

The Routledge Companion to Contemporary Art, Visual Culture, and Climate Change



Edited by T. J. Demos, Emily Eliza Scott, and
Subhankar Banerjee

THE ROUTLEDGE COMPANION TO CONTEMPORARY ART, VISUAL CULTURE, AND CLIMATE CHANGE

International in scope, this volume brings together leading and emerging voices working at the intersection of contemporary art, visual culture, activism, and climate change, and addresses key questions, such as: why and how do art and visual culture, and their ethics and values, matter with regard to a world increasingly shaped by climate breakdown?

Foregrounding a decolonial and climate-justice-based approach, this book joins efforts within the environmental humanities in seeking to widen considerations of climate change as it intersects with social, political, and cultural realms. It simultaneously expands the nascent branches of ecocritical art history and visual culture, and builds toward the advancement of a robust and critical interdisciplinarity appropriate to the complex entanglements of climate change.

This book will be of special interest to scholars and practitioners of contemporary art and visual culture, environmental studies, cultural geography, and political ecology.

T. J. Demos is Patricia and Rowland Rebele Endowed Chair in Art History and Visual Culture, and Director of the Center for Creative Ecologies, UC Santa Cruz.

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Cover image: Not An Alternative / The Natural History Museum, Photo from “Mining the HMNS: An Investigation by The Natural History Museum” exhibition at Project Row Houses, Houston, 2016. The exhibition interrogated the symbiotic relationship between the Houston Museum of Natural Sciences and its corporate sponsors, reinterpreting the Houston museum’s displays and highlighting the voices and stories that are excluded: those of the low-income Latinx communities living alongside Houston’s petrochemical complex. Community members (including Yudith Azareth Nieto, an activist of Manchester, Texas depicted in the image) were provided with dinosaurs equipped with air quality sensors, not only referencing the geological

history of petroleum documented in the HMNS (formed from organic matter dating to the Jurassic and Cretaceous periods of the Mesozoic Era), but also calling for the extinction of the present-day fossil fuel industry as a central perpetrator of climate violence and environmental injustice. Situated at the confluence of scientific research, environmental justice, and critical museum practice, the exhibition aimed to model the museum of the future—one that promotes a collective response to the challenges of the Anthropocene. (Photo: Not An Alternative / The Natural History Museum).

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Nation: American Art and Environment (with Karl Kusserow, 2018), recipient of the Alfred H. Barr Jr. Award from the College Art Association. Braddock is developing two new monographs, *Gum Vision: The First Avant-Garde in American Painting* and *Implication: An Ecocritical Dictionary for Art History*, as well as a Getty anthology on global art history and ecology (with Alexa Sekyra and James Nisbet).

Ron Broglio is Director of Desert Humanities and Associate Director of the Institute of Humanities Research at Arizona State University. His research focuses on how philosophy, art, and literature can help us rethink our relationship to the environment. Broglio is best known for his essays and books on nonhuman phenomenology and animal studies, including *Technologies of the Picturesque*, *Beasts of Burden*, *Surface Encounters*, and *Animal Revolution* (forthcoming, 2021). He has curated and produced a number of art exhibitions on contemporary environmental art.

Renata Ryan Burchfield (Cherokee Nation) is currently a fifth-year PhD candidate at the University of Colorado, Boulder. She holds a Master of Arts in literature and cultural theory with an emphasis on Indigenous film and new media from the University of Oklahoma. Her work focuses on process and performative sovereignties within Indigenous creative cultural production. For Burchfield, Indigenous studies are inherently an interdisciplinary undertaking and as such her research is at the crossroads of story and technology. Her dissertation project, “Weaving Sovereign Webs,” is concerned with how Indigeneity and Indigenous sovereignty are expressed through various modalities of creative expression and how this lends itself to real-world effects for Indigenous communities.

Esther Cann is Programmes and Operations Manager at the Globe Community Project in London, which works to promote cohesion through creativity among diverse communities. She worked on human rights in Indonesia and West Papua for over ten years, both with London-based human rights organisation TAPOL, and with Peace Brigades International in Wamena, West Papua. She has also undertaken editing, translation, and project development work for the Asian Human Rights Commission, the Minority Rights Group, and the London Mining Network. Cann holds a Masters in Conflict Resolution from the University of Bradford.

Isabelle Carbonell is an award-winning sci-fi documentary filmmaker and PhD candidate at the University of California Santa Cruz. Her work lies at the intersection of expanded documentary, environmental justice, and the Anthropocene, while striving to develop new visual and sonic approaches and methods to rethink documentary filmmaking. Imbued in all her work is the connection between the slow violence of environmental disaster, bodies of water, and the future.

Alyne Costa holds a PhD in philosophy from the Pontifical Catholic University of Rio de Janeiro (PUC-Rio), where her research focused on the Anthropocene and ecological collapse. She is an adjunct professor of philosophy at PUC-Rio and post-doctoral fellow at the Science and Culture Forum of the Federal University of Rio de Janeiro, where, apart from her research, she develops projects in popular science and social engagement around climate change. Author of *Guerra e Paz no Antropoceno* [*War and Peace in the Anthropocene*] (2017). Her doctoral thesis “Cosmopolítica da Terra: Modos de Existência e Resistência no Antropoceno [Cosmopolitics of the Earth: Modes of Existence and Resistance in the Anthropocene]” was awarded the CAPES 2020 Prize for best thesis in philosophy.

Heather Davis is an assistant professor of Culture and Media at Eugene Lang College, The New School. Her current book project, *Plastic Matter*, argues that plastic has transformed the world due to its incredible longevity and range, as it has also transformed our understandings and expectations of matter and materiality. She is a member of the Synthetic Collective, an interdisciplinary team of scientists, humanities scholars, and artists, who investigate and make visible plastic pollution in the Great Lakes. Davis has written widely for art and academic publications on questions of contemporary art, politics, and ecology, and has lectured internationally. She is the co-editor of *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies* (2015) and editor of *Desire Change: Contemporary Feminist Art in Canada* (2017).

Ashley Dawson is Professor of Postcolonial Studies in the English Department at the Graduate Center/City University of New York and the College of Staten Island. He is the author of numerous books, including *People's Power: Reclaiming the Energy Commons* (2020), *Extreme Cities: The Peril and Promise of Urban Life in the Age of Climate Change* (2017), and *Extinction: A Radical History* (2016). A member of the Social Text Collective and the founder of the CUNY Climate Action Lab, he is a long-time climate justice activist.

Julie Decker, PhD, is the Director/CEO of the Anchorage Museum in Alaska, which is a leading center for scholarship, engagement, and investigation of Alaska and the North. Decker's career has been focused on the people and environment of Northern places and building projects and initiatives that are in service to local and global communities. Before becoming Director/CEO, Decker served as the Museum's Chief Curator. She has a doctorate in art history, a master's degree in arts administration, and bachelor degrees in visual design and journalism. She has curated and designed numerous exhibitions, taught classes, and authored and edited numerous publications on subjects ranging from contemporary art and architecture of the North to many aspects of the Arctic environment and histories.

T. J. Demos is Patricia and Rowland Rebele Endowed Chair in the Department of the History of Art and Visual Culture, University of California, Santa Cruz, and Director of its Center for Creative Ecologies. He writes widely on the intersection of contemporary art, global politics, and ecology and is the author of numerous books, including *Beyond the World's End: Arts of Living at the Crossing* (2020), *Decolonizing Nature: Contemporary Art and Political Ecology* (2016), and *Against the Anthropocene: Visual Culture and Environment Today* (2017). In Spring 2020, he was a Getty Research Institute Fellow, and has directed the Mellon Sawyer Seminar research project *Beyond the End of the World* during 2019–21. Demos has also curated several exhibitions, including *Rights of Nature: Art and Ecology in the Americas* at Nottingham Contemporary (2015); *Specters: A Ciné-Politics of Haunting* at Madrid's Reina Sofia Museum (2014); and *Beyond the World's End* at the Museum of Art and History, Santa Cruz (2019).

Finis Dunaway is professor of history at Trent University, where he teaches US history, visual culture, and environmental studies. His books include *Seeing Green: The Use and Abuse of American Environmental Images* (2015), which received the John G. Cawelti Award from the Popular Culture Association/American Culture Association and the History Division Book Award from the Association for Education in Journalism and Mass Communication. His next book, *Defending the Arctic Refuge: A Photographer, an Indigenous Nation, and a Fight for Environmental Justice*, will be published in 2021.

Nick Estes is Kul Wicasa from the Lower Brule Sioux Tribe. He is an Assistant Professor of American Studies at the University of New Mexico, the author of *Our History Is the Future: Standing Rock Versus the Dakota Access Pipeline, and the Long Tradition of Resistance* (2019), and the host of *The Red Nation Podcast*.

Carol Farbotko is a cultural geographer with research interests in climate change adaptation, migration, and the politics of climate risk. She holds a PhD from University of Tasmania, Australia and works as a Research Scientist at the Commonwealth Scientific and Industrial Research Organisation, Australia. She also holds adjunct positions with University of Sunshine Coast and University of Tasmania.

Maja Fowkes and Reuben Fowkes are art historians, curators, and co-directors of the Postsocialist Art Centre (PACT) at University College London and founders of the Translocal Institute for Contemporary Art. Their publications include *Art and Climate Change* (forthcoming, 2021), the edited volume *Ilona Németh: Eastern Sugar* (forthcoming, 2021), *Central and Eastern European Art Since 1950* (2020), a special issue of *Third Text* on “Actually Existing Worlds of Socialism” (2018), and Maja Fowkes’s *The Green Bloc: Neo-Avant-Garde and Ecology under Socialism* (2015). Their curatorial projects include the Anthropocene Reading Room, the Danube River School, the group show *Walking without Footprints*, and a trilogy of exhibitions on the revolutions of 1956, 1968, and 1989. They are co-founders of the Environmental Arts and Humanities Initiative at Central European University Budapest. They lead the collective research programme *Confrontations: Sessions in East European Art History*. www.translocal.org.

Jennifer Gabrys is Chair in Media, Culture and Environment in the Department of Sociology at the University of Cambridge. She leads the Planetary Praxis research group, and is Principal Investigator on the ERC-funded project, *Smart Forests: Transforming Environments into Social-Political Technologies*. She also leads the *Citizen Sense* and *AirKit* projects, which have both received funding from the ERC. She is the author of *How to Do Things with Sensors* (2019); *Program Earth: Environmental Sensing Technology and the Making of a Computational Planet* (2016); and *Digital Rubbish: A Natural History of Electronics* (2011). She is co-editor of “Sensors and Sensing Practices,” with *Science, Technology & Human Values* (2019); “Environmental Data,” with *Big Data & Society* (2016); and *Accumulation: The Material Politics of Plastic* (2013). She also co-edits the “Planetaryities” book series. Her work can be found at planetarypraxis.org and jennifergabrys.net.

Elaine Gan’s transdisciplinary practice combines methods from the arts, humanities, and sciences to research and engage more-than-human socialities. Through writing, drawing, and interactive media experiments, Gan explores historical materialisms and temporal coordinations that emerge between organic, machinic, and cinematic assemblages. Gan teaches at New York University’s graduate program in Experimental Humanities & Social Engagement and leads the Multispecies Worldbuilding Lab, a podcast that raises critical awareness about climate change through interviews, sound compositions, and field recordings that listen for untranslatable voices of worlds otherwise (<http://multispeciesworldbuilding.com>). Gan is co-editor of *Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene* (2017) and is presently writing about rice, realism, and change. Gan lives in the grand old cities of New York and Manila (<http://elainegan.com>).

Macarena Gómez-Barris is a writer and scholar focusing on extractive economies, authoritarianism, queer decolonial theory, artistic imaginaries, and political violence. She is author of *The Extractive Zone: Social Ecologies and Decolonial Perspectives*, which theorizes social life through five extractive scenes of ruinous capitalism upon Indigenous territories (2017). She is author of *Beyond the Pink Tide: Art and Political Undercurrents in the Américas* (2018). She is also author of *Where Memory Dwells: Culture and State Violence in Chile* (2009). She is working on three new book projects, *Latchkey*, a work of fiction, *At the Sea's Edge*, a scholarly book, and *Decolonial Ecologies*, which rewrites global environmental history from the perspective of decolonial movements. Macarena is founder and Director of the Global South Center and Chairperson of Social Science and Cultural Studies at Pratt Institute in Brooklyn, New York.

Lesley Green is Professor of Anthropology and Director of Environmental Humanities South at the University of Cape Town, and currently a Cheney Visiting Research Fellow at the School of Earth and Environment at Leeds, working to build stronger social science and humanities engagement with earth and life sciences. A former Fulbright Scholar at the Science and Justice Research Center at the University of California at Santa Cruz, Mandela Fellow at Harvard, and Rockefeller Humanities Fellow at the Smithsonian, her research focuses on understanding and strengthening justice-based environmental governance in Southern Africa. A particular interest is in the relationship between science and democracy. She is the editor of *Contested Ecologies: Dialogues in the South on Nature and Knowledge* (2013), co-author of *Knowing the Day, Knowing the World* (2013), and author of *Rock | Water | Life: Ecology and Humanities for a Decolonising South Africa* (2020).

Amber Hickey is a visiting assistant professor of American Studies at Colby College. They specialize in Contemporary Art and Activism with focuses on Environmental Justice Movements, Indigenous Visual Culture, and Military Aesthetics. Hickey has recent and forthcoming publications in the special issue of *World Art* on Indigenous Futurisms (summer 2019), *Aperture* (summer 2020), the *Journal of Aesthetics and Protest* (issue 11, summer 2020), *Violence and Indigenous Communities: Confronting the Past, Engaging the Present* (2021), and the *Journal of Transnational American Studies*' special issue on "Molecular Intimacies of Empire" (2021). They are cofounder (with Laura Sachiko Fugikawa) of the American Studies Program's Critical Indigenous Studies Initiative. Hickey is involved with the Maine Poor Peoples' Campaign and, before moving to Maine, was a longtime volunteer worker with the Interference Archive in Brooklyn, a volunteer-run archive and gallery that focuses on the connections between cultural production and social movements.

Jessica L. Horton is an associate professor of modern and contemporary art history at the University of Delaware. Her research and teaching emphasize the centrality of Native North American art to a global story of modernity. Her first book, *Art for an Undivided Earth: The American Indian Movement Generation* (2017), traces the impact of Indigenous spatial struggles on artists working internationally since the 1970s. Her second book-in-progress, *Earth Diplomacy: Indigenous American Art and Reciprocity, 1953–1973*, examines how artists revitalized longstanding Indigenous cultures of diplomacy in the unlikely shape of Cold War tours, translating Native political ecologies across two decades and four continents. Her research is supported by the Clark Art Institute, the Warhol Foundation for the Visual Arts, the Getty Research Institute, the Social Sciences Research Council, the Center for Advanced Study in the Visual Arts, and others.

Sintia Issa is a feminist writer and educator from Beirut who likes to think with and about visual culture. A PhD candidate in visual studies at UC Santa Cruz where she also teaches, her inter-disciplinary research engages with activist visual happenings and artistic practices dealing with the infrastructure, materiality, and politics of waste in Lebanon. She is also an editor of *The Public Source*, a Beirut-based, worker-owned, agitational, independent media and essayistic platform. She trained as an art historian at the University of Toronto, worked with Beirut Art Center and the Lebanese American University, and was part of the graduate workers' wildcat strike at UC Santa Cruz last year.

Caroline A. Jones is a Professor of Art History and Associate Dean for Strategic Initiatives in MIT's School of Architecture and Planning. She studies modern and contemporary art, with a particular focus on technological modes of production, distribution, and reception, and interrogations of science. Her most recent publications include *The Global Work of Art* (2016); *Sensorium: Embodied Experience, Technology, and Contemporary Art* (as solo editor, 2006); *Eyesight Alone: Clement Greenberg's Modernism and the Bureaucratization of the Senses* (2005/08); and the co-edited volumes *Picturing Science, Producing Art* (1998), and *Experience: Culture, Cognition, and the Common Sense* (2016). Curatorial interventions include (at MIT's List Visual Art Center) *Sensorium* (2006), *Video Trajectories* (2007), *Hans Haacke 1967* (2011), and a forthcoming bio-art show *Symbionts: Contemporary Art and the Biosphere* (planned for 2022). With Peter L. Galison, she is collaborating on a book about seeing and unseeing the Anthropocene.

John Jordan has been labelled a "Domestic Extremist" by the UK police, and "a magician of rebellion" by the French press; he likes spaces in-between of all sorts, especially between art and activism, culture and nature, the masculine and feminine. With many accomplices, he has intervened in museums, squats, international theatre festivals, climate camps, has choreographed carnivalesque riots, and written BBC radio plays. Co-founder of *Reclaim the Streets* and the *Clown Army*, Jordan co-edited and co-authored *We Are Everywhere: The Irresistible Rise of Global Anti-capitalism* (2003), *The User's Guide to Demanding the Impossible* (with Gavin Grindon, 2009), and the film/book *Les Sentiers de L'utopie* (with Isabelle Fremeaux, 2011). Since 2004, with Isabelle Fremeaux, he has co-facilitated the *Laboratory of Insurrectionary Imagination*, infamous for fermenting disobedience on bicycles, throwing snowballs at bankers, launching a rebel raft regatta to shut down a power station, and refusing to be censored by the Tate Modern. They currently inhabit the Zone à Défendre (Zad) of Notre-Dame-des-Landes (www.labo.zone).

Sarah Kanouse is an interdisciplinary artist and critical writer examining the political ecology of landscape and space. Migrating between video, photography, and performative forms, her research-based creative projects shift the visual dimension of the landscape to allow hidden stories of environmental and social transformation to emerge. Her solo and collaborative creative work—most notably with Compass and the National Toxic Land/Labor Conservation Service—has been presented through the Haus der Kulturen der Welt, Documenta 13, the Museum of Contemporary Art-Chicago, Krannert Art Museum, Cooper Union, Smart Museum, and numerous academic and artist-run venues. Her writings on landscape, ecology, and contemporary art have appeared in *Acme*, *Leonardo*, *Parallax*, and *Art Journal* and numerous edited volumes. A 2019–2020 fellow at the Rachel Carson Center at Ludwig Maximilians Universität, she is Associate Professor of Media Arts in the Department of Art + Design at Northeastern University.

Taukiei Kitara is a Tuvaluan Indigenous knowledge holder and community leader currently living in Brisbane, Australia. He is the President of the Tuvalu Community in Brisbane and is a

committee member for the Pacific Island Council for Queensland in Australia. He is currently studying for his Masters in Global Development at Griffith University. He is a qualified high school teacher and taught for five years, before moving into community development. He worked for eight years at the Tuvalu Association of NGOs in the role of Community Development Officer, providing training to communities on project development, climate change awareness raising and capacity building. He was the founding member of Tuvalu Climate Action Network and represented Tuvalu civil society at several international climate change Conference of Parties, including Copenhagen in 2009.

William Lempert is an Assistant Professor of Anthropology at Bowdoin College in Brunswick, Maine. He has conducted over two years of ethnographic fieldwork since 2006 in the Kimberley region of Northwestern Australia with Indigenous media organizations. Through collaboration on production teams, he aims to understand the stakes of Aboriginal self-representation embedded within the dynamic process of filmmaking. His research engages the paradoxical relationship between the production of films that vividly imagine hopeful and diverse Indigenous futures, and the broader defunding of Aboriginal communities and organizations. This ethnographic research informs his current work on how critical engagements with settler-colonial histories and Indigenous futurisms can reimagine the rise of virtual reality and the current era of outer space colonization.

Lucy R. Lippard is a writer, activist, and sometime curator, co-founder of various activist artists groups (including Ad Hoc Women Artists Committee, Heresies, Printed Matter, PADD, and Artists Call Against US Intervention in Central America). Since 1966, she has published twenty-five books on contemporary art and cultural studies, most recently *Undermining: A Wild Ride through Land Use, Politics, and Art in the Changing West* (2006) and *Pueblo Chico: Land and Lives in Galisteo Since 1814* (2020). She lives in a New Mexico village where she edits the monthly community newsletter, serves on the Water Board, and is active in community planning and land use issues.

Virginia MacKenny is an Associate Professor in Painting at Michaelis School of Fine Art, University of Cape Town. A practicing artist she has received a number of awards, including the Volkskas Atelier Award (1991), an Ampersand Fellowship in New York (2004), and a Donald Gordon Creative Arts Award (2011). A critic and curator, she writes on contemporary South African art and is interested in painting, gender, and deep ecology. Her research on artists in Southern Africa is focused on those concerned with environmental issues, climate change, and interconnected social justice conversations. In 2014 she was one of the founding members for UCT's interdisciplinary Environmental Humanities postgraduate programme. Her solo exhibition, *At Sand's Edge*, at the Barnard Gallery, culminated 2017, and spoke to the current socio-political and environmental disruptions in South Africa.

Emma Mahony is the Course Leader for the BA in Visual Culture at the National College of Art and Design, Dublin, where she has worked as a lecturer since 2009. From 2001 to 2008 she was an Exhibition Curator for the Hayward Gallery, London. She has published widely on contemporary art and curatorial studies as a contributor to peer reviewed journals, including: *Anarchist Studies Journal*, *FIELD A Journal of Socially-Engaged Art Criticism, Performance Research*, *Curator: The Museum Journal*, and *Museum & Society*. She is an editor of *Art & the Public Sphere* journal. She is currently a principal investigator on the MSC H2020 RISE transdisciplinary research action, Spatial Practices in Art and Architecture for Empathetic EXchange (SPACEX)

2021–25. Through secondments between 27 academic and cultural organisations, SpaceX will map and analyse the ways in which spatial practices instigate public exchange and promote empathetic ways of living together in urban space.

Nomusa Makhubu is an Associate Professor in Art History and Deputy Dean of Transformation in Humanities at the University of Cape Town. She was the recipient of the ABSA L'Atelier Gerard Sekoto Award in 2006 and the Prix du Studio National des Arts Contemporain, Le Fresnoy in 2014. She received the American Council of Learned Societies (ACLS) African Humanities Program fellowship award and was an African Studies Association (ASA) Presidential fellow in 2016. In 2017, she was also a UCT-Harvard Mandela fellow at the Hutchins Centre for African and African American Research, Harvard University. Recognising the need for mentorship, collaborative practice, and socially responsive arts, she founded the Creative Knowledge Resources project. She co-edited a *Third Text* special issue: “The Art of Change” (2013) and co-curated with Nkule Mabaso the international exhibition, *Fantastic*, in 2015, and *The Stronger We Become* in 2019 at the 58th Venice Biennale in Italy.

Sara Mameni is Assistant Professor in the Department of Ethnic Studies at UC Berkeley. An art historian specializing in contemporary transnational art and visual culture in the Arab/Muslim world, Mameni has an interdisciplinary research profile in queer theory, critical race theory, post-humanist aesthetics, the anthropocene, and the socio-ecological age of petroleum. Mameni has published articles in *Resilience*, *Signs*, *Women & Performance*, *Al-Raida Journal*, *Fuse Magazine*, *Fillip Review*, and *Canadian Art Journal*, and has written for exhibition catalogues in Dubai, Sharjah, and Istanbul.

Danika Medak-Saltzman (Turtle Mountain Chippewa) is assistant professor in the Department of Women's and Gender Studies and a faculty affiliate of the Native American and Indigenous Studies Program at Syracuse University. Her work focuses on Native histories, Indigenous feminisms, race, and representation, transnational Indigeneity, Indigenous critical theory, comparative settler-colonialisms, Indigenous futurisms, and visual culture—including film, and cultural production. She also examines the transnational movement of American colonial policies—particularly in the case of Japan—which is a subject explored in her forthcoming book, provisionally titled *Specters of Colonialism: Native Peoples, Visual Cultures, and Colonial Projects in the U.S. and Japan*. Her articles have appeared in *American Quarterly*, *The Journal of Critical Ethnic Studies*, *Studies in American Indian Literature*, *Verge: Studies in Global Asias*, and *Critical Asian Studies*. Medak-Saltzman is co-editor of the “Critical Race, Indigeneity and Relationality” book series.

Salma Monani is Chair and Associate Professor at Gettysburg College's Environmental Studies department. She has published extensively on explorations of film and environmental justice, Indigenous ecomedia, and is co-editor of three anthologies. She is currently working on a monograph, *Indigenous Ecomedia: Decolonizing Media Landscapes*.

Jessica Mulvogue is currently a postdoctoral researcher in the Collaborative Research Centre *Otium: Boundaries, Chronotopes, Practices* at the University of Freiburg, Germany. She completed her PhD in Cinema and Media Studies at York University, in Toronto, Canada. She writes on experimental and immersive media, interactive documentary, and art and the environment.

Not An Alternative (est. 2004) is a collective that works at the intersection of art, activism, and theory. Cited in *The New York Times* and ArtNet's “Best in Art” round-ups, Not An Alternative's

work has taken place in museums worldwide, including Guggenheim, PS1/MOMA, Queens Museum, Brooklyn Museum, Tate Modern, Victoria & Albert Museum, and Museo del Arte Moderno. The collective's latest, ongoing project is The Natural History Museum (NHM, 2014–), a traveling museum that highlights the socio-political forces that shape nature. Founded on the belief that museums offer resources, infrastructure, and symbolic and narrative power that can be marshalled in the context of the climate emergency, NHM aims to unleash the power of museums, motivating them to act not as shrines to a civilization in decline, but as defenders of the common and hubs of engagement for the future. NHM collaborates with Indigenous communities, environmental justice organizations, scientists, and museum professionals to create new narratives about our shared history and future, with the goal of educating the public, measurably influencing public opinion, and inspiring collective action.

Rodrigo Guimarães Nunes is professor of modern and contemporary philosophy at the Pontifical Catholic University of Rio de Janeiro (PUC-Rio). His work explores the borders between ontology and politics, investigating how issues in one field can shed light on or change our understanding of the other. He is the author of *Organisation of the Organisationless. Collective Action After Networks* (2014) and *Neither Vertical Nor Horizontal. A Theory of Political Organisation* (forthcoming, 2021), as well as several articles in academic journals and media outlets such as *The Guardian*, *Al Jazeera*, and *Folha de São Paulo*. As an organizer and popular educator, he has been involved in various political initiatives over the years. He holds a PhD from Goldsmiths, University of London.

Birgit Schneider is professor for Knowledge Cultures and Media Environments in the Department of European Media Studies at the University of Potsdam, Germany. She studied art and media studies as well as media art and philosophy in Karlsruhe, London, and Berlin. After initially working as a graphic designer, she worked from 2000 to 2007 at the research department “The Technical Image” at Humboldt University in Berlin, where she received her doctorate. Since 2009, she has held research fellowships at the European Media Studies Department of the University of Potsdam as well as in Munich, Weimar, and Cambridge, UK. In 2010 she represented the Chair of History and Theory of Cultural Techniques at the Bauhaus University Weimar. Her current research focuses on images and perceptions of nature, ecology, and climate change, diagrams, data graphics, and maps, as well as images of ecology.

Emily Eliza Scott is an interdisciplinary scholar, artist, and former park ranger focused on contemporary art and design practices that engage pressing (political) ecological issues, often with the intent to actively transform real-world conditions. A joint professor in History of Art and Architecture & Environmental Studies at the University of Oregon, she holds a PhD in contemporary art history from UCLA. Her writings have appeared in edited volumes and journals (e.g., *Art Journal*, *Third Text*, *Avery Review*, *Cultural Geographies*) in multiple disciplines; and she is coeditor of *Critical Landscapes: Art, Space, Politics* (2015). Her monograph-in progress, *Uneven Geology: Notes from the Field of Contemporary Art*, examines current aesthetics practices that trace environmental violence as it is writ into land, air, and water. She has also been a core participant in two long-term, collaborative art projects: the Los Angeles Urban Rangers (2004–) and World of Matter (2011–2017). Her work has been supported by Creative Capital, Mellon Foundation, Graham Foundation, ACLS, Smithsonian American Art Museum, Nevada Museum of Art, Switzer Foundation, and others.

Rose B. Simpson hails from an arts and Permaculture environment at Santa Clara Pueblo, New Mexico. Still residing on her ancestral homelands, Simpson explores ways to deconstruct gender roles, cultural stereotypes, and social ideologies through many avenues of creative expression, from sculpture to farming, writing, and parenting her small daughter. Her ceramic and mixed media sculpture has been exhibited internationally and is in museum collections throughout the country, including the Denver Art Museum and SFMoMA. Simpson earned her BFA from the Institute of American Indian Arts, an Honors MFA in Ceramics from the Rhode Island School of Design, and an MFA in Creative Non-Fiction also from IAIA. She is on the Board of Directors of Flowering Tree Permaculture Institute, Tewa Women United, and the New Mexico School for the Arts. Her sculpture is represented by Jessica Silverman Gallery in San Francisco and Chiaroscuro Contemporary Art in Santa Fe.

Beth Stephens and Annie Sprinkle have been life partners and 50/50 collaborators on multimedia art projects for 19 years. Currently, they do art/life experiments imagining the “Earth as lover” and aim to make the environmental movement more sexy, fun, and diverse. *Water Makes Us Wet*, their documentary about water, premiered at documenta 14 and screened at NY MoMA. Their new book, *Assuming the Ecosexual Position—The Earth as Lover*, will be published by the University of Minnesota Press (2021). Stephens is Director of E.A.R.T.H. Lab at UCSC, where she is a professor. Beth has a PhD in Performance Studies, and Annie, a former sex worker, has a PhD in Human Sexuality. Based in California, they are currently working on a new documentary about fire.

Julie Sze is Professor and the Founding Chair of American Studies at UC Davis. Sze’s first book, *Noxious New York: The Racial Politics of Urban Health and Environmental Justice* (2006), won the 2008 John Hope Franklin Publication Prize, awarded annually to the best published book in American Studies. Her second book is called *Fantasy Islands: Chinese Dreams and Ecological Fears in an Age of Climate Crisis* (2015). She is editor of *Sustainability: Approaches to Environmental Justice and Social Power* (2018). Her most recent book, *Environmental Justice in a Moment of Danger* (2020), is part of the “American Studies Now: Critical Histories of the Present” series. She has written or co-authored 50 peer-reviewed articles and book chapters and has given talks in Sweden, China, Abu Dhabi, Canada, Germany, France, and Italy.

Paulo Tavares is an architect, researcher, writer, and educator based in South America. His work has been featured in exhibitions and publications worldwide, including Harvard Design Magazine, the Oslo Architecture Triennale, the Istanbul Design Biennial, and the São Paulo Biennial. He is the author of the books *Forest Law* (2014), *Des-Habitat* (2019), and *Memória da Terra* (2020). Tavares runs the design agency autonoma, a platform dedicated to urban research and intervention, and co-curated the Chicago Architecture Biennial 2019.

Inez Blanca van der Scheer is a PhD student at the University of Amsterdam. She works at the Stedelijk Museum of Amsterdam and is the researcher/curator of Hama Gallery as of 2020. She co-founded University of Colour in 2015, an activist collective against the coloniality of European higher education.

Melanie K. Yazzie, PhD, is Assistant Professor of Native American Studies and American Studies at the University of New Mexico. She specializes in Navajo/American Indian history, political ecology, Indigenous feminisms, queer Indigenous studies, and theories of policing and

the state. She also organizes with The Red Nation, a grassroots Native-run organization committed to the liberation of Indigenous people from colonialism and capitalism.

Alessandro Zagato is Latin America's regional representative for the Artists at Risk Connection program of PEN America. He has a PhD in Sociology from Maynooth University, Ireland. He has worked as a researcher for the European Research Council project "Egalitarianism: Forms, Processes, Comparisons" led by Professor Bruce Kapferer at the University of Bergen, Norway. Since 2013 he has lived in San Cristóbal de Las Casas (Chiapas, Mexico), where he founded the "Research Group in Arts and Politics" (*Grupo de Investigación en Arte y Política* – GIAP) and the associated "Casa Giap," a residency center for international artists and researchers. He is author of *After the Pink Tide: Corporate State Formation and New Egalitarianisms in Latin America* (2020), and *The Event of Charlie Hebdo: Imaginaries of Freedom and Control* (2015) among several other publications.

Bo Zheng lives and works in Lantau Island, Hong Kong. Committed to multispecies vibrancy, he investigates the past and imagines the future from the perspectives of marginalized communities and marginalized plants. He creates weedy gardens, living slogans, and eco-queer films to cultivate ecological wisdom beyond the Anthro-po-extinction event. His projects are included in the Liverpool Biennial 2021, the Yokohama Triennale 2020, Manifesta 12, the 11th Taipei Biennial, and the 11th Shanghai Biennial. He taught at China Academy of Art from 2010 to 2013, and currently teaches at the School of Creative Media, City University of Hong Kong, where he leads the Wanwu Practice Group. His website is zhengbo.org.

Connie Zheng is a Chinese-born artist, writer, and filmmaker based in Oakland, California. Her work examines diverse manifestations of propaganda, possibilities for expanding the language of climate apocalypse, and the racialization of contamination narratives, as told through visual and text-based forms. She has exhibited her visual work and short films throughout the US and has published scholarly writing in the *Journal of Urban Cultural Studies*. She is currently a PhD student in Visual Studies at the University of California, Santa Cruz.

INTRODUCTION

T. J. Demos, Emily Eliza Scott, and Subhankar Banerjee

This book addresses the intersection of contemporary art, visual culture, and climate breakdown. It gathers a range of leading and emerging voices, drawn from a diversity of disciplinary and geographical vantage points, and provides new cutting-edge ecocritical research. With it, we hope to contribute to an increasingly urgent, multidisciplinary research formation and to intervene critically and productively in the ongoing development of the environmental arts, humanities, and social sciences. It is true that a growing number of artistic and exhibition practices, activist mobilizations, and scholarly publications within art history and visual studies have engaged climate transformation—one of the most pressing and encompassing subjects facing global society today—in newly relevant ways in recent years. In many cases, this pioneering work has not only drawn attention to the perceptual, affective, entangled, and sociopolitical dimensions of climate breakdown and all it entails, from global warming's melting polar ice, regional droughts, and wildfires to habitat fragmentation, deforestation, and ocean, air, and ground pollution; from zoonotic diseases such as the recent coronavirus pandemic to the biodiversity crisis including manifold species extinctions; from forced migrations and displacements to the disproportionate impacts on frontline communities with the least resources for adaptation. It has also helped to imagine and thereby contribute to the construction of new worlds of imagination—seemingly against all odds—inspiring and resulting from material practices beyond the destructive impacts of petrocapitalism and extractivism. In doing so, the arts offer a crucial lens onto, and sometimes protagonist of, environmental transformation. They provide a vital site of intervention, complementary and alternative to the earth sciences, engineering, design, and economics, which have popularly defined climate-change discourse and policy. Yet unlike within the fields of the environmental humanities, or literary ecocriticism, there is still no major compilation volume that assembles ecocritical writing at the intersection of contemporary art and climate change, offering a generative and much needed platform for the formation of future scholarship and practice.¹

This book helps to fill that void. It thereby asserts the importance of including art and visual culture within the discussion of ecological matters of concern, in order both to critically assess the representational politics of climate transformation as they have recently unfolded and currently exist, and to highlight creative and experimental practices beyond the techno-scientific, apocalyptic, positivistic and/or spectacular media and pop-cultural image systems through which climate breakdown is so often experienced and visualized. International in scope, the

diverse contributions assembled in this volume provide responses to the following key questions: Why and how do art and visual culture, their ethics and values, matter with regard to climate breakdown and its manifold anthropogenic disruptions? How do aesthetic practices, and those art-activist ones more narrowly defined, help make sensible—and newly sensitize us to—the unfolding processes of environmental transformation in singular ways? How might they, more broadly, extend or productively complicate current cultural understandings of environmental ethics and climate science, as well as offer meaningful discussions of environmental- and climate-justice practices through the optic of aesthetics, understood as the creative organization of the sensible?

In providing detailed responses to those prompts, the book's contents are organized according to six thematic parts, offering a comprehensive and interrelated framework of vital areas of inquiry with which to approach the nexus of contemporary art, visual culture, activism, and climate breakdown. The first considers "Extractivism," identifying a central determining logic of capitalism and a central driver of climate transformation, and based on the withdrawal of economic value from environments and their natural resources, forms of life, media, information networks, labor and social relations. Part II focuses on "Climate Violence," including discussion of diverse modes of environmental transformation, extending from militarism, colonialism, neo-liberalism (or corporate globalization), and cultural imperialism, all of which negatively impact frontline communities, fragile ecosystems, and multispecies ecologies. Part III, "Sensing Climates," considers multifaceted modalities of identifying, recognizing, and differentiating atmospheric, environmental, and climatological systems, as well as how such regimes of sensing participate in registering and gathering data in human and more-than-human ways that may generate socio-ecological transformation, behavioral adaptation, and oppositional practices in turn. "In/Visibilities," Part IV, examines the perceptual logics of climate analysis and representation, remaining sensitive as well to environmental and climate-based phenomena that may resist visualization, in addition to the institutional, political, and economic forces that can bar the visible from appearing, and, alternately, occlude appearance for tactical gain. Part V is dedicated to "Multispecies Justice," which highlights sociopolitical, economic, and ecological concerns related to the disproportionate impacts and vulnerabilities of climate transformation on diverse communities, human and nonhuman alike (which, within the category human may include further problematic divisions between, and exclusions of, members according to such categories as race, class, gender, and ability). The final part, "Ruptures/Insurgencies/Worldings," investigates transitional rift zones created by social movements, collective aesthetic experiments, ecosocialist politics, and decolonial formations—including radical proposals for the Green New Deal, the decolonial Red Deal, rights of nature legislation, and degrowth economics, as well as their respective visual-cultural analogues—each variously intent upon inaugurating new worlds beyond the destructive politico-ecological circumstances of the present.

With such wide-ranging analyses, this volume joins efforts with the environmental humanities—which we recognize as a dynamic and increasingly complex field—in seeking to broaden examinations of climate change, particularly as those considerations intersect with, and are further mediated within, social, political, and cultural realms.² Within the environmental humanities, however, the visual arts are seldom foregrounded and sometimes sidelined, even as they address crucial questions of representation, affect, and social-engagement, especially within the expanded field of visual culture as it has increasingly and complexly focused on the subject of climate change. Meanwhile, art history as a discipline has admittedly been slow in considering ecology and related environmental studies, whether because of the field's attachment to formal analysis, its consummate and particularly anthropocentric humanism, or the human-centered tendencies of its dominant methodologies (e.g., social art history, psychoanalysis, post-structuralism,

non-ecological Marxism), rendering it ill-equipped in wrangling with the more-than-human world and our differentiated relations to it. This collection of essays aims to systematically redress these limitations in environmental humanities and art history alike in actively expanding the nascent branch of ecocritical art history, and visual culture more widely. As such, it aspires to advance a robust, internally complex, and necessarily interdisciplinary expansiveness, appropriate to the environmental arts and their politico-ecological commitments (to which all three editors have contributed substantial scholarship and creative practice for more than a decade³).

We begin with the understanding that climate change, in addition to posing certain unprecedented biogeophysical state-changes, also presents profound representational dilemmas. Perhaps more than any other imaginable phenomena, climate transformation is dizzyingly convoluted, comprising many correlated and at times seemingly contradictory processes happening in multiple places and times, at varying rates and scales, and with myriad types and degrees of consequence. This is compounded further by our own immersion in this accelerating event—some call it the Anthropocene—the edges of which are challenging, if not impossible, to define, let alone sense, especially when the very space of being and representation, the two mutually determinative, is continually mutating. Despite the fact that, as already stated, art history has been late to take up climate change as a subject of focus, many areas of expertise long central to its disciplinary purview—from the critical analysis of scale, resolution, and visibility to that of communicability, iconicity, and indexicality—may now, however, be seen as providing newly relevant resources to the study of climate breakdown. Indeed, it is long overdue for art historians, artists, and visual-cultural producers to weigh in on the subject, and they have much expertise to offer to our understandings of climate transformation's visibility and aesthetic modalities.

A word on terminology. In using the term “climate change” in our book's title, we register its widely held conventional usage (especially in the physical and biological sciences), even while we largely agree with the growing consensus that prefers such phrases as “climate breakdown” within independent media, social movements, governmental, and institutional coverage, dedicated to greater scientific precision and rhetorical accuracy. “We want to ensure that we are being scientifically precise, while also communicating clearly with readers on this very important issue,” said the *Guardian's* editor-in-chief, Katharine Viner, in explaining their own terminological evolution and preference for climate breakdown. “The phrase ‘climate change’, for example, sounds rather passive and gentle when what scientists are talking about is a catastrophe for humanity.”⁴ Indeed, organizations such as the UN are using similarly strong language to most accurately communicate the gravity of our present situation in order to relay its direct existential threat. We believe that our carefully considered choice of language within the book—which opts for both climate change (in order to enter and intervene in conventional scientific discourse) and climate breakdown (signaling its catastrophic magnitude)—reflects this conflicted state of affairs and its necessarily capacious nomenclature.

As editors of this volume, we take a similarly expansive approach to art, visual culture, and activism (signaled as well in their own terminological variations). These form overlapping experimental zones where aesthetics (modalities of appearance) and politics (ways of organizing and maintaining relations of power) converge, often escaping confining categories of creative practice premised upon unnecessary separation, even if oftentimes institutionally enforced. Likewise, climate breakdown is understood to entail multiple dimensions, its short-hand designating the wider entanglements of ecology and politics signified in terms like environmental and climate justice, wherein “climate” can be at once meteorological, socio-political, and techno-economic, even while, at times, it refers also to the well-established climate sciences. In this regard, the book's organization and thematic foci reflect the fact that we refuse to view “climate change” as merely a matter of carbon-driven earth systems transformation, insisting,

instead, that it be inextricably linked to wider representational, socio-political, geopolitical, and techno-financial structures and histories. We thus take an expansive view of climate, which figures as more than solely the biogeophysical processes occurring over long periods of time and representing the complex patterning of environmental conditions measurable in and through the natural sciences. As Andrew Ross observes, “the climate crisis is as much a social as a biophysical challenge”⁵; indeed, representational practices not only reference that reality, but also differentially and complexly produce it.

Exemplifying this simultaneously expansive and irreducible socio-environmental understanding of climate, and dramatizing its situated formation within representational practice and grassroots political struggle, are Indigenous approaches. These include those of the Circumpolar North—simultaneously a regional integrator of the Earth’s natural, atmospheric, and oceanic systems; a bellwether of environmental transformation warming at a rate of at least two times the global average; and a driver of feedback-induced further warming owing to its melting polar ice. In February 2002, participants of the “Snowchange Workshop” in Tampere, Finland, adopted a resolution demanding that Indigenous traditional ecological knowledge be recognized as a tool of research equal to Western climate science. In so doing, climate change transformed in that context from a narrowly defined specialist sphere of knowledge to an inclusive cultural and historical engagement with a changing multispecies world. While Indigenous peoples of the Arctic are “already witnessing disturbing and severe climatic and ecological changes,” no substantial mitigation has occurred in part because “the majority of the Earth’s citizens [living elsewhere] have not seen any significant climate change thus far.”⁶ Proving itself prescient, the resolution thus highlighted the need for witnessing (seeing and perceiving) and experiencing (feeling the impacts) as important pre-conditions for meaningful action and mitigation. Yet it took almost 15 years more for the United Nations Framework Convention on Climate Change (UNFCCC), comprised of 196 nations, to sign the Paris Agreement, which came to a similar conclusion (the Trump Administration’s intent to withdraw notwithstanding), albeit a conclusion focused on containing greenhouse gas emissions and largely insensitive to the cultural and political reality of climate breakdown emphasized by participants in the Snowchange Workshop.

Competing visual portrayals of Arctic climate transformation dramatize competing narratives. Photographers and artists of lower latitudes tend to depict the altering climate with apocalypse-tinged spectacles of melting ice and desperate polar bears precariously balancing on disintegrating ice, betraying a colonial gaze often devoid of peoples and politics.⁷ Nevertheless, these images get elevated into the icons of global climate change communication. Inuit artists, on the other hand, lean toward more affective and critical views, often portraying the negative impacts of industrial pollution, petrocultural, and vanishing-nature tourism, the resulting disruption of eco-spiritual multispecies relations, and decolonial aspirations with cosmopolitical significance. These latter typically never make it into mainstream media.⁸ Instead they, and similarly compelling works of visual and performance art, are foregrounded locally and contextually, created alongside the extraordinary political organizing, for instance, of the Inuit Circumpolar Conference under the leadership of Sheila Watt-Cloutier, which has poignantly demanded “the right to be cold.”⁹ In such contexts, climate change is consistently cast as a socio-environmental, cultural, and juridico-political matter of Indigenous, and indeed multispecies, survival. Contributors to the present volume are similarly attentive to this spacious view of climate, one in which the critique of extractive capitalism, decolonial visions, and political organizing collectively foreground analyses far surpassing both the biogeophysical foci of climate science and the frequently spectacular and catastrophist depictions of corporate media projections.

With the inauguration of the Anthropocene within environmental humanities discourse, it is now commonly recognized that social and environmental systems have become mutually

determinative—what Jason Moore usefully calls the “double internality” of nature and culture that has unfolded and intensified over the last few centuries of Western, and now global, modernity. This corresponds to “capitalism’s internalization of planetary life and processes, through which new life activity is continually brought into the orbit of capital and capitalist power,” on the one hand, and “the biosphere’s internalization of capitalism, through which human-initiated projects and processes influence and shape the web of life,” on the other.¹⁰ That means the character of biogeophysical processes are inextricable from, if not collapsible into, the sociopolitical and techno-economic forces within climate-changing human cultures, particularly of nations, transnational institutions, and corporate-extractive productive forces. Climate, in other words, has become manifestly intersectional, indicated in the proliferation of popular-cultural and theoretical usages of the term in relation to social, affective, and technological processes, such as “climates of fear,” “anti-Black climates,” “climates of control,” and “climates of displacement.”¹¹ As Margaret Atwood usefully explains, it’s not “climate change” but “*everything change*,” dramatizing the radical expansiveness and interconnected multiplicity of this optic.¹² In addition to referencing natural processes, climates characterize entangled environments of racism, migration, and extractivism, identifying also cause-and-effect networks of processes and conditions that cannot be pulled apart, and which designate complex infrastructures, affective atmospheres, naturecultures, and uneven geographies.

Put in other terms, it is no longer possible (if it ever was) to separate nature from culture, or human from environmental systems; rather, these mutually defining conjunctions are widely recognized as the basis for the Anthropocene epoch—or the Capitalocene, as some might prefer—within which we now find ourselves. The choice of such politico-geological terms, we argue, matters. *Anthropocene* (the era when human activities become central drivers of Earth’s natural systems), *Capitalocene* (replacing the Anthropocene’s “human” with the more precise focus on capital’s political economy), and *Chthulucene* (the era of multispecies sympoeisis), for instance, issue from terminological decisions that do both experimental speculative work in reframing the crisis, and provide generative language that can identify and bring into being hidden realities, spark alternative futures, and grow additional sites of struggle.¹³ So too do practices of dating matter.¹⁴ Expanding the causality of climate breakdown beyond the industrial revolution within Western capitalist modernity, diverse analysts—climate-justice critics, environmentalists, Indigenous activists, and interdisciplinary scholars—have emphasized the world-changing roles of colonialism and slavery, with their attendant genocides and ecocides, in the centuries-old transformation of our planet’s systems, as initiated particularly in 1492 with the colonization of the Americas and thereafter. Others have dated the beginning of the Anthropocene to times still earlier, going back even thousands of years to the inauguration of sedentary farming, property relations, and iron smelting. Beyond opting for any specific date, we are convinced that the derangement of natural systems has not been defined by isolated events, but is far-reaching and deep-seated in complex causes and implications, each folded into the other. Just as the invention of the steam engine is not unrelated to the formation of nuclear technology, so too is the politico-economic reason of modernity not unrelated to the extractive labor relations of globalized capital, and so on. The Anthropocene, as should be clear by now, is far from punctual and global—even if that’s how some geologists seek to define it—but rather represents a pluri-historical and multi-differentiated series of processes, cascading over multidirectional waves of colonial, genocidal, extractive, nuclear, capitalist modernities and colliding worlds. Language, dates, and maps all matter deeply to our analysis, and we recognize that specific choices can mean the difference between naturalizing environmental transformation and seeing the conceptualization of nature as fundamentally political.

In assembling the contributions to this volume, our guiding criteria of inclusion have been informed by recent developments in artistic practice and a growing body of arts and visual culture-based criticism, which have themselves variously addressed environmental studies, including: mainstream and experimental visualizations of climate breakdown; the politics and aesthetics of environmental and climate justice in photographic, video-essay, multimedia, performative, and activist formats; decolonial and Indigenous approaches to political ecology; critical mobilizations of the Anthropocene/Capitalocene/Chthulucene theses; speculative philosophies of new materialism, particularly those with explicit political and justice-based investments; post-anthropocentric sensitivities to multispecies ecologies and realms beyond the human; cartographic explorations of emergent relations between the local and the global, as well as the earthly and the atmospheric; activist environmentalisms within the conditions of new media, forensics, and spatial politics; and the problematics of visibility and representation, particularly where they correlate with, and are sometimes controlled and occluded by, modes of state, military, and corporate power.

In particular, this book foregrounds justice-attentive aesthetic and research practices that stress the intersectional and the global, even while some analyses draw on geographical specificity and diverse disciplinary specialties. Our commitment as editors extends in this regard from environmental justice discourse, and more recently climate justice research and activism developing over the last few decades.¹⁵ Stressing one fundamental aim of this approach, we have attempted to center in the book's diverse inclusions the perspectives, experiences, and voices of underrepresented and under-resourced frontline communities who have historically suffered (and in many cases continue to suffer) an outsized proportion of climate-related vulnerabilities, bearing the brunt of the unequal social dynamics that have further exacerbated those vulnerabilities. This includes a broad sensitivity to considering cases of environmental and climate injustice in geographies beyond (over)developed countries of the North and West, even while we remain attentive to inequalities and socially differentiated climate violence within those latter unevenly developed regions as well. When a super-hurricane, intensified by fossil-fuel capitalism's exacerbation of climate breakdown, floods low-income communities in Mozambique, producing housing displacement, food insecurity, and existential vulnerability for multitudes, climate injustice intersects with environmental injustice on numerous levels. It also demands extending the research focus toward negatively impacted multispecies communities, deprived of any and all protections extended to (some) humans. Similarly, when disastrous and historically unprecedented wildfires in Australia, abetted by decades of the mining and burning of coal and producing associated greenhouse gas emissions, displaces whole communities of people in random acts of Pyrocene violence (of the emergent age of fire), it is both superimposed on a geography of past waves of settler-colonial displacements of aboriginal people, and also destroys multitudes of animals, birds, and insects. We thereby confront the complex entanglement of climate violence in its human and more-than-human scene, and turn to creative aesthetic arrangements of visibility capable of comprehending the sheer complexity of causes and effects with multi-scaled geographical sensitivities.

A brief history of the United Nations' REDD (Reducing Emissions from Deforestation and forest Degradation) program, launched in 2008, exemplifies this extensive climate violence, as well as why a justice-attuned, geographically capacious, and frontline-centered visual analysis matters. The program proposes carbon mitigation by correlating Northern industry emissions with Southern forest greenhouse gas sequestration through the market-based mechanism of carbon offset credits, supported largely by multinational finance and industrial emitters and opposed generally by Indigenous communities. Forest-dwelling opponents of REDD have seen the writing on the trees—new restrictions on land use, colonialist displacement of communities

in the name of conservation, threats of violence against land and water protectors already plagued by agribusiness harassment and extra-judicial murders—all for the profits of carbon trading. Indigenous protestors shut out of the UNFCCC climate conference COP13, in Bali, Indonesia, in 2007, where REDD plans were unfurled, responded by covering their mouths with folded-white-paper on which UNFCCC was printed in capital-bold letters, offering a moving performance exposing climate injustice and UN silencing. Two years later, on the occasion of COP15 in Copenhagen, Denmark, the Indigenous Environmental Network (IEN) released a 40-page report further detailing this climate injustice, violation of Indigenous rights, and the “largest land grab of all time,” as entailed in REDD and the presumably more-conservation-minded REDD+ program (for which the IEN offered its own damning explanation: “Reaping profits from Evictions, land grabs, Deforestation and Destruction of biodiversity plus Industrial Plantations, GMO Trees & Protected Areas”).¹⁶ “Neither human rights language nor the rights of Indigenous peoples were recognized in the (Copenhagen) Accord,” Tom Goldtooth, IEN’s executive director, wrote in *Indian Country Today*.¹⁷ Yet at the next UNFCCC climate conference, COP16, in Cancún, Mexico, in 2010, even progressive and environmental media in the U.S., instead of responding to the extensive critique, lauded REDD+ and urged its implementation.¹⁸ While this conflict continues to unfold, it not only shows how global climate governance connects and thereby produces new geographical interconnections—materially, economically, and politically; it also demonstrates the necessity for building further transnational resistance, equipped with innovative and transformative visual strategies as much as organizational networks, for the effective advancement of climate justice goals.

That geographical capaciousness, developed across the contributions to this volume, is also met by a temporal expansiveness—connecting the sometimes “slow violence” of environmental impacts, unfolding over years, even centuries and millennia, to the necessarily “long environmentalism” of research practice and activist struggles.¹⁹ Decolonial and global perspectives on environmentalism—entailing the decolonization of time, including linear progressivist models, as much as relational geographical approaches—are crucial, we argue, in avoiding liberal ecologies of affluence, which reflect elite interests in conservationism, wilderness protection, recycling, green capitalism, and techno-fixes, and decline to take on structural and rigorous analyses of the ethico-political and social-justice-based dimensions of climate breakdown. Likewise, we are aware of the limits of past conjunctions of art and ecology that have tended to idealize nature as timeless, return to non-critical mythopoetics and essentializing modes of spirituality, and opt for green design, wilderness conservation, and restorationist ecology, all without systemic politico-economic scrutiny of the long history of fossil fuel capital and its economy’s oppressive social forms and systemic modes of violence. The emergent environmental humanities have already brought some degree of critical attention to this justice-based perspective through innovative interdisciplinary research. We intend to redouble those efforts in recognition of today’s climate emergency—that is, even as we insist on recognizing the entangled histories of past colonial and ecocidal/genocidal apocalypses that precede present threats—all of which finds expression in the militant and activist directions of many of the partisan inclusions herein that address the cultures of resistance.

Given the “*this changes everything*” emergency of the present, we contend that artistic practice, including its substantial historical resources, forms, and techniques, is uniquely poised to get at the tremendous complexity and the variegated multisensory, material, and representational aspects of climate breakdown. This is the case, despite, and in resistance to, the continued forces of commodification and institutional enclosure of aesthetic experience within rarified realms of culture, funded by toxic (and often petrocapiatist) greenwashing philanthropy. Despite these enclosures, art—or, more broadly, aesthetic practice less wedded to conventional

institutions—we contend, still holds the potential for meaningful interdisciplinary and experimental research, open-skies creative thinking beyond capitalist realism, non-instrumentalized poetics, and radical speculative imagination, which excels, in its most compelling cases, in making climate breakdown meaningful, affective, legible, and politically urgent. The longstanding capacity of aesthetic practice to estrange the familiar, and to familiarize the strange, is needed more than ever in this era of corporate media homogenization, algorithmic capture, and consumer culture, all of which tend to deny the emergency in the first place in favor of the habitual and the reassuring, the climate-change denying, profitable status quo.

In distancing ourselves from liberal conceptions of aesthetic autonomy and individual freedom, we move toward the ethico-political imperatives of art's construction of new worlds of social justice and ecological flourishing, as presented in many of our contributions. Therein, art provides a place with which to experiment with political ecology and engaged new materialisms, doing so without reducing its infinite diversity to anti-democratic, authoritarian messages, tried forms, and hackneyed structures. Indeed, art offers a "laboratory of insurrectionary imagination," as the eponymous name of the activist collective perfectly states (see the essay by member John Jordan in this volume). At the same time, and as indicated above, this book traces the aesthetic engagements with climate breakdown that extend beyond the conventional categories of art and considers experimental visual and multisensory cultures, including inter- and post-disciplinary practices—such as forensic and cartographical studies, remote sensing data analysis, embodied social movement activism, climate sensing techniques, more-than-human "sense-abilities," new media ecologies and archival assemblies—all of which resist single-category designation. While many of our contributors draw diversely on the critical resources of art history's diverse methodologies (including its formal, post-structural, sociohistorical, racially attuned and queer analytics), many also cultivate new sensibilities—the *abilities to sense*—beyond the former discipline's sometimes restrictive, humanist, and depoliticized approaches, in favor of visual culture's more flexible openness and consistent emphasis on the imbrications of visibility and power, aesthetics and politics.

Going further still than cultivating the abilities to sense, our contributions also reflect an investment in the politics of visibility, and, more broadly, the politics of aesthetics—in the sense of challenging the unjust and uneven distribution of the sensible.²⁰ This is the case when corporations seek to hide the evidence of their environmentally destructive practices, or when the state shuts down or surveils the activist media attempting to bring public attention to extractive or border violence. We acknowledge that making things visible (and public)—by demanding the "right to see"—can support progressive, egalitarian, and democratic political gains and important policy transformations, even while we also recognize the right to refuse visibility when it inadvertently reinforces power inequalities and neocolonial logics in the era of sensationalist, commercialized media and surveillance capitalism.²¹ There are no doubt times when strategic opacity, and the right to invisibility—particularly in the face of facial recognition software, pharmaceutical biopiracy, and multifaceted extractivism demanding ever greater access to bodies, lands, and information—is more than ever necessary. At a time when environmental defenders globally are increasingly subjected to extrajudicial murder (particularly in the Philippines, Colombia, India, Brazil, Honduras, and Guatemala, where mining, extraction, agribusiness, hydropower, logging, and poaching are implicated sectors), the justification for refusing visibility is all-too-clear.²² In these situations, climate justice may well demand non-spectacular, non-commodifiable, non-capturable forms of being and becoming. Deciding on appropriate strategies and tactics requires situated, place-based, and context-dependent considerations, generating approaches which may remain ultimately non-formalizable and open to strategic mutation.

These create ever more complex and nuanced relations to such areas of meaning-making as critical documentary, media activism, and forensic engagements. The result is a mobility and multiplicity of aesthetic practices, artistic-activist positionalities, and research methods, which, as revealed in this anthology, correspond to the diverse relations of practitioners to cultural sectors and multi-scaled institutions. These include the creative instituting of new knowledges, organizations, and networks at the forefront of the visual culture of climate justice—all of which this book, we hope, will inspire further.

Notes

- 1 One notable exception, and exemplary model within US art history, is Alan C. Braddock and Christoph Irmscher, eds, *A Keener Perception: Ecocritical Studies in American Art History* (Tuscaloosa: University of Alabama Press, 2009).
- 2 See, for example, Jodi Adamson and Michael Davis, eds, *Humanities for the Environment: Integrating Knowledge, Forging New Constellations of Practice* (New York: Routledge, 2017); and Ursula K. Heise, Jon Christensen, and Michelle Niemann, eds, *The Routledge Companion to the Environmental Humanities* (New York: Routledge, 2017).
- 3 See Emily Eliza Scott and Kirsten J Swenson, eds, *Critical Landscapes Art, Space, Politics* (Los Angeles: University of California Press, 2015); Subhankar Banerjee, ed., *Arctic Voices: Resistance at the Tipping Point* (New York: Seven Stories Press, 2013); and T. J. Demos, *Decolonizing Nature: Contemporary Art and the Politics of Ecology* (Berlin: Sternberg Press, 2016).
- 4 Damian Carrington, “Why the Guardian is Changing the Language It Uses about the Environment,” *The Guardian*, May 17, 2019, www.theguardian.com/environment/2019/may/17/why-the-guardian-is-changing-the-language-it-uses-about-the-environment.
- 5 Andrew Ross, “Climate Change,” in *Keywords for Environmental Studies*, ed. Joni Adamson, William A. Gleason, and David N. Pellow (New York: New York University Press, 2016), 38.
- 6 “Draft Declaration of Traditional Ecological Knowledge,” in *The Earth Is Faster Now: Indigenous Observations of Arctic Environmental Change*, ed. Igor Krupnik and Dyanna Jolly (Fairbanks: Arctic Research Consortium of U.S., 2002), 355.
- 7 See James Balog’s project *Chasing Ice*; David Buckland’s project *Cape Farewell*; Olafur Eliasson’s *Ice Watch*; the Academy Award-winning documentary *An Inconvenient Truth*; and a 2006 TIME Magazine cover-story “Be Worried. Be Very Worried.”
- 8 Subhankar Banerjee, “Art as Long Environmentalism,” *Panorama: The Journal of the Association of Historians of American Art*, Spring 2019, <https://editions.lib.umn.edu/panorama/article/art-as-long-environmentalism/>; and Subhankar Banerjee, “Why Polar Bears? Seeing the Arctic Anew” in *Living in the Anthropocene: Earth in the Age of Humans*, ed. W. John Kress and Jeffrey K. Stine (Washington: Smithsonian Books, 2017), 117–120.
- 9 See Sheila Watt-Cloutier, *The Right to Be Cold: One Woman’s Fight to Protect the Arctic and Save the Planet from Climate Change* (Minneapolis: University of Minnesota Press, 2018).
- 10 Jason W. Moore, *Capitalism in the Web of Life* (London: Verso, 2015), 13.
- 11 See, for instance, Christina Sharpe, *In the Wake: On Blackness and Being* (Durham: Duke University Press, 2016). For an approach to ecology-as-intersectionality, drawing together social justice and environmental matters of concern with cosmopolitical and radical-futurist imagination, see T. J. Demos, *Beyond the End of the World: Arts of Living at the Crossing* (Durham: Duke University Press, 2020).
- 12 Margaret E. Atwood, “It’s Not Climate Change—It’s Everything Change,” *Medium*, July 27, 2015, <https://medium.com/matter/its-not-climate-change-its-everything-change-8fd9aa671804>.
- 13 See Donna Haraway, “Tentacular Thinking: Anthropocene, Capitalocene, Chthulucene,” *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016), 30–57.
- 14 Heather Davis and Zoe Todd, “On the Importance of a Date, or Decolonizing the Anthropocene,” *ACME: An International Journal for Critical Geographies*, 2017, 16(4): 761–780; and Karen Barad, “Troubling Time/s and Ecologies of Nothingness: Re-turning, Re-memembering, and Facing the Incalculable,” *New Formations*, 2018, 92: 56–86.

- 15 See, for instance, Robert Bullard, *Dumping on Dixie: Race, Class, and Environmental Quality* (Boulder: Westview Press, 2000); T.J. Demos, *Against the Anthropocene: Visual Culture and Environment Today* (Berlin: Sternberg Press, 2017); and Ros Gray and Shela Sheikh, eds, “The Wretched Earth: Botanical Conflicts and Artistic Interventions Introduction,” special issue of *Third Text*, 2018, 32(2–3).
- 16 See the report “Reaping Profits from Evictions, Land Grabs, Deforestation and Destruction of Biodiversity + Plus Industrial Plantations, GMO Trees & Protected Areas,” Indigenous Environmental Network, 2009, www.ienearth.org/REDD/redd.pdf.
- 17 Subhankar Banerjee, “Cancún Opens for GREEN Business, but REDD Will Destroy Indigenous Forest Cultures,” *Huffington Post*, November 29, 2010, www.huffpost.com/entry/cancun-opens-for-green-bu_b_789014.
- 18 See Jennifer Morgan’s article “What Can Climate Negotiations Achieve in Cancun?,” in *Grist*, November 28, 2010, <https://grist.org/article/2010-11-27-what-can-climate-negotiations-achieve-in-cancun/>; and Kate Sheppard’s article “Cancun or Bust,” in *Mother Jones*, November 24, 2010, www.motherjones.com/environment/2010/11/cancun-or-bust-2/.
- 19 Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, MA: Harvard University Press, 2011); and Subhankar Banerjee, “Long Environmentalism: After the Listening Session,” in *Ecocriticism and Indigenous Studies: Conversations from Earth to Cosmos*, ed. Salma Monani and Joni Adamson (New York: Routledge, 2017), 62–81.
- 20 See Meg McLagan and Yates McKee, eds, *Sensible Politics: The Visual Culture of Nongovernmental Activism* (New York: Zone, 2012).
- 21 Nicholas Mirzoeff, “The Right to Look,” *Critical Inquiry* 37 (Spring 2011), 473–496; Ariella Azoulay, “Unlearning the Origins of Photography,” in the series “Unlearning Decisive Moments of Photography,” Fotomuseum Winterthur blog, September 6, 2018, www.fotomuseum.ch/en/explore/still-searching/articles/155239_unlearning_the_origins_of_photography; and Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: PublicAffairs, 2019).
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PART I

Extractivism

Extractivism identifies a political economy premised on the withdrawal of value without corresponding deposit: resources are removed from the Earth, profits from labor, and commodifiable data from plants, bodies, and information systems.¹ Returned to their place is waste, toxicity, disease, exhaustion, and death. Comprising a fundamental logic of advanced global capitalism that is now evident worldwide, extractivism has long been recognized as a fundamental form of colonialism as well: “[E]xtracting is stealing—it is taking without consent, without thought, care or even knowledge of the impacts that extraction has on the other living things in that environment,” notes Leanne Betasamosake Simpson. “That’s always been a part of colonialism and conquest. Colonialism has always extracted the indigenous.”²

When the word “extraction” is used, what often first comes to mind is oil drilling, coal and mineral mining, hydroelectric power dams, logging, industrial fishing, and so on. Those activities linked to fossil fuels, or what Andreas Malm terms “fossil capital,” most obviously relate to anthropogenic climate transformation, wherein prehistoric resources are drawn from deep underground and, through their processing and burning at the surface, their fumes are released into the atmosphere, reflecting a sort of reverse geological process.³ But all comprise the voracious and expansive “extractive zone” wherein mining for fossil fuel energy, metals, and minerals supports modern industrial production, its energy systems and infrastructure, leaving rivers, forests, lands, and seas in varying states of waste.⁴ Extraction also extends to secondary registers. Big Ag’s chemical-based, monocrop farming, in systematically withdrawing value from the soil in the form of minerals, represents another mode of mining; similarly, the privatization of water for consumer products exemplifies the appropriation of resources away from what many call the commons. Extraction also entails labor, in the form of unpaid (often female) domestic toil, volunteerism, wage-based work, and low- or unpaid convict labor, corresponding to the exploitation of surplus value in the form of profits. In the art world, this is detectable not only in the prevalence of literal uncompensated labor (e.g., the notorious gallery internship, research or logistical assistance carried out by workers that provides behind-the-scenes labor that materializes only invisibly in the final exhibitable or sellable artwork), but also in the extractive appropriation of gestures, emotions, and related interpersonal skills, comprising the informal labor of the communications industry and service economy more widely. Many artists and activists in this volume are keenly aware of the omnipresent danger of instrumentalization and have developed savvy, built-in tactics to resist it in their work. This is especially so for Indigenous and

female artists, artists of color, and artists from the Global South who are disproportionately subjected to cultural extraction.

Extraction increasingly includes digital appropriation, relating to social media and surveillance-based data mining, IT processing, and algorithmic capture, expanding the extractive zone to the techno- and info-spheres.⁵ The growing information industry (think Amazon, Google, Facebook, Baidu, and Alibaba) that collects and commodifies Big Data relies on the enormous cybernetic accumulation of preferences, identities, consumer habits, political tendencies, social networks, and images that are variously mobilized by the security, medical, marketing, publicity, and consumer industries. As media ecology researchers point out, the energy basis of digital extraction relies heavily on fossil fuels, but is also increasingly located in renewables, with materials provided by green capitalism in the form of rare earth mining (lithium for solar panels and electric-car batteries), leading to new versions of extractive violence (as with the 2019 right-wing “lithium coup” in Bolivia). Digital extraction can constitute “data colonialism” when information—for instance, facial recognition data gathered in Syria or Nigeria—is sold to security industries in the European Union and the US.⁶ Data mining (what some call “biopiracy”) corresponds to the collection of biogenetic materials and DNA samples—from plants, animals, insects, and human bodies—by the pharmaceutical, medical, military, and security industries, which often target the politically disenfranchised (Indigenous, migrant, undocumented, and minoritarian) and the lands of underdeveloped countries as test subjects and resource sites.⁷

As such, extraction forms an enormous web of primary resource mining and secondary juridico-political appropriations, cybernetic technologies, and data infrastructures. “Today, enormous technical and legal complexities are needed to execute what are ultimately elementary extractions,” Saskia Sassen writes:

It is, to cite a few cases, the enclosure by financial firms of a country’s resources and citizens’ taxes, the repositioning of expanding stretches of the world as sites for extraction of resources, and the re-gearing of government budgets in liberal democracies away from social and workers’ needs.⁸

We cannot speak about extraction without also addressing consumption (or, more appropriately, wasteful overconsumption). For extraction and consumption are two sides of the same coin. The smooth functioning of these twin processes, beyond the technical and legal complexities, requires significant military support from nation-states (often executed through corporate contracts)—to control key extractive zones as well as ensure the safe transport of materials to markets of consumption often thousands of miles away. It is thus not surprising that the US military represents the single largest consumer of fossil fuels and, with its many private sub-contractors, works all over the world to maintain extractive flows that largely benefit its associated financial elites. More than three decades ago, Ramachandra Guha identified overconsumption and growing militarization as the “two fundamental ecological problems facing the globe.”⁹ That reality has not changed; indeed, it has only worsened.

At its broadest, extractivism designates a calculus of accumulation by dispossession.¹⁰ Its political economy functions as a mode of necropolitics: the governance of the dead and dying, including the transformation of habitats into sacrifice zones; the relegation of populations to the warn-out, used-up, and debilitated; the conversion of life-worlds into “cheap nature” and thus eventual death-worlds.¹¹ As extraction represents the violent transformation of life into capitalist commodities, its profit-seeking entails a mutating, strategic political ontology, categorizing and hierarchizing matters of life and nonlife into shifting, differential values, legislating legal and illegal practices: “industrial capital depends on and, along with states, vigorously polices the

separations between forms of existence so that certain kinds of existents can be subjected to different kinds of extractions,” writes Elizabeth Povinelli in her analysis of the “geontologies,” or Earth beings and their political taxonomy, of late liberalism:

Thus even as activists and academics level the relation between animal life and among objects (including human subjects), states pass legislation both protecting the rights of businesses and corporations to use animals and lands and criminalizing tactics of ecological and environmental activism.¹²

Those opposed to extractivism and its violent expressions face the world-historical challenge of how to overcome this dangerous, unjust, and destructive relationality that is at the center of our dominant socioeconomic regime. Just as extractivism connects sites of extraction to those of consumption by way of evermore formidable networks among corporations and nation-states, however, at the same time, anti-extractivist social movements have also become more interlinked and robust. Indeed the latter are rising. The contributors in this section and in other parts of this volume are committed to identifying and analyzing the logic of extractivism, its breadth, and representational conditions, constituting important steps in understanding climate breakdown and imagining and offering more just, non-extractive, futures for all life.

Notes

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- 2 Naomi Klein, “Dancing the World into Being: A Conversation with Idle No More’s Leanne Simpson,” *YES! Magazine* March 5, 2013.
- 3 See Andreas Malm, *Fossil Capital: The Rise of Steam Power and the Roots of Global Warming* (London: Verso, 2020).
- 4 Macarena Gómez-Barris, *The Extractive Zone: Social Ecologies and Decolonial Perspectives* (Durham: Duke University Press, 2017).
- 5 For a fascinating discussion of how data mining relates to visibility, see Trevor Paglen, “Invisible Images (Your Pictures Are Looking At You),” *The New Inquiry* December 8, 2016, <https://thenewinquiry.com/invisible-images-your-pictures-are-looking-at-you/>. Also see: Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: PublicAffairs, 2019).
- 6 Nick Couldry and Ulises A. Mejias, *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism* (Stanford: Stanford University Press, 2019); and Jackie Wang, *Carceral Capitalism* (New York: Semiotext(e), 2018).
- 7 Vandana Shiva, *Biopiracy: The Plunder of Nature and Knowledge* (Boston: South End Press, 1999).
- 8 Saskia Sassen, *Expulsions: Brutality and Complexity in the Global Economy* (Cambridge, MA: Harvard University Press, 2014), 15.
- 9 Ramachandra Guha, “Radical American Environmentalism and Wilderness Preservation: A Third World Critique,” *Environmental Ethics* 11(1) (Spring 1989): 71–83.
- 10 David Harvey, “The ‘New’ Imperialism: Accumulation by Dispossession,” *Socialist Register* 40 (2004): 63–87.
- 11 Achille Mbembe, *Necropolitics* (Durham: Duke University Press, 2011); Jason W. Moore, “The Rise of Cheap Nature,” in *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism*, ed. Jason W. Moore (Oakland: Kairos, 2016), 78–115; and Jason W. Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (London: Verso, 2015).
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EXTRACTING THE COST

Re-membering the Discarded in African Landscapes

Virginia MacKenny and Lesley Green

Colonial and Apartheid extractive processes, in both mining and agriculture, dislocated and disconnected indigenous peoples from the land in South Africa. A quarter-century after the end of Apartheid, the struggle of the Xolobeni community against the Australian mining company Mineral Resource Commodities (MRC)¹ exemplifies the challenges of ecopolitical justice in Africa where land grabs are part of a global neoliberal economy of commodity markets based on extractivism.

The Mpondoland coastal forest and grasslands, where the Xolobeni community lives, are exceptionally sensitive to disturbance. The black sand titanium mining engaged in by MRC, which will be exhausted after 25 years of dredging, will use up the streams and strip the plant cover, effectively creating mini-deserts: hot sand dunes on which nothing grows. After mining, what money will keep the bare soils cool enough to let endangered plants take root again? Who will take responsibility to turn desert back into fields and forests, especially in the predicted droughts under conditions of climate change? Would the otters, porcupine, lizards, fish, frogs, and birds return? Importantly, why, in a time of South African land restitution, when a national priority is ensuring Black access to land, might it be acceptable for government to aid multinationals to push Black farmers maintaining a successful agro-ecological economy off their traditional land? Why force a people, whose means of survival has largely escaped the effects of colonialism, into a precarious existence? In the political jiu-jitsu offered by the Minister of Mineral Resources, however, political liberation requires economic trickle-downs. Those opposing the mine, it is insinuated, are opposing Black economic empowerment. While apartheid laws may have been scrapped,² rural communities in particular have suffered “an intensification of post-apartheid dispossession as the mining industry and the state turn their eyes to the former homelands³ where 90% of new mining applications are located.”⁴

Contemporary visual artists responding to this complex terrain of environmental politics are utilizing a variety of strategies to highlight the harm from extractive practices, labour exploitation, and environmental damage. Photographic constructions, collaborative practices, performative engagements, and relational approaches attempt to dissolve historical boundaries reconnecting peoples, land and human-nonhuman relations.

Commencing a visual history of regional extractivism with Francois Le Vaillant’s “King’s Map” (1790), which documents the surface assets of Southern Africa for King Louis XVI of France and presages the next couple of centuries of European plunder of the country’s resources,

it becomes clear, as Renée Holleman notes, that mapping “has always been an act of imagination as much as a practice of documentation.”⁵ Holleman’s exhibition *A Brief History of the Horizon*⁶ maps the troubled relationships within the continent through the horizon, the fence, and the boundary. Central to Holleman’s project is *A New Map of Africa* (2019). Constructed by overlaying an eponymously titled nineteenth-century map produced in 1805 with another depiction of the African continent whose edges don’t quite align with the original, it is filled with the many fictional references to Africa which have arisen over time. Including Kukuanaaland, an African country in H. Rider Haggard’s novel *King Solomon’s Mines* (1885) and Wakanda in Marvel’s *Black Panther* (2018),⁷ the fictions ebb and flow across its surface exemplifying Congolese artist Sammy Baloji’s statement “Africa is a European concept, not a local one.”⁸

The force of such external conception is clearly evident in Malcolm Payne’s *Rorschach Test* (1975).⁹ A silkscreen of a large black Rorschach stain imposed on a geological survey map of Southern Africa, it amplifies the values and effects of a devouring colonial presence—an ‘angel of death’ that continues to haunt post-colonial Africa. Such work marks the ubiquitous presence of mining on the continent. Many South African artists such as Gerard Sekoto, David Goldblatt, and William Kentridge,¹⁰ acknowledge this in work depicting mining in ways that focus on the demands made on the human frame, particularly those played out on the bodies of black men labouring as miners. Baloji’s work expands these concerns within the Democratic Republic of Congo, entangling past and present narratives of people and land and exposing ongoing colonial legacies in the contemporary economy.

Baloji, raised in Lubumbashi, in the mineral-rich Katanga province, mainly utilizes photo-montage, placing elements of archival prints from the Belgian colonial period¹¹ over contemporary, colour photographs of derelict mining shafts and ruined landscapes. In *Mémoire* (2006) the black and white historical images are dominated by rows of mine labourers—often naked, many shackled together, usually only identified by numbers—whose exposed bodies are set against neatly suited colonial masters in pith helmets. Starkly revivifying the past, Baloji haunts the present with its ghosts (Figure 1.1).

T.J. Demos’s *Return to the Postcolony: Specters of Colonialism in Contemporary Art* (2013) articulates the concerns with which Baloji’s work engages. Demos’ concept of a “colonial hauntology” wherein the “colonial past still haunts us because it is a past that has not really past”¹² undergirds a video interview with Baloji, *The Past in Front of Us* (2015). Baloji narrates his discovery of an unidentified skull in the Royal Belgian Institute of Natural Sciences in Brussels,¹³ observing that it was presented as an object amongst other objects, with no context. His research revealed that it belonged to a murdered Congolese king from Katanga, who had been decapitated by



Figure 1.1 Sammy Baloji, *Mémoire*, 2006

colonialists. Baloji's distress at the violence of both the colonial action and the colonial archive is evident. "For Congolese people," he says, "the dead are not dead, they stay with us."¹⁴ In Baloji's *Memoire*, the dead repopulate the places they once occupied; in effect, however, Baloji sees them as never having left. He notes that, from the colonial period to now, "it's still the same reality." The continuum of mining and exploitation have never ceased.

Clive van den Berg's work is more abstracted than Baloji's narrative, but no less pointed in its message that history rises up to overshadow us now, and that it is both the spirit of the land and the dead embedded within it, who haunt us.¹⁵ His *The Land Throws up a Ghost* (2013), a painting with a surge of searing red paint that erupts through its centre, epitomizes this.

That the past exists in the present may be more evident than the "colonial future narratives" of capitalist extraction¹⁶ that lurk in neocapitalism. In Namibia, Margaret Courtney-Clarke, one of the few female photographers living and working in the field, documents the impoverished Namib peoples recorded within the onslaught on the land caused by climate change and contemporary Chinese uranium mining. The subject on the cover of her book, *Cry Sadness into the Coming Rain*, like Van den Berg's image, appears ambiguous, with its phantom of dust hovering over the landscape. Casting a shadow on the whitened desert sand this apparition is raised by the kickback of her dog after urinating on the roadside graves of two poachers – the ghosts of the crosses of the dead vaguely discernible through the veil of sand.

In postcolonial landscapes capitalism and corporate power have replaced colonial masters, and neoliberal extractors now populate even the most apparently barren of surfaces leaving unresourced locals to survive as best they can. As Courtney-Clarke recounts when she traverses the Namib desert she is "stunned and angry to discover many once accessible routes now closed to the public." She continues, "I grapple to photograph a place now littered with signboards: *DANGER; Uranium Mine; Zhonghe Resources; China Nuclear Power; Explosives in operation; High Pressure Hoses in Use; CAUTION; Radiation Hazard – Protective clothing required; Authorised access only; Keep out!*"¹⁷

Courtney-Clarke's images are dominated by bleached landscapes strewn with the detritus of human endeavour, both corporate and individual, and indicators of the entangled struggles of multiple species to survive. A hare hangs dead from a cable, a human skull is embedded in the earth of a midden along the aptly named Skeleton Coast, the ancient plant *Welwitschia*, known to endure 1000 years, is demarcated by stones offering scant protection from the toxic dust slowly burying it as the trucks stream by to the mines.

Jason Larkin's photographic essay *After the Mines*¹⁸ (2013) records the waste dumps left by Johannesburg's gold mining industry when the gold deposits in the Witwatersrand Basin, once one of the largest in the world, began to run out in the 1990s. It raises questions seemingly ignored in the vast, barely populated, regions of Namibia regarding the effects of the real cost of capitalist extractivism. Once mined out, the dumps are "places-as-waste"¹⁹ and "the ruins of the mines... become waste itself, evidenced in abandoned economies."²⁰ Marginalized areas abandoned by mining companies are often occupied by those who are themselves considered dirt—"abandoned wastelands throughout the world unveil the invisible consequences of the capitalocene that has led to 'the displacement of industry and industrial workers to the cultural periphery'."²¹ The Johannesburg mine dumps, now home to nearly two million people in townships created by the Apartheid government and informal settlements constructed by both locals and immigrants seeking work, are being further disrupted by re-mining for the precious metal residues, continuing their legacy of expelling people to ever more distant peripheries.

Those who clean up under such circumstances are also often seen as dirt. This careless disposal of both peoples and environment provides a context for Santu Mofokeng's *Baptismal Prayer in Radiant Waters Kliprivier, Soweto* (2011), with its punning take on the toxic sublime. The river,

used for baptisms of renewal, suffers the effects of Acid Mine Drainage (AMD)²² and, given the presence of uranium, its 'radiance' is radioactive.

Unlike much of his other, largely black and white, work Mofokeng's photographic series "Radiant Landscapes" (2010–2011) is glaringly red-orange—the colour signalling danger. Mofokeng depicts the river, sometimes in detailed, highly abstract form, at others with the figures of men and women in green and white robes immersed in its rushing waters, wallowing, as he recounts it, "in faith, in ecstasy and in abandon."²³ Such religious abandon in abandoned environments is a tragic meeting of various displacements and disconnections. The larger hidden violence in the missionary project is exemplified in Kenyan president Jomo Kenyatta's oft-quoted summation of the effects of Christianity on Africa; "When the missionaries came to Africa they had the Bible and we had the land. They said 'Let us pray'. We closed our eyes. When we opened them we had the Bible and they had the land."

In this instance land, once it is literally trashed with industrial excreta, is easily discarded and becomes a place of return for the dispossessed, a place where reconnection is attempted. The belief in the healing powers of the "red water" of the river is such that, either through ignorance or faith, its dangers are ignored. Mofokeng relays that the river "is considered to be 'sewerage' by many healers and rightly so."²⁴ He quotes a test done on the river's pH in 2010 for the Mail and Guardian newspaper²⁵ when sections of the water in and around the Kliprivier were so acidic that their pH was recorded as around 2²⁶—stronger than stomach acid. Mining companies in the area disclaim any responsibility and while laboratory tests prove the presence of AMD it is difficult to pinpoint from where it is emanating. Writing and photographing from within a community where his brother had succumbed to AIDS while considering himself immune because of his status as a sangoma (healer), Mofokeng poses a series of questions

Who lives in these rotten places after their decline in profitability or disasters have occurred and capitalists have left? Is proliferation of degraded environments a by-product in the profit-making business or one of insouciance? Are these devastated environments factories or laboratories or are they intended to serve both purposes?²⁷

Radiant Landscapes offers a place where an already complex intersection of indigenous spirituality and the missionary-imported faith of Christianity that historically severed indigenous peoples both from their beliefs and their connection to the land, is here interpolated with a continuing invisible violence to land, water, and bodies. Mofokeng notes "democratic South Africa is yet to take psychic ownership of the land it has inherited from its ancestors."²⁸

That there are those attempting to do just that has become increasingly evident in recent years as attested by Dineo Bopape's soil installations *sa___ke lerole, (sa lerole ke___)* (2016) that are seeded with healing herbs and rituals, and Sethembile Msezane's feminist performative public space occupations. Msezane's *Chapungu – the Day Rhodes Fell* (2015), a four-hour performance during the removal of mining magnate Cecil John Rhodes' statue from its plinth at the University of Cape Town, witnesses and embodies dispossession and reclaiming. Evoking the spirit of the Zimbabwean bird Chapungu,²⁹ Msezane repossesses territories previously lost. Land is thus more than a grounding metaphor within the South African context. Historical black land dispossession is a desperately urgent national issue that is energising an emerging populism that objects to the lingering relations of colonial rule in the neoliberal terms for which South Africa's liberators agreed to settle.³⁰

The toxic effects of capitalism are clearly visible in Pieter Hugo's photographic series "Permanent Error" (2010),³¹ depicting Ghana's Agbogbloshie dump for first world discarded computers. Agbogbloshie is the physical manifestation of the ideas in a leaked World Bank

memo signed by Lawrence Summers, then the Chief Economist of the World Bank, who noted that “I think the economic logic behind dumping a load of toxic waste in the lowest-wage country is impeccable and we should face up to that... I've always thought that under-populated countries in Africa are vastly under-polluted.”³²

Hugo's images of Agbogbloshie reveal a poisoned land re-mined by local inhabitants for its mineral residues: the gold, platinum, copper and other metals in the discarded devices. Burning pyres of illegally disposed electronic waste excreted by Europe fill the landscape with plumes of grimy smoke, beyond the breathing space of those wealthy consumers who once owned them. Out of sight and out of mind, the sites are the geological legacy of a development proposal that continues the process of “expanding the geographies of exclusions to invisible faraway sites.”³³ As human foragers pick their way through the blackened terrain in the hope of finding something of value in the detritus, Hugo's images show, as T. J. Demos describes it, the “present post-colony struggling with precarity and creative survival.”³⁴ The “normally invisible ‘death worlds’ of the South, where the ‘necropolitics’ of the postcolony are enacted and the division between the living and the dead loses its definition”³⁵ gives rise, in Demos' words, to a *monstrum* – “both a revelation and a portentous manifestation” of survival and invention.

While most reviewers focus on the human struggle within Hugo's images it is clear that Hugo himself recognises the dissolving of boundaries between inanimate waste and other bodies. The hardships for the beasts of rural life caught in this technological wasteland are visible in the “unnatural portent” of twisted wires resembling bodies flayed in convulsion. In this processing place for industrial waste it is animals as well as human beings who ingest some of the most hazardous chemicals on earth, thereby providing passage for them to enter the human food-chain. Hugo's images of goats and Nguni cattle,³⁶ with their distinctive black, white and brown speckled hides, render the animals as patches or fragments, and as battered and emaciated as the land. Recent analysis by Ipen³⁷ and Basel Action Network (BAN)³⁸ of eggs produced by free range chickens that seek sustenance in this terrain indicate that their eggs contained Dioxins, PCBs and fire-retardant chemicals. The analysis revealed that “an adult eating just a single egg in the Agbogbloshie scrap yard and slum would exceed the European Food Safety Authority limits on chlorinated dioxins 220 times over” (Figure 1.2).³⁹

As Timothy Morton observes, “Capitalist economics is an anthropocentric discourse which can't factor in the very things that ecological thought and politics require: non-human beings.”⁴⁰ While reportage on the Agbogbloshie dump is concerned for the toxicity imposed on the human population it pays scant regard for the “free-range” chickens, generally signifying a healthier, non-factory farmed creature, carrying their lethal chemical load.

Following the trajectories of waste also guides the artistic practice of Francois Knoetze. *Cape Mongo*⁴¹ (2014–2016) traces the journeys of discarded cardboard, glass, plastic, metal, VHS tape, and cell phones, as each material attempts to find its way back to source. In performance videos the artist dons costumes assembled from each material and becomes a “mythical trash creature”⁴² on a quest for its ‘home’. Cannily edited videos include contextual locating sites, historical documentation, movies, voiceovers and advertorial publicity allowing Knoetze to conjure the layered and entangled social justice issues of manufacture and consumption as well as environmental disruption of waste in the world's most unequal society, South Africa.⁴³ Instead of highlighting the contaminating dangers of waste however, Knoetze asks for an empathetic response to these wandering, often shambling, creatures seeking a place of rest, reintegration or reconnection.

Attributing a living characteristic to plastic or cardboard in these instances is akin to animism. Isabelle Stengers, in her essay *Reclaiming Animism*, refuses to define the term for reasons of its degraded status in the West as either an infant phase or a pejorative assumption declaring its



Figure 1.2 Peter Hugo, *Untitled, Agbogbloshie Market, Accra, Ghana*, 2010

presence as indicative of a ‘primitive’ belief system. Fundamentally she is disgusted by what she sees as “Science disenchanting the world”⁴⁴ in its search for authority over it. Her preferred model is not singularity, but “connecting heterogeneous practices, concerns and ways of having the inhabitants of this earth matter, with none being privileged and any being liable to connect with another”.⁴⁵ Knoetze, as artist, breathes life into these inanimate creatures created from discarded, and disregarded, materials, activating our ability to see the *animus* (“breath” or “soul”⁴⁶), in them. Reclaiming materials, as Knoetze does, is a means of “recovering what we have been separated from, but not in the sense that we would just get it back. It means recovering, or recuperating, from the very separation, regenerating what it has poisoned.”⁴⁷

In Knoetze’s work the volition of matter, as envisaged in the vital materialism in Jane Bennett’s *Vibrant Matter—A Political Ecology of Things* (2010), becomes inventively apparent. As the jagged glass being wends its way past the workers’ cottages of the Western Cape vineyards back to the sand of the shoreline, and the cardboard buck navigates through the city to a forest, finally merging with a tree, imaginative play becomes “a matter of recovering the capacity to honor experience, any experience we care for, as ‘not ours’ but rather as ‘animating’ us, making us witness to what is not us.”⁴⁸ Thus, while things themselves have an ability to act or “produce effects dramatic and subtle,”⁴⁹ for Stengers it is the experience of the world that vitalizes, and wherein anything can have “the capacity to lure us into relevant attention.”⁵⁰

Such “relevant attention” is the aim of Belgian-Beninese Fabrice Monteiro’s dramatic photographic series⁵¹ ‘Prophecy’. Incorporating African “traditional storytelling, magic, and mysticism,”⁵² Monteiro’s towering female djinns of the earth arise to raise awareness of environmentally

degraded sites littered with pollution, or affected by climate change. These figures embody Mother Earth's "last option, to authorise the spirits to appear to humans and deliver to them a message of caution."⁵³

Congolese artist Maurice Mbikayi's work, which literally refashions, in wearable forms, the obsolete computer detritus of the West found in the dump sites that Hugo photographs and Monteiro refashions, also demands attention, focusing on the theme that time is running out. In Mbikayi's exhibition *Coucou Crumble* (2019)⁵⁴ he punningly plays on an informal greeting in French derived from the sound of a cuckoo clock and the English phrase "that's how the cookie crumbles." Time and fatalism intersect in the face of the collapse of systems. In *Coucou Crumble III*, a photograph of a pig/man creature hugging itself, or claspings its stomach in pain, the man of colour wearing the ceremonial striped trousers of King Leopold of Belgium, is barely visible. His upper body, smothered by a pig mask⁵⁵ constructed out of computer keys, is emblematic of greed run rampant. As in George Orwell's allegorical novel *Animal Farm* (1945),⁵⁶ and, as Baloji states: "it's still the same reality"; Europe's grasp over the DRC's economy,⁵⁷ as in most post-colonial countries, remains.

Mbikayi opens dialogues across history, acknowledging, as stated by Stengers, the "need to struggle and the need to cure us of what threatens to make us resemble those we have to struggle against are... irreducibly allied."⁵⁸ In much of his work he fabricates computer waste into clothing that references the fashionable dandyism of nineteenth-century Europe in the heyday of colonial power. Wearing these, he situates himself between cultures, histories and species. The costumes reflect his role as a dapper Sapeur, a name derived from the Congolese *Societe des Ambianceurs et des Personnes Elegantes* (SAPE) (the Society of Tastemakers and Persons of Elegance). Such Sapeurs⁵⁹ grace the Congolese streets of Brazzaville and Kinshasha,⁶⁰ and their self-confidence reflects, in part, their resistance to postcolonial poverty. Creating what he terms a TechnoDandy, he resists the oppressions of the past through a contemporized re-appropriation of it. Donning top hat and 'redingote', a full-skirted Victorian outercoat, he engages in performative conversation with living animal interlocutors. Mbikayi's TechnoDandyism is thus less an evocation of sartorial elegance than a complex multispecies engagement invoking the Sapeurs' gentleman's code of non-violence and respective consideration towards others.

In his work with animals Mbikayi acknowledges an echo of Joseph Beuys' performance *How to Explain Pictures to a Dead Hare* (1965). While Beuys, his head covered in gold leaf and honey, appeared to explain the works in an exhibition to a hare obviously unable to respond, Mbikayi chooses to interact with living non-humans—dogs, a goat, a sheep and a horse. Beuys' symbolic sensibility co-opted the materiality of the animal world and regional shamanism, critiquing what he perceived as the moribund nature of both human politics and academic pedagogy, but Mbikayi inclines his head to the animal in question, as though listening, open to new conversations, dependent on other sensibilities.

Timothy Morton notes in his book *Humankind* (2017) that "hiding in very plain sight, everywhere in post-agricultural psychic, social and philosophical space, is evidence of a traumatic Severing of human-nonhuman relations."⁶¹ Morton capitalizes the word 'severing' to signal a foundational end of a symbiotic relationship—a particular grand narrative "from which meaning and connection have evaporated."⁶² Such deep damage in the fabric of our earth community is producing an increasingly palpable effect—the 6th Extinction.

The harm experienced in eradication is pictured in Mbikayi's *The Dream of a Mute* (*Ndoto Ya Baba*)⁶³ (2016). Chromatically dominated by black and white, the image shows a dog standing on a table opposite the seated artist. Only on close inspection does one realise the dog is reliant on just three legs. Mbikayi, whose own wounding is signalled by his head and body swathed in white bandages, is rendered blind and mute, conditions that necessitate a different kind of



Figure 1.3 Maurice Mbikayi, *The Dream of a Mute (Ndoto Ya Baba)*, 2016

communication—one posited by Mbikayi, as extra-sensory perception. Given that language is often claimed as one of the signifiers of human superiority this call to communicate beyond language, is pivotal in multi-species recognition. Liefie, as the dog is known, is well able to hunt and fend for herself despite her disability. Akin to the trademark dog on the recording label His Master's Voice (HMV), Liefie no longer inclines her ear to a phonogram, but is here atop the table, on an equal level with the artist who is clothed in the detritus of nineteenth- and twentieth-century capitalism. Mbikayi, whose skin colour is only evident at his fingertips, is a shadow of the colonial masters of the past, both owned and dispossessed by colonial power. Seated nose to nose, he invokes others – paying attention from a mutually damaged position (Figure 1.3).

Feeling-with and being-with inform Mbikayi's solidarity with and for others, underlining an increasing emphasis in artistic practice to move beyond the frame of the exclusively human. Recognising this tangled web of relationships, the call within much environmentally engaged art from Africa is to pay attention to the harm done by the dependence of global commodities markets on the destruction of African ecologies. Extractivism and corruption continue to drive expulsions, extinctions and the deposition of industrial excreta on African soil—a reality increasingly evident in the material choices of artists on the continent.

Notes

- 1 *Amadiba Crisis* Committee (ACC) was formed in 2007 by villagers of Xolobeni to fight the controversial Australian mining company MRC from extracting titanium in their area. Village resentment reached boiling point after ACC chairman Sikhosiphi “Bazooka” Rhadebe was assassinated (March 22, 2016). The community has since won in court the right to say ‘No’ to mining—a win fought by the Minister of Mineral Resources, Gwede Mantashe.
- 2 South Africa's first democratic elections were in 1994.

- 3 'Homelands' is another name for Bantustans, or territory to which black South Africans were sequestered by the apartheid regime. Reinforcing racial segregation, they were claimed to be self-governing, but were still reliant on the South African economy and government.
- 4 Andrew Benni, "Mining will not Bring Jobs to Xolobeni," January 15, 2019, www.dailymaverick.co.za/article/2019-01-15-mining-will-not-bring-jobs-to-xolobeni/
- 5 Renée Holleman, *A New Map of Africa* Guide exhibition supplement to *A Brief History of the Horizon*, AVA Gallery, Cape Town, 2019.
- 6 Renee Holleman, AVA Gallery, Cape Town, 2019.
- 7 Wakanda entered the Marvel stable in 1966 in the Fantastic Four #52 (Holleman, *A New Map*).
- 8 *Past in Front of Us*. Available: <https://channel.louisiana.dk/video/sammy-baloji-past-front-us>
- 9 Remade 1999.
- 10 Gerard Sekoto's series "Song of the Pick" (1946–1947), David Goldblatt's *On the Mines* (1973), William Kentridge's oeuvre, dominated by the subject of mining in Johannesburg, includes the animated charcoal drawing videos *Mine* (1991) and *Felix in Exile* (1994).
- 11 The archival photographs are from neglected collections in old mining information centres ("*Past in Front...*": 2015)
- 12 T. J. Demos, *Return to the Postcolony—Spectres of Colonialism in Contemporary Art* (Berlin: Sternberg Press, 2013), 10.
- 13 Lotte Arndt, "Vestiges of Oblivion—Sammy Baloji's Works on Skulls in European Museum Collections," in *Dark Matter: In the Ruins of Imperial Culture*, vol 11, November 2013. www.darkmatter101.org/site/2013/11/18/vestigis-of-oblivion-sammy-baloji-s-works-on-skulls-in-european-museum-collections/
- 14 "*Past in Front...*" 2015
- 15 In the South African context this is particularly sorely felt in the new democracy when miners protesting for a raise at Lonmin platinum mine (August 2012), were gunned down by police in the Marikana massacre. 34 miners lost their lives. Cyril Ramaphosa, now South Africa's president, but then a non-executive director of Lonmin mines, was implicated in the heavy-handed approach to the protests, but largely exonerated in the Farlam Commission of Inquiry (*Marikana shootings will always stalk Ramaphosa*, <https://mg.co.za/article/2015-06-19-00-marikana-shootings-will-always-stalk-ramaphosa/>) (*Marikana: What was Cyril Ramaphosa's Role*, www.thesouthafrican.com/news/marikana-what-did-cyril-ramaphosa-do/).
- 16 Véronique Bragard, Reclaiming the future: (In)visible dirt borders in Sammy Baloji's mining photo-montages, *Social Dynamics*, 44:2, 273–290 (2018): 275.
- 17 Margaret Courtney-Clarke, *Cry Sadness into the Coming Rain* (Göttingen: Steidl, 2017), 11.
- 18 Jason Larkin, *After the Mines* (Johannesburg: Fourthwall Books, 2013).
- 19 Rosa, 2015, 182 in Bragard, *Reclaiming the Future*, 274.
- 20 Bragard, *Reclaiming the Future*, 282.
- 21 High and Lewis, 2007, 25 in Bragard, *Reclaiming the Future*, 274.
- 22 Acid Mine Drainage is the outflow of polluted, acidic water from abandoned coal and metal mines.
- 23 "Radiant Landscapes de Santu Mofokeng," April 4, 2011, <http://lemagazine.jeudepaume.org/2011/07/radiant-landscapes-paysages-radiants/>
- 24 Mofokeng, "Radiant Landscapes." Other toxic residues in the waters are arsenic and lead.
- 25 Mara Kardas-Nelson, "My Neighbour, the Mine Dump," *Mail and Guardian*, November 26, 2010, accessed April 19, 2019, <https://mg.co.za/article/2010-11-26-celebrants-of-life-drinking-from-a-poisoned-chalice>
- 26 ± 2 is highly acidic—neutral water has a pH of around 7.
- 27 Mofokeng, "Radiant Landscapes."
- 28 Virginia MacKenny, *Grounding Ourselves*, unpublished paper presented at Reading Nature conference, Universidad Complutense de Madrid, Spain 14–16 December 2011
- 29 Chapungu is one of eight soapstone birds that were taken from Zimbabwe during the colonial era. All of the birds have since been returned save for Chapungu, which is still in Cecil John Rhodes' estate.
- 30 Black First Land First (BLF) and the Economic Freedom Fighters (EFF) both used the call for land appropriation as electioneering positions in the 2019 General Elections. Despite South Africa's Constitution making provision for "willing seller, willing buyer," and Article 25 allowing for appropriation without compensation changes to the Constitution have been tabled by the ANC at the time of writing.
- 31 Pieter Hugo, *Permanent Error*, Stevenson Gallery, Cape Town, 2010, <http://archive.stevenson.info/exhibitions/hugo/index2010.htm>.

- 32 Basil Enwegbara, Toxic Colonialism: Lawrence Summers and Let Africans Eat Pollution, *The Tech* 121(16), April 6 2001, <http://tech.mit.edu/V121/N16/col16guest.16c.html>.
- 33 Bragard, *Reclaiming the Future*, 286.
- 34 Demos, *Return to the Postcolony*, 133.
- 35 Demos, *Return to the Postcolony*, 136.
- 36 Nguni, more generically Southern African Cattle given that they are also farmed by Zulu, Xhosa, Ndebele and Swazi peoples, are highly valued. Hybrid Indian and European cattle they were introduced to southern Africa by Bantu-speaking tribes between 600–1400AD.
- 37 IPEN's Toxics-Free Future for All tracks increases in toxic synthetic chemical production via a global network of more than 500 public interest NGOs in over 100 countries. <https://ipen.org/>
- 38 Basel Action Network—Champions of Environmental Health and Justice is a non-profit organisation tasked with 'Safeguarding people and the planet from toxic waste trade'. www.ban.org/
- 39 <https://ipen.org/news/most-toxic-chemicals-in-African-eggs> and Peter Beaumont 'Rotten eggs: e-waste from Europe poisons Ghana's food chain' (accessed April 25, 2019). www.theguardian.com/global-development/2019/apr/24/rotten-chicken-eggs-e-waste-from-europe-poisons-ghana-food-chain-agboghloshie-accra
- 40 Timothy Morton, *Humankind—Solidarity with Nonhuman People* (London:Verso, 2017), 6.
- 41 *Mongo* is slang for an object thrown away and then recovered.
- 42 Artist's website 'Cape Mongo' <https://francoisknoetze.carbonmade.com/projects/4395983> accessed May 8, 2019.
- 43 Time Magazine's cover (May 13, 2019), listed South Africa top of unequal societies based on a 2018 World Bank report (Victor Sulla & Precious Zikhali, *Overcoming Poverty and Inequality in South Africa: An Assessment of Drivers, Constraints and Opportunities (English)*. Washington, DC: World Bank Group, 2018. <http://documents.worldbank.org/curated/en/530481521735906534/Overcoming-Poverty-and-Inequality-in-South-Africa-An-Assessment-of-Drivers-Constraints-and-Opportunities> The top 1% of South Africans own 70.9% of the country's wealth. Youth Unemployment Rate in South Africa averaged 52.28% from 2013 until 2019. *South Africa Hangs its Head in Shame*. Available: www.timeslive.co.za/news/south-africa/2019-05-03-sa-hangs-its-head-in-shame-as-time-magazine-highlights-inequality/
- 44 Isabelle Stengers, Reclaiming Animism. *E-Flux* 36, July 2012, 2.
- 45 Stengers, *E-Flux* 36, 3.
- 46 The Latin *animus*, meaning "rational soul, life, or intelligence," from a root that means "to blow" or "to breathe."
- 47 Stengers, *E-Flux* 36, 6.
- 48 Stengers, *E-Flux* 36, 8.
- 49 Jane Bennett, *Vibrant Matter—A Political Ecology of Things* (Durham, Duke University Press, 2010), 6.
- 50 Stengers, *E-Flux* 36, 12.
- 51 Monteiro works with Senegalese stylist Doulsy.
- 52 Monteiro in Irina Backonsky, April 22, 2018, These incredible photographs are prophecies for our planet www.dazeddigital.com/art-photography/article/39835/1/fabrice-monteiro-photographs-are-prophecies-for-our-planet
- 53 Design Indaba 2018 www.designindaba.com/articles/creative-work/we-already-live-dystopian-world-%E2%80%9393%C2%A0fabrice-monteiro
- 54 *Coucou Crumble*, accessed May 2, 2019, <https://gallerymomo.com/exhibitions/coucou-crumble>
- 55 Maurice Mbikayi author/artist interview, May 9, 2019, Gallery MOMO, Cape Town, in which Mbikayi references Franz Fanon's *Black Skin, White Mask* (1952).
- 56 Satirizing the Russian revolution's failure in Stalinism, in *Animal Farm* the pigs revolt against the farmer, but when in power they adopt the vices of those they ousted. Mobutu Sese Seko, military dictator of the DRC from 1965–1997, was seen by many as the puppet of the Belgians, perpetuating their control.
- 57 Mbikayi, interview.
- 58 Stengers, *E-Flux* 36, 6.
- 59 MessyNessy Cabinet of Chic Curiosities, April 5, 2011, "Who Is the Dandy Man? The Congo Subculture Uncovered" www.messynessychic.com/2011/04/05/who-is-the-dandy-man/

60 Kinshasha, the capital of the Democratic Republic of Congo (DRC) and Brazzaville, the capital of the Republic of the Congo, also known as Congo *Brazzaville*, or Little Congo, are two equatorial Congo neighbors in central Africa. They are Separated by the Congo River, the European imperialism of Belgian and French colonial pasts, and longstanding contemporary civil war and unrest that has killed 5.4 million people.

61 Morton, *Humankind*, 16.

62 Morton, *Humankind*, 18.

63 The title in Mbikayi's mother tongue, Luba.

2

IN THE FRONTIERS OF AMAZONIA

A Brief Political Archaeology of Global Climate Emergency

Paulo Tavares

At the time I am reviewing this text for publication (June 2019), Brazil's recently elected far-right president Jair Bolsonaro is implementing a series of measures to weaken environmental protection laws. His foreign minister believes that climate change is a "Marxist plot," and he appointed a pro-business environment minister who is trying to destroy every progressive environmental policy for which Brazil became known since the country hosted the first UN Earth Summit in Rio de Janeiro in 1992.

It is known that "Rio 92" constituted a landmark event in global environmental politics, for it brought more diverse civic voices—social movements, indigenous organizations, NGOs etc.—to the center stage, setting the ground for the understanding that the ecological crisis should be addressed in relation to socio-economic justice and shared and differentiated responsibilities. This rose ethical and political questions that became increasingly more poignant ever since, asking how climate change and global warming are related to colonial and imperial structures of power defined along lines of class, race, and gender. In Brazil, the moment of "global ecological consciousness" represented by Rio 92 was also symbolic in that it represented the country's coming back to democracy after twenty years of military dictatorship. Human rights, democratic participation, and environmental issues constituted inextricable dimensions of the same struggle, local and global.

Looking the current situation in light of this historical context, it is not surprising that Bolsonaro's attack against nature runs in parallel with his government's attacks to undermine laws that were established after the dictatorship to protect indigenous lands. Bolsonaro attempted to transfer the custody and demarcation of indigenous territories from the Ministry of Justice to the Ministry of Agriculture, thus subjecting indigenous rights to the interests of Brazil's powerful agribusiness lobby, which is one of his main electoral constituencies. He also declared that indigenous peoples should be "integrated" into national society, vowing to open their lands to mining extraction and industrial plantations.

Bolsonaro's use of the term "integration" made a direct reference to the doctrines implemented by the military dictatorship in Brazil, which he praised on several occasions. After the US-backed coup of 1964, the Brazilian State deployed a series of planning strategies whose central objective was to "occupy and integrate" indigenous territories by advancing development projects in the inner frontiers. A national truth commission demonstrated that these

projects and policies incurred in systematic displacement of indigenous communities, leading to acts of genocide and ethnocide against various groups. Moreover, due to the predatory logics of the development projects implemented by the military regime, the twenty years of dictatorship in Brazil were also characterized by widespread deforestation in Amazonia.

Brazil's environment protection system grew from social opposition to the ecological destruction caused by the military's economic-spatial planning, and was consolidated in the constitutional reforms that followed the re-democratization process after 1984. The new democratic constitution implemented 1988 also establishes a series of landmark rights in relation to indigenous peoples, especially in relation to cultural and territorial recognition. At the political horizon of Bolsonaro's militarized-populist neoliberalism is the complete dismantling of the rights system established post-dictatorship, projecting Brazil back to a time in which rights violations were the rule so that indigenous territories and environmental protected areas can be appropriated (and destroyed) by global extraction industries.

This text briefly traces that historical context, arguing that deforestation in Amazonia caused by the planning schemes of the military regime must be related to the severe human rights violations. In other words, political violence, freedom-of-speech repression, and the curtailing of democratic rights experienced during the twenty-year-long dictatorship in Brazil are in many ways associated with environmental destruction, and this must be placed in perspective with the global climate emergency. Violations of human rights and rights of nature consisted in entangled dimensions of a violent political order that is at the roots of the ecological crisis. The "archaeology" that follows sheds light into the recent past of Brazil as well as the near planetary future, serving as a tale of caution for what is to come if we don't resist and allow the necro-politics against peoples and nature deployed by far-right extremists like Jair Bolsonaro to prevail.

Terra Nullius – Tabula Rasa

Brasília—Brazil's modernist capital built from scratch in the country's hinterland plateaus in the late 1950s—is above all a city of colonial occupation. It is a product of modern state-led settler colonialism, aimed at expropriating and occupying territories by defining indigenous lands as "demographic voids" in need of "development." Lucio Costa, the urban planner of Brasília, said it explicitly. Explaining the concept of his design, he wrote: "It was born out of the primary gesture of one who marks or takes possession of a place—two axes crossing at a right angle, the very sign of the cross."¹ Many interpreters read Brasília's cross-shaped urban plan as the image of an airplane flying towards a future of modern progress, a third world's aspiration that will never be fulfilled, if only in architectural forms. Closer to ideology manifested by the city is the idea that, as Costa stated, its urban plan symbolizes a Christian cross, denoting a mark of colonial possession over foreign lands in the same fashion as the Portuguese did in the sixteenth century. Brasília is "a deliberate act of possession," Costa wrote, "a gesture similar to that of explorers, in the mode of the colonial tradition."²

Only in the early 1970s, when Brazil was under military dictatorship, did Brasília become the *de facto* centre of national political power. By that time, the colonial programme embodied in the modernist design of the city was rapidly expanding toward Amazonia. Like their colonial predecessors, modern strategists and planners defined Amazonia as a void space characterized by chronic lack: demographic emptiness, technological underdevelopment, economic stagnation, territorial isolation. This neo-colonial perspective led the military dictatorship to design a territorial strategy to "occupy and integrate" the forests of Amazonia known as "Operation Amazonia," which was translated into a series of radical experiments in spatial planning. This plan was deployed as if the extreme diverse and complex socio-natural environs of the rainforest could be planned and modified as a whole: a homogenous *terra nullius–tabula rasa* to be rationally

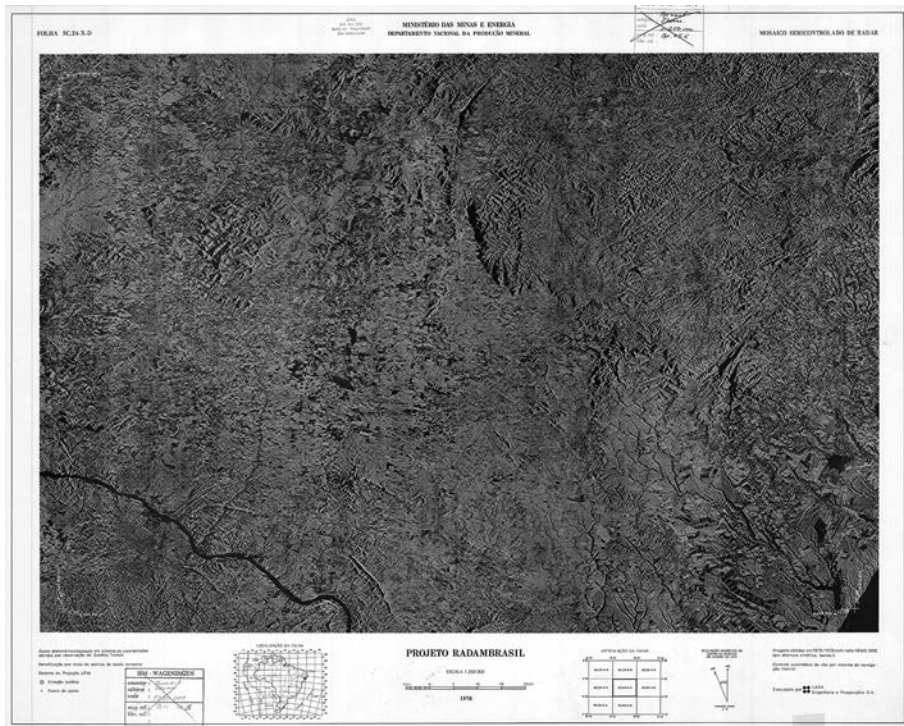


Figure 2.1 Radar-based map of central Amazonia produced by project RADAM (Radar-Amazonia), RADAM Brasil, 1971

domesticated, colonized, and re-engineered. Aided by mapping technologies developed by the Cold War military-industrial complex, Amazonia was conceived and visualized as a limitless resource-terrain open for capitalist exploits upon which a series of cartographic imaginaries, government discourses, and grand strategies were projected and implemented. This in turn led to dramatic changes in the forest's social and natural landscapes (Figure 2.1).

The Politics of Erasure

In order to accomplish that plan, the military government sought to “pacify” indigenous communities whose territories were located in strategic zones designated to receive development projects such as roads, mines, dams, plantations, and cattle farms. State policies directed at indigenous peoples then became aligned with Cold War doctrines of national security, while the “pacification” campaigns became increasingly militarized.

As documented in the final report of the Comissão Nacional da Verdade, a national truth commission set in 2013 to investigate grave human rights violations perpetrated by the military regime, this politics of pacification generally involved violent compulsory removals and forcible transfers, leading to massive dispossession and displacement, severe demographic reductions, socio-cultural disintegration and the near-extirmination of entire native groups. When mapped in conjunction as integrated components, these actions draw the contours of a broader strategy to “produce demographic voids,” the truth commission concluded (Figure 2.2).³

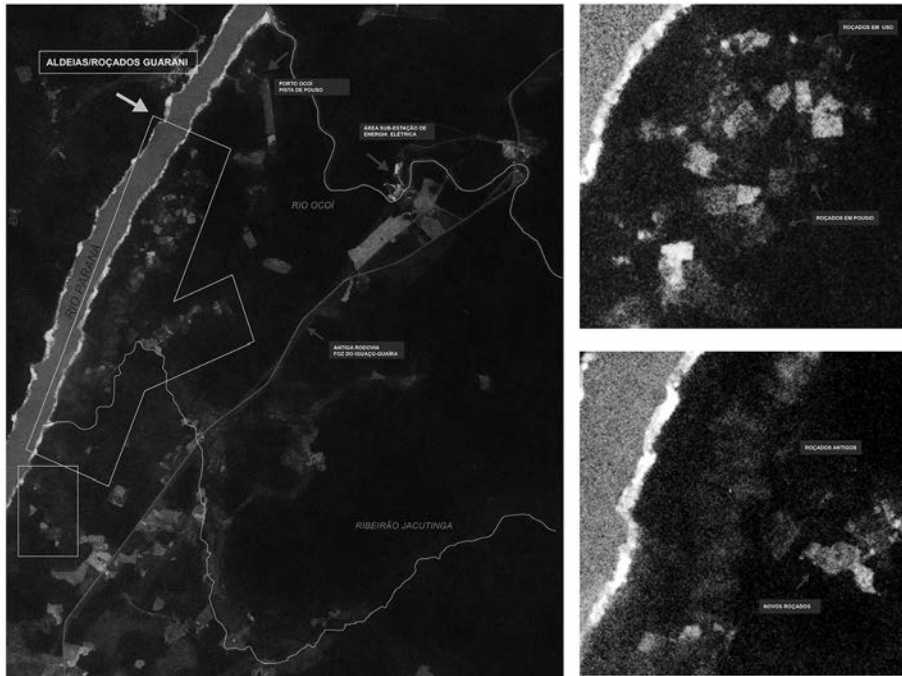


Figure 2.2 Identification of Avá-Guarani villages at the margins of the Paraná River through forensic mappings, 2020

Source: Image by Paulo Tavares/autonomia

The colonial perception that the forest constituted a vast *terra nullius* was translated into an official state policy, eliminating the existence of indigenous peoples as subjects of rights and exterminating them as culture and as a people. “In order to liberate land for colonization and the construction of infrastructural projects,” the truth commission states, this politics “led not only to formal attempts of denying the existence of certain indigenous peoples in certain regions, but also to means of making this erasure reality.”⁴

Ecocide by Design

Besides the killing of thousands of indigenous peoples, “Operation Amazonia” caused widespread, long-term, and severe damage to the environment. Large-scale deforestation was as much a product of the violence of the colonial politics implemented by the military as it was one of its main driving forces on the ground. Environmental destruction followed the spatial blueprint elaborated by state planning bureaus, moving deeper into the forest along highways, development projects, and government policies. Ecocide was produced by design.

It was only in the mid-1980s, when Brazil was transitioning back to democracy, that the environmental impacts of “Operation Amazonia” started to be mapped. These early cartographies are expressions of this period of democratization as well as of growing international concerns over the global climate that surged at that time. In 1990, two years before the first UN Earth Summit was convened in Rio de Janeiro and months after the first post-dictatorship presidential election of 1989, the National Institute for Space Research of Brazil (INPE) released the first detailed analysis on deforestation in Amazonia. This cartography showed the total area

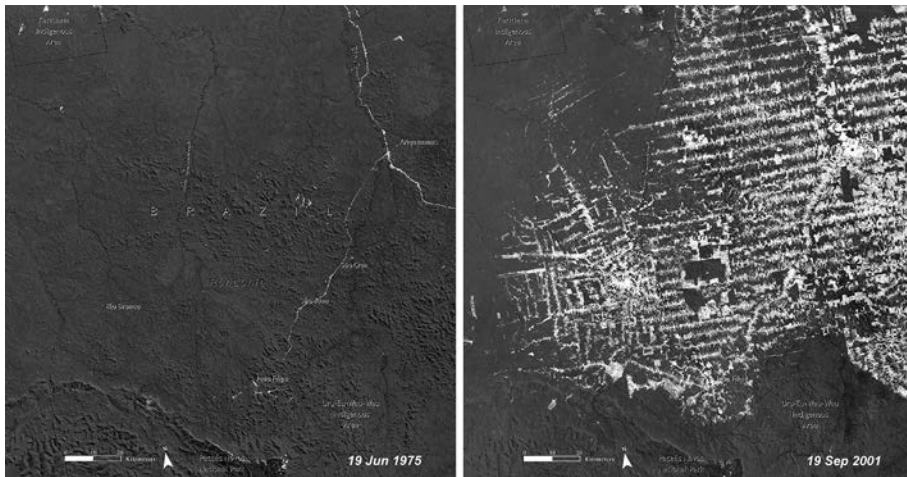


Figure 2.3 Satellite image showing the changes in land-use pattern of the one of the “development” poles implemented by the military regime in Amazonia: the fish-spine pattern of deforestation was converted into a “vernacular” mode of occupation in the Amazon (UNEP), 2001

deforested during two decades of military regime was equivalent to the territory of Portugal and Italy combined (Figure 2.3).⁵

Being the largest rainforest mass on the planet, Amazonia plays a crucial function within the Earth System, and therefore the territorial planning of the military dictatorship had the potential to unleash ecological consequences of global scope. Political and economic forces turned into “planetary environmental forcings.” Contemporary climate models suggest that if deforestation spreads, Amazonia will cross a tipping point and reach a new state of equilibrium as a drier, warmer, and much less biodiverse environment. In turn, energy feedback-loops can affect large-scale climatic processes.⁶ The “savannization” of Amazonia will be irreversible, and hence a major Earth-cooling engine will be turned off, converting the entire planet into much drier, hotter, less fertile and inhospitable land.

Power and Climate

During the global Cold War, a major event occurred in the Earth’s trajectory toward the contemporary condition of planetary climate emergency. When observed from a global perspective, the rates of every index that registers humanity’s footprint on the planetary ecosystem increased dramatically during the second half of the twentieth century, reaching a take-off stage in the 1950s and accelerating in the following decades.⁷ This is so radically different from everything else experienced in the natural history of the Earth that a specific geological periodization named the “Great Acceleration” – “the most rapid and pervasive shift in the human-environment relationship” – has been designated to define the Cold War decades.⁸

The Earth’s transition from the Holocene to the Anthropocene is generally attributed to an evolutionary process in the history of humanity toward higher stages of civilization, technological progress, social-economic development, and material well-being. Most often treated as a universal and inherently positive movement, this revolution is recorded in global statistics that show how the incremental development of human societies is imposing a heavy toll on planetary resources. Under this frame climate change appears as the inadvertent by-product of

modernization; that is, the global climate emergency is interpreted as a collateral effect within an inexorable path towards human progress and civilizational evolution.

But, as Walter Benjamin reminds us, “there is no document of civilization which is not at the same time a document of barbarism.” The indexes that draw the charts of the “Great Acceleration” must be historically contextualized and spatially situated, framed in relation to the uneven geographies of resource distribution and the architectures of power that have shaped this novel geophysical terrain in multiple and overlapping forms. For the other side of explosive economic growth—an ideological construct that define less a natural process in human history than the most powerful ideological avatars of capitalism—has been tremendous concentration of wealth and inequality,⁹ while the degradation of the global environment is historically and structurally related to the colonial conquest of territories and populations.

If the onset of the Anthropocene occurred in the late eighteenth century, as scientists Paul Crutzen and Eugene Stoermer have proposed, it was as much a product of fossil fuel-enhanced industrialization and urbanization in the centers of the western world as it was the result of the destructive forces of colonialism in its peripheries, whether manifested in the great enclosures of common lands of the European peasantry, or in the brutal territorial annexations that ravaged the life of indigenous populations throughout the colonial world. More recent scientific studies have proposed setting the “golden spike” of the Anthropocene in the period of early modernity-colonialism, identifying colonization as the decisive event in the Earth’s transition to a new geological epoch. According to ecologist Shimon Lewis and the climate scientist Mark Maslin, the impacts of colonialism—warfare, enslavement, the spreading of western diseases, and the conquest and degradation of habitats that caused the genocide of Native Americans—can be seen as an ecological planetary force that engendered a “swift, ongoing, radical reorganization of life on Earth without geological precedent.”¹⁰

Likewise, as the case of the modern colonization of Amazonia during the dictatorship in Brazil demonstrates, the “Great Acceleration” cannot be detached from the genocidal-ecocidal rationale that drove the militarized resource rush of the global Cold War. In other words, insofar as humanity has turned into a force of nature, power consists in one of the most effective vectors by which this force is manifested and deployed, with the conspicuous difference that, as ecologist Simon Lewis argues, “power is unlike any other force of nature in that it is reflexive, and can be used, withdrawn or modified.”¹¹ May we now interpret state coups as “ecological forcings”?

Worldly War

In relation to the temporal scale of the Earth’s deep time, the late twentieth century looks like a brief, insignificant fragment. If measured in intensity, however, these short but extremely violent decades characterize a moment of exponential geo-chronological acceleration. The human capacity for inadvertently or purposefully inducing modifications in the global environment increased exponentially as the alliance between scientific knowledge, industrial technology, and military power pushed innovations beyond the limits of the imaginable. This is never more evident than in the attempts to “weaponize nature” pursued in the 1950s–1970s, when the global powers, chiefly the United States and the Soviet Union, systematically conducted scientific research on large-scale environmental manipulation and weather control in order to prepare for a total war that would be fought on a geophysical dimension.¹² By more diffused and less bellicose means, the rationale for these military strategies of environmental modification reverberated throughout civilian industries. When applied toward social and economic development, such as in the case of the so-called “Green Revolution,” they also have been employed to enforce political containment and resource control.¹³

Within this global battle, the ultimate casualty was Planet Earth itself. “We so-called developed nations are no longer fighting among ourselves,” philosopher Michel Serres wrote in the aftermath of the conflict, “together we are all turning against the world. Literally a world war.”¹⁴ As natural resources and biodiversity are dramatically extinguished, and the climate tips towards permanent instability, we are beginning to experience the effects of this ecocidal rationale.

The global Cold War was fought on an environmental scale, both in times of war, as in the case of the scorched-earth campaigns deployed by the United States against the forests of Indochina, and in times of peace, through the transformation of the Earth’s environment driven by development projects and the ideology of unlimited economic growth. At the same time, this was a period when states of exception and political violence turned into the normalized form of government, chiefly at the margins of the third world, where coup-enforced military dictatorships were responsible for installing repressive regimes. In lawless frontier zones of the hinterlands such as Amazonia, where modernization and colonization were indistinguishable processes, violence directed toward human collectives and environmental destruction were condensed as two sides of the same strategy. It follows that, once the environment is recognized as a tool of power, it must also be recognized and mobilized as a weapon of resistance.

Reparation/Restoration

In bringing together forms of political and environmental violence, it is necessary to ask how historical reparation is related to ecological restoration. In the context of human rights tribunals and truth and reconciliation commissions, which has become the standard model for addressing historic atrocities since the Holocaust, the general trend was to focus on human rights abuses, not taking into consideration the role of the environment in forms of political oppression and violence.

Since the chemical warfare deployed by the United States in the Vietnam War, when many voices rose to call for the framing of ecocide as war crime, new perspectives on the issue have emerged, trying to understand and legally define how actions of violence directed against nature are intertwined with human rights abuses. Among several other initiatives, one of the most recent and meaningful is found in Colombia, where there has been a series of social mobilizations for setting up an “Environmental Truth Commission” to deal with the past decades of armed conflict in the country.¹⁵

In my own practice I have been dealing with visual projects and forms of spatial advocacy that seek to address the links between political violence and environmental destruction, foremost in relation to indigenous groups in Brazil that have been affected by the militarized colonial policies of the dictatorship. In one of these projects, called *Memory of the Earth*, we re-appropriated several visual instruments utilized by the state to displace the Xavante people, chiefly maps and satellite images produced in the context of secret military surveillance missions, to extract evidence of gross human rights violations perpetrated by the state. Through the re-framing of these visual instruments of power, we were able to identify a series of Xavante villages that have been forcibly abandoned or destroyed, thereby inverting the colonial gaze they served. The multiple sets of forensic cartographies produced in *Memory of the Earth* also demonstrate that displacements were closely associated to the massive deforestation that occurred in the ancestral land of the Xavante people after they were forced to leave, making the nexus ecocide-genocide visible in evidentiary form (Figure 2.4).

Hence the historic reparation of the Xavante people cannot be detached from the ecological restoration of their land, for one and the other are parts of the same process of violence. This connection between reparation and restoration is an important one if we are to conceive

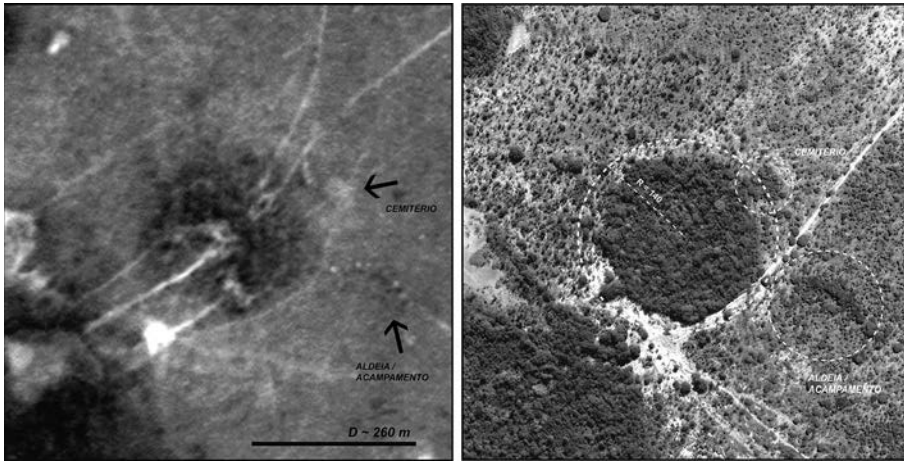


Figure 2.4 Identification of Bö'u, the old center of Marãiwatsédé, 2018

Source: Image by Paulo Tavares

meaningful alternatives to respond the planetary climate emergency, since the ecological crisis cannot be addressed without considering questions of historic social justice. Visual cultures and the arts play an important role here in the sense that they can help bringing social histories of environment to the realm of the sensible, for in a time of proliferating fakes, this battle is as much political as aesthetic, fought on the ground and through narratives.

Coda

As the Earth enters in the post-climate change condition, and insofar as the Anthropocene hypothesis refers to the collapse of the distinction between social and natural forces, a critical question that needs to be addressed concerns the relationships between histories of power and natural histories, social conflicts and environmental transformations, politics and ecology. The long-term, widespread, and severe damage caused to the ecosystem of Amazonia by the modern-colonial project implemented by the Brazilian military regime is expressive of how power functions as an anthropogenic driver, pushing the Earth toward climatic emergency. Only by converting Amazonia into a zone where exception was the rule, could “Operation Amazonia” be enforced on the ground, crushing any possible form of democratic dissidence and political resistance. Entangled in various dimensions, political and environmental violence consisted of fundamental engines by which indigenous lands were occupied, enclosed, and colonized, opening the rainforest to spiralling deforestation, and thereby enhancing climatic changes of planetary proportions.

Histories of power are environmental histories, and such perspective call us to investigate and narrate how (global) political structures are related to the (planetary) climate emergency. In the contemporary geo-political/geo-climatic condition, when conservative forces negate the science of global warming as “Marxist plots,” embracing this task became politically urgent if we are to fight the dystopian future that is being delivered by the powerful to the most vulnerable human and nonhuman populations on Earth. The defence of nature is entangled with struggles for democracy, human rights, and social inclusion. Ultimately, as the current situation in Brazil shows, this is a fight against new forms of fascist-like necropolitics.

Notes

- 1 . Lúcio Costa, *Memorial do Plano Piloto de Brasília* (1957).
- 2 . Costa, *Memorial do Plano Piloto*.
- 3 Comissão Nacional da Verdade, *Final Report, Volume II: Tematic Texts*, December 2014, pp. 198 and 217. The Brazilian Truth Commission (CNV) estimates that at least 8350 indigenous peoples were killed because of “direct actions or omissions” of governmental agencies, but also affirms that this number could be exponentially higher.
- 4 Comissão Nacional da Verdade, *Final Report*, p. 205
- 5 Philip M. Fearnside, Antonio Tebaldi Tardin, and Luiz Gylvan Meira Filho, *Deforestation Rate in Brazilian Amazonia* (Manaus: INPE, 1990).
- 6 Carlos Afonso Nobre and Laura De Simone Borma, ‘Tipping points’ for the Amazon forest, in: *Current Opinion in Environmental Sustainability* 2009, 1: 28–36.
- 7 Of the 40,000 large-scale dams distributed around the planet, only 5,000 were built before 1950; fully exploited marine fisheries went from less than 20% in 1950 to over 80% in 2000; and in the same period the loss of world tropical rainforests rose from 10% to over 30%. Within these five decades, grain production tripled, energy consumption quadrupled, economic activity quintupled, and the world population more than doubled, reaching over 6 billion in the early twenty-first century. About half of the wildlife that existed forty years ago has been exterminated due to direct killing conducted by humans or indirectly by human-driven depletion of marine and terrestrial habitats.
Sources: See Will Steffen et al., “The Trajectory of the Anthropocene: The Great Acceleration,” *The Anthropocene Review* 2 (2015): 81–98; and Will Steffen, Paul Crutzen, and John R. McNeill, “The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?,” *Ambio* 36 (2007): 614–621; Patrick McCully, *Silenced Rivers* (London: Zed Books, 1996); Damian Carrington, “Earth has lost half of its wildlife in the past 40 years, says WWF,” *The Guardian*, Tuesday September 30, 2014.
- 8 Will Steffen et al., “The Trajectory of the Anthropocene,” p 2.
- 9 Thomas Piketty and Arthur Goldhammer. *Capital in the Twenty-first Century* (Cambridge MA: The Belknap Press of Harvard University Press, 2014).
- 10 Simon L. Lewis and Mark A. Maslin, Defining the Anthropocene, in *Nature* 519, 171–180, March 12, 2015.
- 11 Apud David Biello, *Mass Deaths in Americas Start New CO₂ Epoch*, in: *Scientific American*, March 11, 2015.
- 12 This included experiments such as nuking ice shells and oceans to create artificial tsunamis and drown coastal cities; producing firestorms in forest areas or altering the temperature of sea currents to disrupt the enemy’s climate and food production; or using biological agents to contaminate land, water and air. Jacob Darwin Hamblin, *Arming Mother Nature: The Birth of Catastrophic Environmentalism* (Oxford and New York: Oxford University Press, 2013).
- 13 Schemes of agricultural development such as the Green Revolution were intrinsically associated with notions of global security and most often came to serve as instruments for the exercise of political, economic and cultural domination. Informed by doctrines of security, the modern planning of economy, society and territory achieved proper geophysical dimensions, ranging from projects for the “perennial irrigation” of the Saharan desert to the creation of an artificial inland sea in the middle of Amazonia. See J. R. McNeill and Corinna R. Unger (eds), *Environmental Histories of the Cold War* (New York: Cambridge University Press, 2010).
- 14 Michel Serres, *The Natural Contract* (Michigan: University of Michigan Press, 2003), p. 32.
- 15 www.pressenza.com/es/2016/06/una-comision-verdad-ambiental-colombia/

3

FROM TUÍRA TO THE AMAZON FIRES

The Imagery and Imaginary of Extractivism in Brazil

Rodrigo Guimarães Nunes and Alyne Costa

Thirty years ago, the Kayapó people in the Amazon held a meeting to mobilize against the Brazilian government's plan to build a hydroelectric complex in the basin of the Xingu river. Conceived during the 21-year-long military dictatorship that had then only recently come to an end, the project entailed flooding over 18,000 sq. km of forest and displacing around 7,000 indigenous people, including uncontacted groups.¹ The very name that had been chosen for the first projected dam came across as an insult: *Kararaô* meant "war cry" in the Kayapó language. To issue a war cry was exactly what the Kayapó did, hosting over 3,000 people in the town of Altamira to discuss the situation. Although the meeting exceeded all expectations, it was one scene above all that captured the world's imagination. Halfway through the proceedings, a young Kayapó woman named Tuíra rose from the audience and walked towards José Antônio Muniz Lopes, the director of the state company in charge of the project. After an indignant tirade in her language, she drew her machete and pulled it up against the executive's face. Her gesture showed that the government's declaration of war against the peoples of the Xingu had been understood and would be returned in kind (Figure 3.1).

The picture of Tuíra brandishing her machete travelled the world, becoming a symbol of indigenous resistance and the fight against a notion of progress that, with colonial exploitation and extractivism at its center, has left centuries of destruction in its wake. Brazilian history is, of course, inextricably tied to the extraction of raw materials: the country's name refers to a tree species (*pau brasil*) that was the first commodity the Portuguese exploited in the Americas, and the gentile *brasileiro* originally referred to the people involved in its trade. In this essay, however, we wish to take a shorter historical perspective and examine the discursive and iconographic persistence of a certain imaginary of national development between the 1950s and the present. This angle of analysis reveals much more continuity than one would expect between governments as disparate as the reformist populists of the 1950s and early 1960s, the military regime of the 1960s and 1970s, and the Workers' Party (PT) administrations at the start of this century. We show why PT chose to rekindle this imaginary, which had been the undisputed center of the political spectrum until the 1990s, instead of strengthening its historical ties to environmental and indigenous movements, and point to a fateful consequence of this decision: helping pave the way, politically as well as discursively, for the resumption of that imaginary in an extreme,



Figure 3.1 Reaction to a war cry: Tuíra and the Eletronorte executive, Brazil, 1989

deadlier form under a government that openly embraces climate denialism while extolling the worst political and socio-environmental crimes of the military regime. In the conclusion, we raise some questions about the role that art and visual culture more generally can have in unmaking this imaginary and promoting alternative ones.

The Making of a National Developmental Imaginary

With characteristic irony, in *We Have Never Been Modern* Bruno Latour refers to 1989, the year in which the picture of Tuíra conquered the world, as “glorious.”² In his telling, that was when capitalism came to be seen as both the only economic system possible, owing to the collapse of the Soviet bloc, and an impossible economic system—nascent awareness of anthropic climate change signaling an end to “its vain hopes of unlimited conquest and total dominion over nature.”³ Just the year before, at a session of the United States’ Senate Committee on Energy and Natural Resources, climatologist James Hansen had linked rising temperatures to manmade greenhouse gas emissions and warned that extreme weather events such as the drought that plagued the country in 1988 would become more frequent.⁴ His testimony received broad media coverage and brought the expression “global warming” out from relative scientific obscurity. The Intergovernmental Panel on Climate Change (IPCC) came into existence only a few months later.

Since the 1960s, signs of ecological degradation in different parts of the world had been pushing environmental concerns further into the center of public debate; the mounting evidence of climate change accelerated that tendency. In step with the international trend, the late 1980s saw ecological awareness grow in Brazil. Among the causes for that were the expressive rise in Amazon fires and the assassination of rubber tapper leader and environmental activist Chico Mendes in 1988. That process would be amplified by the holding of the United Nations Conference on Environment and Development in Rio de Janeiro in 1992; and before that, by the struggle in the Xingu, magnified by the powerful image of Tuíra and the global tour that

Kayapó chief Raoni Metuktire undertook between 1988 and 1989 alongside celebrities like Sting. The campaign against Kararaô was enormously successful in whipping up international pressure against the Brazilian government. With the economy crippled by hyperinflation and debt, and faced with the World Bank's change of heart about financing the hydroelectric complex, it had no choice but to abandon the project, vowing never to use indigenous names again.

As a party that had emerged from the convergence of several social movements towards the end of the military regime, PT was naturally receptive to demands coming from environmentalists and indigenous people. From 1985, the party had an environmentalist cluster, and its affiliated trade unions participated in 1987 in the creation of the Alliance of the Peoples of the Forest, which brought together indigenous people and rubber tappers. The Alliance's foremost leader, Chico Mendes, was a party member. When former metalworker leader Luis Inácio Lula da Silva won the presidential elections in 2003, expectations ran high. Lula appointed Marina Silva, a close collaborator of Mendes', to the Ministry of the Environment, and his first few years in power saw a push to demarcate indigenous and maroon land. Internationally, Brazil positioned itself as a champion of biofuels, presented as instrumental to the transition away from a carbon-based economy. The country's stance in climate negotiations became central to its global "soft power" strategy, and it acted as both an advocate for poorer nations and the most committed negotiator among the so-called BRICS. It sought to lead by example too: an effective anti-deforestation program brought loss of forest cover in the Amazon down from almost 28,000 sq. km. in 2003 to just over 5,000 sq. km. in 2014.⁵

Parallel to that, however, PT's domestic success was feeding a directly contradictory tendency at the heart of the government. From the start, Lula had been aware that the fate of his administration depended on managing the tension between historically repressed demands and the interests of the Brazilian elite. It soon became clear that Lula had chanced upon a formula that allowed him to introduce progressive measures without much pushback. The boom in the market for primary commodities sparked by Chinese growth allowed the country's economy to grow at a pace unseen since the 1970s. This generated the revenue that would be partially redirected towards the cash transfer programs that lifted 26.3 million people out of poverty and initiatives such as a radical expansion of access to higher education. The rich were getting richer and the poor, less poor. Yet this meant that the government's very success was now premised on the flourishing of sectors like agribusiness and mining, both of which are highly concentrated and depend on the continuous expansion of agricultural and extractive frontiers. In short, the condition for continuing to distribute wealth was raising the political and economic clout of the primary sector and, with that, the pressure on indigenous land and the environment.

It was not difficult to find ideological justification for this in the left's repertoire. In the 1990s, the Brazilian elite's embrace of neoliberal globalization had granted the left a monopoly over a national development discourse that had been the center of the political spectrum from the 1950s to the 1980s. In its communist variant, national development was a necessary step for a bourgeois revolution that would rid the country of pre-capitalist traces and create the conditions for a socialist rupture. In the version offered by the economists connected to the United Nations Economic Commission for Latin America and the Caribbean (CEPAL), it was the only path for overcoming economic backwardness and inequality, creating at once a fairer domestic capitalism and a fairer international market. Differences in strategy notwithstanding, these positions were de facto tactical allies. And when the country's elite sided with the military to bring down the developmentalist government of João Goulart in 1964, what followed was still a project of state-led national development, even if one more fundamentally committed to combining economic modernization with maintaining the sociopolitical status quo.

Through it all, natural resources in general, and the Amazon in particular, occupied a central place in the developmentalist imaginary. Brazil's natural riches were evidence that the country was fated to join the ranks of the great nations, and its manifest destiny lay in exploiting them just as developed countries had theirs. Two consequences followed. The first was an explicit internalization of the relations that characterize the country's position in the global capitalist system: the colonial exploitation of Brazil was internally reproduced in the exploitation of the country's northern and western regions by the industrialized south and southeast. The second was that, ironically, even the military could speak the language of anti-imperialism to some extent, presenting the industrial-scale exploitation of the country's resources as the only way of protecting them from a covetous international community. With the slogan *integrar para não entregar* ("to integrate so as not to lose"), they initiated a push to occupy the Amazon, the effects of which included the largest iron ore mine in the world (Carajás), the first large-scale hydroelectric project in the region, the Carajás–São Luís railroad, and the Transamazonian and Belém–Brasília highways.

From the Developmentalist to the Destruction Sublime

Whereas the "economic miracle" of the 1970s had failed to translate into an improvement of living standards for the majority, it was in the context of a successful combination of economic growth and poverty alleviation that PT started resurrecting the national developmental imaginary. Inevitably, this meant becoming increasingly deaf to environmental concerns and indigenous demands. Not only were these now obstacles in the way of precisely those sectors on which growth depended, they acted as a permanent reminder of a question that was not on the agenda when the dream of national development had first been idealized: climate change.

That tendency was accelerated by Brazil's discovery of large reserves of offshore oil in late 2006, and became manifest in a number of iconographic and discursive borrowings from the past. Interestingly, PT harked back less to João Goulart's more progressive developmentalism than to the at once more authoritarian and more conciliatory governments of Getúlio Vargas and the military. In 2006, Lula celebrated Brazil achieving self-sufficiency in oil production with a photo opportunity that openly referenced a portrait of Vargas at the time of the creation of Petrobras. (Figure 3.2.) From the dictatorship, PT inherited a taste for what we could describe as a *developmentalist sublime*, which conveyed the dynamism of national progress through sweeping helicopter shots of gargantuan public projects, luxurious plantations and abundant "natural resources".

It was in this context that plans for the hydroelectric complex in the Xingu basin were revived. Renamed Belo Monte, the Kararaô project was given pride of place by Lula and his successor, Dilma Rousseff. In its support, the government argued that it would generate thousands of jobs and meet the growing demand for electricity caused by improving living standards. What was left unsaid was the plant's role as a bridgehead and source of energy for energy-intensive extractive projects in the region, among which were aluminum mining and smelting, and what is supposed to become the largest open pit gold mine in the country, managed by Canadian giant Belo Sun.

Even before Belo Monte was built, therefore, it had already had two immensely damaging impacts. Firstly, it consolidated the discursive and political rift between PT and the environmental and indigenous causes; from that point on, it was clear that the tension between those and the demands of the extractive industry had been definitively decided in favor of the latter. Secondly, it cemented in the public imaginary—even, or especially, among the left—an irresolvable contradiction between reducing inequality and protecting the environment or indigenous rights. By failing to come clean about the real motivations for Belo Monte and dishonestly arguing that whoever opposed it was opposing working-class consumption, PT effectively naturalized a



Figure 3.2 Getúlio Vargas, Brazil, 1952

highly destructive and wealth-concentrating model as the only possible path for social justice. More than unquestioningly accepting the “infernal alternative”⁶ it had been dealt by historical circumstances—either accelerate extractivism or miss the opportunity to pursue poverty alleviation—the party made accepting it—and, by accepting, entrenching it—into a supreme virtue for anyone committed to equality.

This shift became even more marked under the presidency of Rousseff, not least in the way her government swept aside all opposition to start building Belo Monte. At a meeting with environmentalists prior to the Rio+20 Conference in 2012, Rousseff described their resistance to hydroelectric plants in the Amazon as “fantasy.”⁷ The following year, her chief of staff justified an overhaul of the legal framework for the demarcation of indigenous land by saying that the government would not be held hostage by “minorities with unrealistic ideological projects.”⁸ Before that, a communist congressman that acted as a liaison between the government and the agribusiness lobby had revisited old 1970s tropes to attack environmentalism as the new weapon of imperialism against national development.⁹ Finally, Brazil’s United Nations Framework Convention on Climate Change (UNFCCC) targets were revised down from zero net deforestation by 2015 (pledged in 2008) to zero illegal deforestation by 2030 (pledged in 2015). In 2014, after decreasing steadily for a decade, deforestation started to rise again.

While images of the devastation surrounding the Belo Monte construction site could still be situated within a developmentalist sublime with predominantly positive connotations, a new iconographic regime was already in the offing. As the global economic slowdown hit Brazil and investment in large infrastructural projects dropped, images of gigantic construction sites became less frequent or associated with unfinished projects. As the delayed consequences of years of bullish extractivism-based growth began to show, what took their place was something that we

could describe as the *destruction sublime*. Like its developmentalist counterpart, the destruction sublime is “dynamic,” in Kantian terms; that is, connected to a feeling of awe in the face of a much greater force. Differently from the Kantian dynamic sublime, however, both are inspired not so much by the boundlessness of nature’s might—“volcanoes with all their destructive power, hurricanes with all the devastation they leave behind...”¹⁰—as by its instrumentalization and subjugation by a technologically mediated *human* force.¹¹ But whereas the developmentalist sublime could still be related to a consciousness “of our superiority to nature within us, and thereby also to nature outside us,”¹² in that it pointed to a capacity to bend the natural world to human ends, the destruction sublime awes us with a glimpse of our own uncontrolled destructive power, undermining any feelings of moral or rational superiority. In this sense, it is perhaps closer to Kant’s mathematical sublime in that whatever pleasure it can offer is more intellectual than moral. This pleasure, however arises not from the realization of reason’s advantage over the imagination, but from the expansion of our imagination through technical means that render intelligible processes and events too large for the “natural” perspective of any single individual.

The most extreme manifestations of the destruction sublime came with two catastrophes involving the collapse of tailing dams belonging to the mining giant Vale. In November 2015 in the town of Mariana, the toxic sludge buried a whole village, caused permanent damage to seven others, and flooded the riverbed of several rivers, including Rio Doce, the most important in the region. Apart from the shots of the remains of houses, vehicles and animals jutting out from the reddish mud, the most memorable image of the disaster was that of Rio Doce flowing into the sea, its contaminated waters in sharp contrast with the marine blue. Apart from the 19 dead and the roughly 250 affected families, to this day it is still hard to estimate the true extent of the impacts or how long recovery may take.¹³

If Mariana was the largest environmental disaster in Brazilian history, the second catastrophe may turn out to be the deadliest tailing dam incident in the world in decades, killing at least 253 people at the latest count.¹⁴ It took place in January 2019 in Brumadinho, a town that ironically houses the most prestigious contemporary art center in the country—the founder of which, a mining tycoon, was himself connected to a tailing dam disaster in the 1980s.¹⁵ In this case, the most memorable image came from a video showing the moment when the dam collapsed, the previously solid wall liquefying into a wave of sludge moving at 80 km/h that dwarfed vehicles and buildings and swept away everything in sight.

After Brumadinho, the president of Vale sparked outrage for saying that the company, which was privatized in 1997, is “a jewel” that “cannot be condemned for an accident, no matter how big the tragedy.”¹⁶ Revolting as the statement might sound, it rings true when one looks at the authorities’ reluctance to even criticize the company publicly, or the fact that, despite immediate losses, Vale’s market value has tripled since Mariana.¹⁷ Even more heartbreakingly, it rings true when the inhabitants of Brumadinho expose the very palpable reality of the infernal alternatives facing mining towns: unions fight to keep Vale jobs when operations are suspended for safety reasons,¹⁸ the economic slowdown makes people move away, and the mayor announces that, without the 35% of revenue that came from mining, the local administration will severely restrict public services.¹⁹ Even after a major catastrophe, the show must go on—and the only way people can imagine the show going on involves doubling down on the very activity that puts their lives at risk.

The Brumadinho disaster took place already under the presidency of Jair Bolsonaro, a far-right former army captain elected as a dark horse in 2018 after the 2016 impeachment of Rousseff and the imprisonment of Lula, who until then had been leading the polls. Though it would be absurd to suggest that his recently sworn-in administration had any responsibility in it, it is undeniable that he represents a sharp acceleration of tendencies already visible under PT.

Bolsonaro is a historical enemy of landless workers, indigenous peoples and environmentalists who has long advocated for legalizing all kinds of extractive activities in reservations²⁰ and for the rights of landowners to arm themselves.²¹ His Minister for the Environment, Ricardo Salles, has gone about dismantling the structure of his own ministry, weakening the institutional means for enforcing environmental legislation while openly attacking NGOs. Bolsonaro's cabinet is packed with more or less overt climate deniers, not least Salles himself, who has connections with denialist groups in the United States,²² and the Foreign Minister, Ernesto Araújo.²³

At the same time, there is something clearly cynical and opportunistic in Bolsonaro's deployment of the national developmental imaginary. What is at stake in his case is not state-induced strategic development, but unregulated frontier capitalism in which the state simply offers cover for robber barons to practice predatory accumulation. Although he resorts to hackneyed anti-imperialist tropes that accuse indigenous people and environmentalists of collusion in an international conspiracy against Brazil's sovereignty over the Amazon, going so far as to suggest that it is they who have been setting fire to the Amazon,²⁴ he has repeatedly made clear his wish to open the Amazon to private companies from the US so as to cement his alliance with Donald Trump. The two countries have since come to an agreement in that regard.²⁵ This is, in short, national developmentalism repeating itself as fraud.

Beyond Destruction

Since before his election, the signals sent by Bolsonaro could not have been less subtle. Following his inauguration, he proudly announced to Brazilian agribusiness, "this government is yours."²⁶ After illegal loggers set fire to government property to protest against the environmental protection agency in the Amazonian state of Rondônia, Salles met with them and declared they represented "the good, hard-working people of this country."²⁷ When the satellite data produced by the National Institute for Space Research (INPE) exposed the accelerating rate of deforestation, Bolsonaro denounced the report as a "lie" and sacked the institute's president. The magnitude of the effects and the speed with which they came were staggering. By August 2019, the rate of deforestation in the Amazon had gone up by 222% in comparison with the same period in the previous year.²⁸ A wave of devastating fires struck the forest, and over 40,000 fire zones scorched about 30,000 sq. km, the equivalent of 4.2 million soccer fields. In one area where fires went up by 300% in one day, it transpired that local landowners had come together via WhatsApp to organize a "Day of Fire" meant to "show the president that we want to work."²⁹

To some extent, however, this offensive backfired; and it did so because of the power of the images it produced. When the destruction sublime was brought home from the country's far-flung corners to Brazil's biggest city—on August 20, smoke from bushfires in central Brazil darkened the skies of São Paulo in the middle of the day³⁰—the fires became a national and international crisis. The shots of São Paulo under a heavy cloud were some of the most effective pieces of environmental awareness-raising in (and about) Brazil in a long time. Those images condensed processes too large for individuals to perceive other than fragmentarily into something that, while apprehensible in a single take, was still large-scale enough to convey the magnitude of what it stood for. The immediate consequence of the fires—the smoke—thus functioned as a metonymical substitute for the long-term consequence of allowing the fires, and the economic dynamics behind them, to rage on: the irreversible transformation of the ecosystems that humans and other species depend on. This time at least, instead of inspiring only awe and passivity, the destruction sublime gave concreteness to the idea of a climate crisis and spurred people to action.

This case brings us back to a question previously posed by T. J. Demos regarding the role that art might play when consciousness-raising regarding climate change "is taking place through

mainstream mass media, the culture industry, and investigative journalism, even if public knowledge is still plagued by governmental inaction, fossil-fuel lobbying, and climate denialism.”³¹ Apart from the effort to translate the enormity and complexity of the processes that currently threaten humankind into a human scale, what else is there for art (but also theory) to do?³² What we have discussed suggests four provisional answers, four lines of enquiry to be further explored. The first has to do with contributing to the intelligibility not only of the consequences of the environmental crisis, but of the economic and political dynamics that underpin and sustain it, so as to enhance the collective capacity to identify weak spots, chokepoints, leverages and possibilities for political action that intervene *at the appropriate scale* to produce transformative effects. The second involves directly supporting the mobilization and organization of such interventions, which can be done by producing memorable imagery like Tuíra and her machete (or a *collective action sublime* perhaps?), by proposing useful concepts and questions, but also through active material participation. The third concerns advancing “creative proposals for alternative forms of life based on environmental justice in a global framework.”³³ The fourth has to do with exposing the workings of “infernal alternatives” and loosening their hold on the imagination, showing how they artificially reduce our choices by placing certain premises outside of public debate and, above all, severing the supposedly necessary link between combating inequality and indefinite economic growth.³⁴ The latter is especially important in countries in the capitalist periphery like Brazil. Only once that work is done can a new imaginary of social *and* environmental justice, free from the mid-twentieth-century assumptions of national developmentalism, emerge.

Notes

- 1 “Histórico,” Movimento Xingu Vivo para Sempre, October 14, 2010, www.xinguvivo.org.br/2010/10/14/historico/.
- 2 Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, MA: Harvard University Press, 1993), 8.
- 3 Latour, *We Have Never*, 8.
- 4 See Ben Block, “A Look Back at James Hansen’s Seminal Testimony on Climate, Part One,” *Grist*, June 16, 2008, <https://grist.org/article/a-climate-hero-the-early-years/>.
- 5 “Taxas anuais do desmatamento—1988 até 2015,” INPE, accessed November 17, 2019, www.obt.inpe.br/prodes/prodes_1988_2015.
- 6 See Isabelle Stengers and Philippe Pignarre, *Capitalist Sorcery: Breaking the Spell*, trans. and ed. Andrew Goffrey (New York: Palgrave Macmillan, 2011), 23ff.
- 7 João Domingos and Rafael Moraes Moura, “Em encontro, Dilma defende novas usinas hidrelétricas,” *Exame*, Jul 15, 2012, <https://exame.abril.com.br/mundo/em-encontro-dilma-defende-novas-usinas-hidreletricas-2/>.
- 8 *O Estado de São Paulo*, “O governo não pode e não vai concordar com minorias com projetos ideológicos irreais,” May 12, 2013, <https://alias.estadao.com.br/noticias/geral,o-governo-nao-pode-e-nao-vai-concordar-com-minorias-com-projetos-ideologicos-irreais-imp-,1031015>.
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- 10 Immanuel Kant, *The Critique of Judgment*, trans. Werner Pluhar (Indiana: Hackett, 1987), §28.
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4

DESCRIBING THE INDESCRIBABLE

Art and the Climate Crisis¹

Lucy R. Lippard

“We hit a horrifying milestone this past week: the amount of carbon dioxide in the atmosphere reached 415 parts per million—the highest level ever recorded in human history. But you wouldn’t know we’ve reached the tipping point by watching the news.”

—*Thanu Yakupitiyage for 350.org*²

What next? A gathering storm of public knowledge? Belated, drastic, and expensive solutions to save the planet? Or more of the greedy passivity that has gotten us where we are? In 2007, I curated *Weather Report: Art and Climate Change* for the Boulder Museum of Contemporary Art in Colorado (at the behest of Marda Kirn of EcoArts, with a mandate that the artists would work with scientists). It was one of the earliest art exhibitions on climate change, a subject I knew little about at the time. Among the lessons I learned while getting the show together was that climate change was not news. In fact, as I noted in the catalogue, the role of greenhouse gases was noticed around 1822 by Jean Baptiste Fourier. Mark Twain (or someone else) said that “climate is what you expect and weather is what you get.”³ By now, of course, it’s become abundantly clear that we must expect the unexpected; in fact—had we only noticed—we haven’t been getting the expected for a long time. In 1931, Thomas Edison said: “I’d put my money on the sun and solar energy. What a source of power! I hope we don’t have to wait until oil and coal run out before we tackle that.”⁴

By the mid-1970s, it was clear that saving energy is a lot cheaper than making it. Yet education about the scope of climate disruption is urgent and crucial... and almost non-existent. Misinformation is rampant, muddying the issues. This is where art comes in. With *Weather Report*, we tried to create a show that was varied, beautiful, accessible, and alarming, but not alarmist. I concentrated on conceptual and public work that seemed better able to cope specifically rather than impressionistically with the vast amount of data available even then.⁵ One piece in particular made the exhibition’s goals all too clear. The 2001 video *The Mountain in the Greenhouse*, by Helen Mayer Harrison and Newton Harrison. Titular founders of the eco arts movement, who began talking about climate change in 1973 and making art about it in 1979, the Harrisons asked Georg Grabherr, a University of Vienna professor, if they could make a piece based on his research on the effects of climate change on an alpine mountain. Ecosystems, with their infinite sensitivity to change, describe climate zones by where they grow. One small change in the climate triggers microcosmic toward macrocosmic chain reactions. Each year, as the temperature slowly rose,

Grabherr and his students recorded the climb of grasses and flowering plants up the mountain, slowly disappearing from lower altitudes. When the plants and their dependents reach the top, they have nowhere to go. They disappear, as polar bears and walruses could do in the Arctic's melting sea ice, although they are not the only species to be losing habitat, and therefore life.

While scientists like to remain "objective," artists resist restrictions. James Baldwin said, "The purpose of art is to lay bare the questions which have been hidden by the answers."⁶ That's an amazing gift... and a huge responsibility. I understand that Grabherr was reluctant to speculate on the basis of his findings, but he was happy to have the Harrisons, who have worked with scientists for decades, do so. They introduced their video:

This is a little drama; the theme is the disruption living systems will undergo as the perturbations of global warming reverberate through the European high grounds. It is a drama being enacted in fast time if you happen to be a glacier but in slow time if you happen to be a person.

Now, eighteen years later, if you happen to be a person, you have far more reason to identify with those plants climbing toward oblivion. Eighteen years later we know that that "slow" time in the Arctic, and in Canada, has speeded up beyond anyone's wildest imaginings. Eighteen years later we have been warned about far more dire effects than were known (or exposed) when the Harrisons' video was made. (No more trees? No more clouds? No more pollinators? Dwindling wildlife? Resistant bacteria?) We work quickly, but nature has outrun us. Everything is coming down the pike far faster than we imagined it could. Janet Culbertson's 1987 paintings show billboards depicting bright, healthy, lost lands, standing in dark, barren, devastated landscapes. As the Green New Dealers keep telling us, there are no jobs on a dead planet.

Time is perhaps the most crucial element in our understanding of climate disruption in this age of instant gratification. If it's not happening today we don't bother to worry, even if disaster looms tomorrow. Ecoartist Aviva Rahmani, whose *Blued Trees* project combines site-specific art and music to oppose pipelines, contends that we're caught in a paradox; finding the "right answers" takes time... and we have no time.

From today's vantage point, it seems unreal that for decades the Left (which is obviously where I stand) considered environmentalism to be "soft politics." Those who allegedly cared more about the earth and its creatures/creations than about social revolutions were perceived as acting from a kind of political suburbia. Today, sparked by indisputable evidence of human agency, the environment is center foreground. It has rightfully become the radical edge, but only if social justice remains at its core.

Some perceive a conflict between the parallel necessities to focus either on carbon in the atmosphere or on inequality on the ground, but "climate justice" incorporates both extremes. We share DNA with every form of life on the planet, and there is no part of life that won't be touched by climate crisis over the next century. The UN recently reported that one million animal and plant species are at risk of extinction right now. The loss of biodiversity may turn out to be just as catastrophic as climate change itself.⁷ As a firm believer in the ecological truism that everything is connected, locally and globally, it seems clear to me that there are few contemporary issues that don't connect, from climate refugees to desertification and diminishing farmland to toxic pollution from the extraction industries, and even reproductive rights. As we uncover the social and ecological subtleties, we begin to understand the interconnective nuances between what we call nature and what we call human, which is, of course, merely another branch of nature, though we've done everything we can to separate ourselves from those parts we think we can dominate and exploit.

Brian Collier's *The Pika Alarm*, a public piece in *Weather Report*, broadcasted the plaintive calls of the pika (a small, really cute alpine animal, aka the Boulder Bunny), which was then in line to be one of the first species to reach extinction due to climate change. (It has since been beaten out by a now extinct Australian rodent, the Bramble City Melomys.) Like the alpine plants, it too is climbing to ever higher elevations. Another art approach is that of ROA, the Belgian muralist who travels the world painting his striking black and white bestiary of disrespected or threatened creatures on rural and urban structures. Alexis Rockman's meticulous paintings of a dystopian future offer still another strategy.⁸ There is no single style or medium that is better equipped for the task, although access to a potentially responsive public is crucial.

Tim Collins and Reiko Goto suggest that the term interface be seen as an analogy for art, "a common boundary or interconnection" between systems, concepts, environment, and people.⁹ This definition allows artists an alternative to the commercial artworld, allows them to move out into the world where we all live. If TV and video games and the Internet are undeniably running faster and faster, art is the slow food for thought. What, then, is the socially engaged artist's role in this precarious era? There's no reason to exaggerate the elusive power of artists. They can't change the world ... alone. But with good allies and hard work, they can collaborate with life itself. Art can offer visual jolts and subtle nudges to conventional knowledge. At best it can lead us to look, to see, to understand, and then to act. Artists can also deconstruct the ways we're manipulated by the powers that be and help open our eyes to what we have to do to resist and survive. The popular image of artists as renegades frees them to imagine situations and outcomes beyond the predictable. The "unexpected" is simply grist to the esthetic mill. Among artists' most important and optimistic tasks is to work with individuals and organizations to restore and remediate wounded nature. Unlike the most famous (male) land artists, Patricia Johanson, among others, moves earth for positive restorative goals, such as sewage treatment, exposing contaminants in the soil, or stormwater management—all in forms inspired by natural beauty, from mice to flowers. In her recently completed *Sego Lily* in Salt Lake City, she provides crucial flood control as well as irrigation and recreation.

Working with scientists, artists can even provide innovative models for new approaches. One of those most committed to making a difference is Mary Miss, who observes that she has

spent the last couple of decades trying to imagine a path through complex environmental issues such as climate change... artists have an integral, complimentary role along with planners, scientists, educators, community stakeholders and policy makers if we are to address the complex issues we face.¹⁰

In *Weather Report*, Miss worked with a hydrologist to create *Connect the Dots*, marking with blue discs the predicted paths of flooding from Boulder Creek—a project that was tested (and proved valid) only a few years later.

Those of us who live in the West, where nature is politics and politics is nature, are confronted with "altered landscapes," described by photographer Peter Goin as "humanature." (Of course, virtually every landscape we know has been altered one way or another, over the ages, usually by humankind.) Critical landscape photography has a new sense of purpose, to make the hot breath of climate disruption both vivid and immediate to this speed-addicted, visually oriented society. Visual documentation can seem to be the most effective way to communicate where we are. Photographs of casualties and causes—hurricane-devastated homes, vast strip mines, mountain-top removal, and colorfully toxic waters—can be striking, even "beautiful," providing another challenge for photographers struggling with the beauty of ugliness. Many believe that beauty can powerfully convey difficult ideas by engaging people when they might

otherwise look away. Others consider it estheticizing disaster. We do have to ask if images of lethal situations are being normalized by photography. At the same time it seems counterproductive to make uninteresting images about such pressing problems. Those who choose beauty for this subject matter are most effective when they also manage to communicate the flipside, usually in series, when their choice of beauty is a conscious means to counter brutality. Subhankar Banerjee's painful but beautiful images of the now-threatened Alaskan Arctic, including the currently threatened Arctic National Wildlife Refuge, are classic examples: for instance, an aerial shot of vast tundra marred by the tracks of vehicles illegally exploring extraction opportunities, permitted by the George W. Bush administration.

The oceans are also suffering, and not only from the death of coral reefs and the plastic morass in the Pacific that is as big as Texas, named as great a threat as climate disruption itself. A 2015 study pointed out that if the world's oceans kept warming, acidifying, and de-oxygenizing, they might become hot enough by 2100 to stop oxygen production by phyto-plankton (the source of two thirds of Earth's oxygen), disrupting the process of photosynthesis, which would "likely result in the mass mortality of animals and humans."¹¹ A worst-case scenario would leave about 691,123 square miles underwater, displacing up to 187 million people. The effect of ocean acidification on the human body was the subject of Judit Hersko's *Seven Days of Dissolution*, in *Weather Report*. Collaborating with oceanographer Victoria Fabry, as part of a larger piece called *Shifting Baselines*, Hersko translated into our own organs the acidifying effect of increasing carbon dioxide emissions on the oceans, which could destroy much marine life by 2048. Seven glowing units, followed, in flashes, the gradual disintegration of a human heart and lungs made from shell suspended in "low-oxygen" water and connected to a tank of "carbon dioxide."

It is always a temptation, when discussing climate chaos, to depend heavily on seductive statistics supported by scientific research. They can scare the living daylights out of us while also providing authoritative fuel for resistance. Artist Chris Jordan's "Running the Numbers" series looked at American consumerist culture through a statistical lens, with intricately detailed photographs assembled from thousands of smaller ones, laying some of the blame where it is due—on all of us. His *Denali Denial* seems at first glance to be a pixelated black-and-white photograph of the gigantic Alaskan mountain and its melting glaciers. On closer perusal, the image is constructed of the word "denial" and 24,000 logos of the GMC Yukon Denali, representing only six weeks of sales of the SUV in 2004. We are transported in a matter of minutes from admiring a mountain to deploring a lifestyle.

There are powerful historical reasons for Native American artists to recognize and communicate the apocalyptic. Will Wilson's "Auto Immune Response" series depicts "the quixotic relationship" between a post-apocalyptic Diné man—the artist—"and the devastatingly beautiful but toxic environment he inhabits"—the arid expanses of the Navajo Nation. In a prescient 1990 text piece *For the Rainforest*, Cheyenne Arapaho artist Edgar Heap of Birds offered *Food for the Brick Prick*, and *Burning Debt*. A painting of the same year by Salish artist Lawrence Paul Yuxweluptun has a title that speaks for the imagery: *Red Man Watching White Man Trying to Fix Hole in the Sky*.

At the camps at Standing Rock in 2016–2017, Water Protectors protested the Dakota Access Pipeline infringing on their traditional connections to the land and water, or what we call nature. Sioux artist Cannupa Hanska Luger constructed hundreds of Mylar-on-plywood "mirror shields," modeled on an action by Ukrainian women holding mirrors up to their oppressors. His shields were deployed against the security forces harassing the thousands of Native people wintering at the camps. The media was enthused by Standing Rock, but made too little of the fact that Indigenous people were protecting not only their own waters and sacred sites, but those of millions of ungrateful non-natives downstream on the Missouri River.

Water—too little of it, too much of it—is at the heart of climate chaos. A photoshopped image of the president's Florida resort, Mar-a-Lago, under water, has been overtaken by real images of 2019's unprecedented midwestern floods. While southern states are attacked by atypically horrendous storms, and western states succumb to drought and unprecedented wildfires, the southwest is drying out.¹² In New Mexico, the momentous challenge is *lack* of water, drought, the overexploitation of the Colorado and Rio Grande rivers, and contested compacts on sharing with Texas and Mexico. In 2018, the Rio Grande was dead dry in many places. In 2019, it is roaring downstream, a welcome respite, but nothing that can be counted on. In 2020, a massive drought is confirmed. Along with her decades of ice books and performative art on the Rio Grande and other waterways, Basia Irland writes (in the first person) on the inner lives of global rivers in *National Geographic*. *Flash Flood* was artist Bobbe Besold's idea for Santa Fe's contribution to the 350.org actions in 2010. Over a thousand of us made the dehydrated Santa Fe River flow again with blue tarps and towels and anything blue held aloft. The aerial view simulated a healthy river. (Figure 4.1).¹³

As I write this, I look out the window at an arid landscape deeply affected by drought, deforestation, and development, gullied by heavy precipitation on dry ground incapable of absorbing the moisture, and the Rio Galisteo, a shallow intermittent stream that may lose its protection along with most of the state's waterways, thanks to President Trump's proposal to eviscerate the Clean Water Act. I see mountains where old mining scars are slowly disappearing, though other regions in my poor home state of New Mexico have become vast sacrifice zones to the fossil fuel industry, supporting our economy, despite the fact that we have ample renewable resources



Figure 4.1 Flash Flood, Action organized in Santa Fe, NM for 350.org and the Santa Fe Art Institute November 20, 2010
Source: Photo by Michael Clark

in sun and wind. As I contemplate local land and water issues, my mantra has become “long term thinking is in short supply.”

Thanks to my age (83 at this writing) and lived experience as a place-obsessed local luddite, I have great faith in small-scale projects and their potential to spread into larger spheres. Eudora Welty wrote that “one place understood helps us understand all other places better.”¹⁴ For some of us the best way to deal with the onslaught of such urgent issues is trying to strengthen our local communities, literally *homing* in. I like to think in terms of ripple effects, place-based activism that starts from a center, the local, a very specific place, a “deep map,” and then moves on out from there in collaboration with those from other places. One way of learning where we are, in this time of tremendous anxiety, is to follow those ripples outward, with the aid of consciously lived experience.

Artists, like everyone else, must take some responsibility for the places they live, and perhaps love. An unacknowledged class bias denigrating those who can’t afford overconsumption just makes bigger look better and makes it harder to communicate the dangers of our situation. Frugality and scaling down—values from the Great Depression that have lost their grip on our psyches—are hard sells in the United States. We desperately need to resurrect them as we search for our “Postcapitalist Self,” an alternative to the rugged individualism of Manifest Destiny, but one that allows working people a decent living and human rights. E.F. Schumacher’s influential 1973 book *Small is Beautiful: Economics as if People Mattered* occupies a small but beautiful place in our pantheon. In this century small is no longer just beautiful, it’s crucial. It’s not just a matter of affordable housing, urban infill, resource conservation, immigration reform, environmental protection, and planned parenthood, it’s a psychological impetus that’s needed everywhere and that artists can build on. We have to wonder, with author Charles Bowden, “Why can’t we imagine a future where we *have* less but *are* more?”¹⁵

It seems that the world is just beginning to understand that ecological sustainability is inextricably linked to social sustainability, a basic necessity for survival. Context—the health of the planet and all its occupants—is crucial here. Decontextualization is counterproductive, especially when exploited by greenwashers. Sustainability is dependent on empathy and downsizing—both of which are hard to achieve in a racist capitalist society based entirely on unsustainable growth, non-stop for-profit expansion and to hell with the consequences. Growth of everything, from McMansions to nuclear arsenals to strip mines to corporate conglomerates to ever larger and more expensive art installations, reflects the national plague of obesity. So, Downsize or Die. Halt or at least *slow* growth until some sort of sustainable justice to both people *and* the planet is accomplished.

Virtually none of us is innocent of overproducing the carbon emissions generated by cars, planes, buildings, and appliances. I may live in a casita off the grid on full solar, but (before the pandemic) I flew around to talk about this subject. One esthetic strategy is to confront our own habits as a way to cajole viewers into taking some responsibility for personal behaviors. Bobbe Besold has deployed her comically huge and clunky *Climate Footprint Shoes* in many public contexts. Sherry Wiggins’s interactive *Carbon Stories*—profiles of local citizens and celebrities with varying lifestyles and income levels—were exhibited during *Weather Report* in Boulder’s public spaces where viewers could identify, or not, and apply these analytical tools to their own lives... or not. Janet Koenig’s and Greg Sholette’s *Cannibal Tech*, another public sculpture in *Weather Report*, confounded the expectation of beauty as synonymous with art. Their monumental column of plastic-wrapped computer discards was deliberately ugly. With a compelling graphic, they cited statistics about the (then) 750 million PCs in use around the world, which, improperly recycled, contribute carbons and hazardous chemicals to global ill health, not to mention the energy they use and carbon emissions equivalent to the aviation industry.

Making critical art that is open and interesting enough to draw viewers in and profound enough to keep us there, to make us think and act, can be difficult for visual artists no matter how famous and powerful they may be. Trapped in galleries, reaching relatively few people, their options are limited unless the museum or gallery is also utilized as a place of public discussions, workshops, and lectures where innovative social and eco-political narratives can be constructed. The reactionary opposition is always watchful, as in the case of Chris Drury, whose 2011 sculpture pointedly titled *Carbon Sink: What Goes Around Comes Around* was a spiral of drought-stricken, beetle-killed logs centered on a pile of coal on the University of Wyoming campus. It was destroyed long before its scheduled demise, because conservative Wyoming has a very short fuse when it comes to coal. The director of the Wyoming Mining Association took the message personally and unfurled threats to all funding for the arts. The situation recalls a New Mexico kerfuffle when the newly elected Republican Land Commissioner got rid of *Brickface Hope* by sculptor James Tyler and replaced it with a pumpjack in front of his building. So much for hope.

Bill McKibben observes that some of the largest systems on Earth are now in seismic shift, and since the powerful have punted, “now it’s up to the scruffy, the young, the marginal, the angry to do the necessary work... They are what’s left of our fighting chance.”¹⁶ (I would add artworkers to his list.) Mierle Laderman Ukeles, famous for her decades of “maintenance art” and work on the production and management of urban solid waste, has been concerned with the next generations. In *Weather Report* she distributed a questionnaire for children ages seven and up. Their drawn or written responses were exhibited in Boulder’s public library. Some of these children may now be participants in the strikes protesting adult lack of action on climate change, inspired by the amazing Swedish teenage activist Greta Thunberg, who demands:

Where are the breaking news?/The extra news broadcasts?/The front pages?/Where are the emergency meetings?/The crisis summits?/What could be more important?/We are failing but we have not yet failed./We can still fix this./ But not if we continue like today./Not a chance.¹⁷

The very fact of global warming offers startling insights into our surroundings. Yet visions of alternatives are difficult to conceive when we know that resistance is also crucial. Hubris often leads us to believe that we should decide what changes and how—as though agreement were possible in this polyphonic world. Our era – called since 2000 the Anthropocene—has also been dubbed the *misanthropocene*, or the *eremozoic*—an era of loneliness and isolation. Historian Tim LeCain argues that calling our era the Anthropocene is classically anthropocentric, preserving our habit of crediting humans “either as the failed stewards of our Eden or the technological heroes who can geoengineer our planet into a more reliably hospitable state.”¹⁸ T.J. Demos, author of *Against the Anthropocene*, asks “What would it mean to decolonize nature?” suggesting that it would demand

the cancellation of this subject-object relation between humans and the environment, the removal of the conditions of mastery and appropriation that determine the connection between the two, and the absolution of the multiple levels of violence that mediate the relation of human power over the world.¹⁹

It is coming down to a race between humankind and nature to see who can get rid of us first. Noam Chomsky points out that in January, 2019, the Doomsday Clock of *The Bulletin of Atomic Scientists* was set at two minutes to midnight, the closest it has been to terminal disaster since 1947. The announcement cited not only the increasing threats of nuclear war and global

warming, but added for the first time the undermining of democracy. And, said Chomsky, “that was quite appropriate, because functioning democracy offers the only hope of overcoming these threats.”²⁰

I constantly cite Antonio Gramsci’s recommendation to depend upon pessimism of the intellect, optimism of the will. I don’t think it’s ever been better said. But the moment when we can stop vandalizing the planet and contemplate better lives for all living organisms is passing us by. Time is not on our side. Some contend that our window of opportunity to find relatively painless solutions has already closed, thanks to Obama’s failure to pass a climate bill, Trump’s total disdain for the crisis, and all the other global failures to step up to the plate. I have heard it said that pessimism is a waste of time. I wish I were more optimistic, and I would rather see us change out of hope than fear. Optimists are sometimes dismissed as Utopian or politically reactionary. It’s true that we need to be down to earth, our Earth. But we also need something to hope for, to long for, to reach for. For all their power, few works in *Weather Report* offered such succor, concentrating instead on warnings and the then-unfamiliar facts that have since multiplied far beyond anything familiar in 2007. In a startling caveat to progressive artists hoping to be effective, researchers discovered in a 2015 study of 874 viewers’ responses to the work presented at the ArtCOP21 climate change festival in Paris, that only three of the thirty-seven public works scattered around the city inspired “personal reflection or action.” All three were “beautiful and colorful depictions of sublime nature that are showing solutions to environmental problems.”²¹ Buckminster Fuller famously declared, “You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.”²² Thirteen years after *Weather Report*, the challenge is even greater and more and more artists are taking it on.

Notes

- 1 A few passages in this essay were first published in the catalogue for *Weather Report: Art and Climate Change* (Boulder: Boulder Museum of Contemporary Art, 2007) and in my book *Undermining: A Wild Ride Through Land Use, Politics and Art in the Changing West* (New York: The New Press, 2014).
- 2 Thanu Yakupitiyage for 350.org, “Call It a Crisis: CO₂ Pollution Just Topped 415 ppm,” *Environmentalists Against War*, online, May 22, 2019.
- 3 Mark Twain is often credited with this line, but no source has ever been found.
- 4 Thomas Edison, quoted in James D. Newton, *Uncommon Friends: Life with Thomas Edison, Henry Ford, Harvey Firestone, Alexis Carrel, & Charles Lindbergh* (San Diego: Harcourt Brace Jovanovich, 1987), ix.
- 5 There were fifty-one pieces in the show: fifteen were in public spaces around town, mostly outdoors but including the public library, the University of Colorado, NCAR, and the daily newspaper.
- 6 James Baldwin, 1962, quoted in Leonard Shlain, *Art & Physics: Parallel Visions in Space, Time, and Light* (New York: William Morrow and Company, 1991), 15.
- 7 See Ashley Dawson, *Extinction: A Radical History* (New York: OR Books), 2016; and Subhankar Banerjee, “Biological Annihilation: A Planet in Loss Mode,” www.tomdispatch.com/blog/176506/tomgram%3A_subhankar_banerjee%2C_the_vanishing.
- 8 See Peter Ward and Alexis Rockman, *Future Evolution: An Illuminated History of Life to Come* (New York: Henry Holt and Company, 2001).
- 9 Tim Collins and Reiko Goto, “Landscape, Ecology, Art and Change”, 141. <https://collinsandgoto.com/wp-content/uploads/2018/10/2003-COLLINS-GOTO-Landscape-Ecology-Art-and-Change.pdf>.
- 10 Mary Miss, “Creating a New Narrative About Climate Change: 1000 Steps, City as Living Laboratory: Artists/Imagination/Collaboration”; one version of this paper for environmental conferences is published in *The Brooklyn Rail*, June 7, 2019. See also Subhankar Banerjee, “Boulder Flooding: Remembering Warnings from ‘Weather Report,’” *Common Dreams*, September 13, 2013. www.commondreams.org/views/2013/09/13/boulder-flooding-remembering-warnings-weather-report.
- 11 [From University of Leicester, no author,] “Failing Phytoplankton, Failing Oxygen: Global warming disaster could suffocate life on planet Earth,” *Science Daily*, Dec. 1, 2015. Derrick Jensen, *Deep Green Resistance* (New York: Seven Stories Press, 2011) notes that there is ten times as much plastic as phytoplankton in the oceans.

- 12 See William deBuys, *A Great Aridness: Climate Change and the Future of the American Southwest* (New York: Oxford University Press, 2011).
- 13 “What Rivers Know” is an ongoing series of the *National Geographic’s* Water Currents on line. See also Basia Irland, *Water Library* (Albuquerque: University of New Mexico Press, 2007).
- 14 Eudora Welty, *One Writer’s Beginnings* (Cambridge: Harvard University Press, 1984).
- 15 Charles Bowden, paraphrased by Philip Connors, “Not So Pretty Horses, Too,” *The Nation*, September 30, 2002.
- 16 Bill McKibben, “Glaciers and Arctic Ice are Vanishing. Time to get radical before it’s too late,” *The Guardian* (on line), April 10, 2019.
- 17 @Greta Thunberg on Twitter, May 7, 2019.
- 18 Tim LeCain, “Against the Anthropocene: A Neo-Materialist Perspective,” *International Journal of History, Culture, and Modernity*, no. 3, 2015, 1–28.
- 19 T.J. Demos, “Decolonizing Nature: Making the World Matter,” *Social Text Online*, March 8, 2015.
- 20 Noam Chomsky, “Chomsky: Nuclear Weapons, Climate Change & the Undermining of Democracy Threaten Future of Planet,” *Democracy Now*, May 27, 2019. And that was reported before the release of Trump’s Nuclear Posture Review, which significantly increases the dangers.
- 21 Sarah Cascone, “Can Art Change Minds About Climate Change? New Research Says It Can – But Only If It’s a Very Specific Kind of Art,” artnet news, July 26, 2019. See also Julia Halperin, “It’s Hard to Make Good Art About Climate Change. The Lithuanian Pavilion at the Venice Biennale Is a Powerful Exception,” artnet news, May 10, 2019. The Lithuanians’ *Sun and Sea*, a critique of lazy leisure in times of crisis, won the Golden Lion Award for the best national pavilion.
- 22 Richard Buckminster Fuller, quoted in L. Steven Sieden, *A Fuller View: Buckminster Fuller’s Vision of Hope and Abundance for All* (Divine Arts Media, 2011), 358.

5

ART OF THE INTERREGNUM IN CANADA'S CHEMICAL VALLEY

Jessica Mulvogue

The Energy Impasse and Climate Change as Markers of the Interregnum

Originally a term used for the period separating the death of a royal sovereign and the enthronement of a new ruler, “interregnum” was used by Antonio Gramsci in his *Prison Notebooks* to describe the broader crisis of the socio-political-legal order in 1930s Europe. He famously states: “the crisis consists precisely in the fact that the old is dying and the new cannot be born; in this interregnum a great variety of morbid symptoms appear.”¹ Gilbert Achcar notes a recent spike in the use of this term and this quote, attributing it to a range of global uncertainties, instabilities, and crisis-states.² Economic sociologist Wolfgang Streeck, for instance, asserts that we are witnessing the dawn of a post-capitalist interregnum. Due to its internal contradictions, rather than any oppositional challenge, capitalism is imploding, but there is no new socio-economic order on the horizon. Capitalism “hang[s] in limbo, dead or about to die from an overdose of itself but still very much around, as nobody will have the power to move its decaying body out of the way.”³ For sociologist and philosopher Zygmunt Bauman, the interregnum extends further: it describes the present-day planetary condition. He finds signs of it in institutional attrition, increasing xenophobia, and in the precarious environmental stability of the planet.⁴

Touching upon the relationship between fossil fuel extraction and nonstop capital accumulation, Bauman mentions in passing that climate change is also a “morbid symptom” of this planetary social disorder. Certainly, the socio-economic decay and entropy described by Streeck, Bauman, and others are directly linked to the energy systems on which contemporary society is built, and which produce and perpetuate climate change. Even though widely acknowledged as being environmentally catastrophic, fossil fuels continue to be the world’s main energy source. In fact, the Government of Canada’s website reveals that “emissions from oil and gas production have *gone up* 23% between 2005 and 2017, largely from increased oil sands production, particularly in-situ extraction.”⁵ Related to the “postcapitalist interregnum,” then, is what has been called by the Petrocultures Research Group—a University of Alberta-based team who produces research related to the socio-cultural and political implications of oil and energy use—as “the energy impasse.” We face an impasse because practical transition away from fossil fuels is not just a matter of developing adequate technology or political will. Oil seeps throughout the social, cultural, and ideological worlds of the West and carries with it material and affective

attachments.⁶ It is therefore not only a matter of a transition to another energy source—an easy switch to wind or solar energy, for instance—but also requires a major transition of social, cultural, and political life. As such, extractive capitalism carries on as a seemingly insurmountable, even if decaying, ideology. The energy impasse and its by-product—climate change—are indeed crucial components of the present interregnum.

In this chapter, I examine four contemporary, experimental photo, video, and performance works that speak to the interregnum as it relates to a small corner of southern Ontario, Canada, which houses a dense area of petrochemical factories. Located next to the town of Sarnia and directly bordering on the Aamjiwnaang First Nation reserve, this area is known as Chemical Valley. The works I examine—Kijig Collective's documentary *Indian Givers* (2012), Andreas Rutkauskas' photo and video exhibition *Petrolia* (2013), Christina Battle's video-based exhibition *BAD STARS* (2018), and Broadleaf Theatre's mixed-media theatrical performance *The Chemical Valley Project* (2016)—illustrate different facets of the interregnum as it relates to pasts, presents, and possible futures of the oil-seeped area. Through my analysis of these works, I suggest that the concept of interregnum helps to articulate the felt experiences of living within climate change and environmental disaster in general. But while impasse may be a characteristic of the interregnum, it should not be confused with defeat. The interregnum also provides, as the artworks show, real and conceptual openings for thinking of alternative futures and ways of relating that work against continued extractivist, colonial practices and policies in Canada.

Indian Givers and Things to Know About Chemical Valley

In Canada, oil and gas industries are today almost synonymous with the province of Alberta, with its infamous tar sands, as well as with the various contested pipelines in it and other Western provinces. Less acknowledged is southern Ontario's important role in this industry. While no longer a site of oil extraction, Chemical Valley hosts Canada's densest concentration of petrochemical plants;⁷ making up 40% of Canada's petrochemical industry, over 60 plants in a 100-block area manufacture plastics, synthetic rubber, and polyvinyl chloride. Though smaller in size, Chemical Valley can be compared to Cancer Alley in Louisiana, as it attests to a similar form of environmental racism.

For nestled within the vast industrial zone is the Aamjiwnaang First Nation. With the worst air pollution in Canada, multiple scientific studies have shown increased cancer rates, lower life expectancies, and deviations in birth ratios. The Aamjiwnaang community lives in a perpetual state of alert for chemical spills, fires, explosions, and other accidents.⁸ Many members have long been in legal battles with the government of Ontario for environmental justice, for the right to live in a healthy environment. But to no avail: the government continues to allow the expansion of major oil corporations in the area, presumably in the name of profit and progress.

Made by the Kijig Collective, a group of Indigenous and non-Indigenous youth whose mandate is to educate local populations on Indigenous culture, the documentary *Indian Givers* explores the lives of Aamjiwnaang First Nation members as they reflect on and contend with the destruction of their land and the possibilities for reconnection with their traditional ways of life. A montage of the factories and industrial wastelands opens the film before we are introduced to Anishinaabe teenager Jacob Rogers, a key protagonist, as he makes his way to high school. Jacob recounts how the Aamjiwnaang reserve land used to stretch down to Michigan, but that much of the land was lost in a 1795 Treaty due to the concept of land ownership being completely foreign to Indigenous worldviews. The understanding of land as property is fundamentally antithetical to the Anishinaabe understanding of the world and this discord becomes a motif; it informs how the

film narrates the long history of Indigenous land and bodies that have been stolen, extracted, polluted, enclosed, and contained. The toxicity of the ever-encroaching petrochemical companies is a key issue in the film; one Aamjiwnaang resident discusses the deformed pups her dog gave birth to and how they are advised only to eat fish from a local river once a month. But this destruction of land and bodies extends thematically in the film to older histories, such as the heinous practices of the Sixties Scoop and residential schools in Canada.⁹ As Anishinaabe writer and scholar Leanne Betasamosake Simpson attests, the removal of bodies from the land is a way to make it easier for the state to acquire and maintain sovereignty over the land: “this not only removes physical resistance to dispossession, it also erases the political orders and relationships housed within Indigenous bodies that attach our bodies to our land.”¹⁰ The film even suggests that the policing of Jacob’s hat-wearing inside the hallways of his high school is also a means of biopolitical control (Jacob explains that he is trying to grow his hair out to respect the customs of his people, but he needs the hat to keep his hair out of his eyes). As such, the documentary frames Chemical Valley as just one symptom of a long history of racist, violent colonial practices and attitudes. The reoccurring image of barbed-wire fences in the opening shots speaks not only to the private land status of and potential dangers involved with entering the area of the chemical plants but also to the entrapment of the Indigenous community in this area. It illustrates their lack of power in the face of a force whose central node of power no one seems able to locate.

Throughout *Indian Givers*, the unresolved question of who exactly is responsible for the continued pollution of the area emerges several times. The filmmakers even speak with Sarnia’s mayor, who, while sympathetic to the concerns of Aamjiwnaang residents, only offers a bumbling response about how it is “complicated.” Halfway through the film, a poem, *I didn’t Know*, by activist and Aamjiwnaang First Nation member Ada Lockridge is recited. Lockridge testifies to the knowledge she and her community have not been privy to about Chemical Valley, even though they are the ones most directly affected:

...
I didn’t Know that I
should keep my windows
closed at night since the
plants mostly burn from
the stacks at night so as
to not bother so many
or something like that.
I didn’t Know which government
is responsible for what,
still a bit iffy on that too.
Chief & Council, Sarnia Mayor, St. Clair
Township, Municipalities, Counties,
Provincial, Federal, Health Canada,
Environment Canada, Dept. of Oceans and
Fisheries, Indian Affairs, Ministry
of Environment, M.P., M.P.P., Ministry of Natural Resources.

I didn’t Know that those
flares should only be
burning when there is a problem
...

Lack of access to knowledge is, of course, a mode of power that works to keep people oppressed. Lockridge's poem also evokes differences between Indigenous and non-Indigenous epistemologies. But the way the film presents the general bewilderment of authority figures and community members alike as to why the petrochemical companies can pollute local land, air, and waterways seemingly without any repercussions speaks directly to an indicator of the interregnum. As Bauman notes, one of the key factors in the present interregnum is the way in which power has been transferred from local government into global markets, leaving economic forces without regulatory frameworks and stripping governments of the legitimacy to maintain social order.¹¹ Through constant visual reference to nightmarish imagery of the factories of Chemical Valley, the film makes clear that it is the global petrochemical companies housed on this land that hold the true power in this region, and perhaps in the country, at the great expense of Indigenous peoples. For Dakota scholar Kim Tallbear, Indigenous peoples' "intimate relations with [lands and waters] continue to be undercut and our memories relentless erased when the extractive nation-state continues to be dreamed."¹²

The extractivist dreams and erasure of Indigenous peoples in what is today southern Ontario has a much longer history. Twenty kilometres away from Chemical Valley are the two relatively obscure, small towns—Oil Springs and Petrolia—that were once petroleum boomtowns. In the next artwork I discuss, this history is thematized; as it highlights the persistence of oil against a decaying landscape, it evokes the affective experience of the interregnum.

Petrolia and the Long Catastrophe of Lambton County

As you enter Oil Springs, a sign greets you that proclaims the town to be "The Site of North America's First Commercial Oil Well." In the mid-nineteenth century, businessman James Miller Williams exploited gum-beds that until then were used to make asphalt, finding large oil deposits that he bucketed out of shallow pits, distilled, and sold for use in kerosene lamps. Williams is known as "the father of the world's petrochemical industry" and, the year 1858, as "the year oil history was created."¹³ Indeed, it was this small corner of southern Ontario that jump-started the global commercial oil trade. It was also here that the jerker-line was invented by Lambton County's John Henry Fairbank in 1863. Employing a simple but effective wooden structure that uses rods that swing back and forth and that are connected to pump jacks, Fairbank's jerker-line provides a means of transferring power from steam engines to multiple oil pumps.

Andreas Rutkauskas' exhibition, *Petrolia*, explores Lambton County's oil history through a photographic series and video work. As an artist-in-residence at the Judith and Norman Alix Art Gallery in Sarnia, Rutkauskas started his project by asking local community members to take him on a virtual tour of the area. The gallery distributed GPS units to members of the public, who were encouraged to document walks, bikes, and drives around their favourite locations in the county. It was through these virtual tours that Rutkauskas discovered the region's oil history.

Rutkauskas' photographic series depicts the infrastructure of the historical and contemporary petroleum industries in the area. We can view these works as situated within a tradition of Canadian industrial landscape photography, most notably that of Edward Burtynsky. But unlike Burtynsky's, Rutkauskas' photographs resist the sublime. Where Burtynsky's photographs aestheticize environmental destruction, presenting it as awesome but ultimately controlled by the masterful gaze of aerial photography, Rutkauskas' images are characterized by the mundane and unspectacular, calling attention to everyday structures, both natural and human-made, that support the extraction of oil—railroad tracks, waterways, dirt roads, paths, powerlines, parking lots. Noticeably, vehicles of all sorts—cars, trains, wagons—are absent, as are human beings. Indeed,



Figure 5.1 Andreas Rutkauskas, *Oil!*, video installation view, 2013

Source: Image courtesy of the artist

with the exception of the smoke coming out of a factory in the background of one photograph, absence and abandonment thematically dominate the images.

The thematic concerns of (infra)structure, absence and the everyday, the significances of which will be suggested shortly, are also apparent in Rutkauskas' video, *Oil!* (Figure 5.1). While named after Upton Sinclair's novel, Rutkauskas' video departs significantly from the dramatic, plot-heavy story of greed, corruption, and political struggle. The video is composed of a series of still landscape shots, each of which reveal a different working part of a jerker-line system that has been in operation for over 150 years. The video captures the structure as it threads across the land, imposing sharp architectural shapes into the landscape; harsh angles and jerky movements of machines contrast with the fluttering softness of the trees, bushes, and grass. Similarly, the creaking and grating sounds produced by the structure's movement unsettle the otherwise quiet idyll. The video is not organized to provide a view of the structure from one end to the other. Instead, parts do not always seem to fit together, and we can't know if we are looking at one branch of the structure or multiple. It is also not organized by an end reveal; for, in the middle of the film, we are shown the fruits of this machine's labor: with each pumping movement, a small rig at the end of the line pulls up a tiny amount of oil onto the surrounding ground. There is a sense of unease or eeriness to the video; the jerker-line is a relic from a past that continues into the present, an ongoing machination that seemingly functions completely without human input.

The temporality of the photographs and video evoke the last 165 years of oil development in the area as something both historical and contemporary, foregone and still present. The photographs reference not only Lambton County's past as an oil frontier town, but also, with the inclusion of modern-day infrastructure, the present. The video presents such a temporality more literally: the past still, and seemingly forever, in motion. While the images certainly show how the extraction and uses of oil have changed over the past century and a half, such changes are

presented simultaneously and without narrative, evoking a collision of temporal dimensions rather than a linear progression of historical time. They are suggestive of the energy impasse: oil is still being extracted even in the absence of signs of human life. As such, they also evoke a post-apocalyptic future, but one that looks identical to the present day. The exhibition asks the viewer to question whether it is the past, present, or future upon which we gaze; we are thus positioned in a liminal state, an interregnum between oil pasts, presents, and futures. I understand the affective force of the work's temporality to be much like how we experience climate change in the everyday and this may also speak more broadly to the experience of the interregnum. Climate change is both a drawn-out and quickly accelerating catastrophe; for the most part, it is unobtrusive, allowing everyday life to unfold as "normal," but every so often, explosive indicators of its presence erupt and challenge the day-to-day run of things. For those not in areas of the world that are directly witnessing devastating impacts of climate change, it is simultaneously "there" and "not there."

As landscape-based artworks, the issue of what and whose land has been transformed and scarred by oil infrastructure comes to the fore. While Rutkauskas' work itself makes no overt reference to the violence of fossil fuel extraction or to climate change, the thematizing of abandonment and the sense of unease that permeates the work raises the question of what catastrophic histories and futures are not being shown here. The next exhibition I examine situates Chemical Valley within a broader arena of ongoing disaster, both contemporary and historical, reflecting on the relationship between extractivism and colonialism as it pertains to Canada and beyond.

Extractivism and Atmospheric Disaster in *BAD STARS*

Exhibited at Trinity Square Video in Toronto, Christina Battle's *BAD STARS* (2018) is a multi-screen installation that takes its title from the Greek roots of the word disaster (*dus-* meaning "bad" and *aster* meaning "star"). Projected onto screens and displayed on TVs, five videos depict various kinds of disaster that for the most part Battle gleaned online. *BAD STARS* invites us to consider disasters that differ in nature and in degree, but, as a whole, the exhibition suggests that



Figure 5.2 Christina Battle, *BAD STARS*, video still, 2018

they all may be interconnected. Connections made in the exhibition stretch from Greek philosophical musings on the nature of things to the legacy of settler colonialism to the mysteries of the cosmos. But while it depicts multiple kinds of disaster, climate change and extractivism come to the fore through the theme of atmosphere and atmospheric change.

Four of the videos speak to disaster on a general level. Two looped, animated gifs introduce cosmic disaster in the form of meteorites. In one, we are shown a series of images of meteors flying through space—those “shooting stars” which burn brightly in our atmosphere—and, in another, we see craters that index those incidents when meteorites collide with the surface of the Earth—the signs of the *bad stars*. Images of craters summon the most famous meteorite that ended the Cretaceous period, thereby also alluding to our own geological moment, the so-called Anthropocene, in which human beings are compared to this epoch-ending meteorite. In two other video works, disaster and creation on the earthly realm are brought together as moving images of unidentified disasters appear alongside pleasant videos of various flora and fauna; the moving images are framed by colorful posters of botanical samples—those plants which help to produce a healthy atmosphere. Battle overlays text, taken from news sources, that obliquely reference disasters: for instance, we read “we heard people trying to dig through the rubble” against an image of long grass gently blowing in the wind. Such combinations suggest a more mundane take on disaster, bracketing the spectacular, sensational quality of many disaster images. Like Rutkauskas’ work, they produce a sense of unease that gesture to a pervasive atmosphere or a kind of “structure of feeling” of the interregnum; although here, Battle’s work openly acknowledges the regularity of disaster as an ongoing, daily occurrence, something that surrounds us all of the time.

The video *Chemical Valley* (Figure 5.2) brings together the cosmic and general with the local and specific. Using the 3D Building renderings of Google Earth’s StreetView, it takes the viewer around the industrial site. Through text combined with voiceover, Battle links early interpretations of meteorites with details about the stark realities and consequences of the petrochemical pollutants with information about advance satellite imaging technologies (such as the ones used to generate the very images we watch). Battle’s use of Google Earth to generate the film’s images may, on first reflection, seem to be counterintuitive. As T.J. Demos writes, Google Earth mapping imagery “is embedded in a specific political and economic framework, comprising a visual system delivered and constituted by the post-Cold War and Western-based military-state-corporate apparatus. It offers an innocent-seeming picture that is in fact a ‘techno-scientific, militarized, ‘objective’ image.’”¹⁴ But the images in *Chemical Valley* are of poor quality and full of glitches; at times, sections of the virtual world appear to morph or even disintegrate. Throughout the film, glitches produce stone-like objects floating in the air; are these meteorites about to hit the ground or visible manifestations of the pollutants in the atmosphere? Such illegibility suggests the breakdown of the Western-based military-state-corporate apparatus and the all-encompassing and seamless representations of the planet commonly attributed to Google Earth. Since the images are of Chemical Valley, it also suggests the slow decay yet persistence of the fossil fuel industries. The atmosphere is here a contested space of struggle and disaster, a space where the environmental, political, technological, and social cannot be divorced from one another.

Against these poorly rendered computer images of Chemical Valley, Battle’s film muses on the fact that the Earth itself is made up of the matter of former stars, some brought by those meteorites that have collided with the planet over the eons. And yet the video acknowledges that while all things on Earth may come from the sky, disaster and creation alike, the air we breathe is not equal. The work communicates facts about pollution faced by residents of Sarnia and the Aamjiwnaang First Nation, referencing reports of toxics leaks of hydrocarbons, hydrogen sulfide,

and benzene gas into the atmosphere. These are gases that cannot be seen, but are felt, most acutely by those living on the reserve. In its musings on atmospheric disaster in Chemical Valley, Battle's video gestures to a growing body of scholarship by Christina Sharpe, Kyle Powys Whyte, Nicholas Mirzoeff, and Kathryn Yusoff, among others, which insists that climate change and extractivism cannot be divorced from the history and legacies of settler colonialism and chattel slavery. In that the video discerns how environmental pollution is most often directed at racialized, poor, "frontline" communities, it echoes Yusoff's statement that if the Anthropocene

proclaims a sudden concern with the exposures of environmental harm to white liberal communities, it does so in the wake of histories in which these harms have been knowingly exported to black and brown communities under the rubric of civilization, progress, modernization, and capitalism.¹⁵

This critique can be similarly levelled at the concept of the interregnum. If the present interregnum is, as Bauman suggests, a planetary condition characterized by economic, social, political, and environmental decay, its "morbid symptoms" arise from practices and histories that have long left certain communities in ruinous states, living within perpetual disaster. To be more specific, if the contradictory yet continual reliance on fossil fuel extraction is a key facet of the interregnum, then what all of the artworks I've examined thus far tell us is that the present impasses and crises are built on much older, yet ongoing disasters felt by specific, marginalized communities. In the case of Chemical Valley, then, the interregnum as a crisis-replete global state of affairs cannot be severed from the many world-ending events that are tied to the extractivist logic of colonization and the mistreatment of Indigenous populations. As environmental philosopher and member of the Citizen Potawatomi Nation Kyle Powys Whyte reflects, for Indigenous populations, environmental destruction characteristic of the Anthropocene is not, as many Anthropocene discourses imply, an imminent apocalypse. For, given the destruction of ways of life built on relationships with the natural world that occurred during colonization, "some indigenous peoples already inhabit what our ancestors would have likely characterized as a dystopian future."¹⁶

But rather than jettisoning the term, the interregnum, itself, I think it might be more fruitful to instead insist on its historical dimensions. For the interregnum also presents an opportunity for new modes of living and being-in-common. The interregnum may mark a prolonged state of crisis and catastrophe in which the future is unknown and uncertain, but it is also then a space in which alternative ideologies, other imaginations of the future, have room to be expressed and heard.

Making Communities in the Interregnum and *The Chemical Valley Project*

Each of the works I have discussed incorporate community collaboration in their creation and exhibition. *Indian Givers* was a collective project intended to engage local communities and generate dialogue, not least through screenings at high schools in the region. Rutkauskas discovered the theme for his *Petrolia* through the participation of Sarnia-area residents. And Battle created a space for community dialogue by inviting speakers, such as those from the Indigenous Environmental Project and the re:assemblage collective, to engage in conversation about disaster over the course of multiple meetings. For Battle, these conversations underscore, "the possibility for the reshaping of current systems and the aversion of potential disasters to come—a hopeful first step in ushering in real structural change."¹⁷ I want to consider the import and urgency of

these artistic ways of creating communities and dialogue within communities as it pertains to the interregnum through the analysis of a final artwork, the mixed-media documentary theatre piece, *The Chemical Valley Project*.

Created by Kevin Matthew Wong and Julia Howman, *The Chemical Valley Project* stages the struggles of Aamjiwnaang First Nation through performance and projected photographs and videos. The story is based on Wong's own experience in discovering the social, economic, and environmental issues of the area and tracks his journey in getting to know the local community and becoming involved in their activism. A variety of media is employed: video, photography, puppetry, and shadow play. Throughout, real bodies mesh with virtual bodies, stage props help to augment projected images, and Wong himself moves between performer and audience member. The play takes advantage of the visceral space of the theatre in communicating the experiences of Aamjiwnaang residents. This is especially the case with the inclusion of the frightening spill drill alarms in the piece; every Monday an alarm rings out through Chemical Valley reminding residents of the potential for a major leak, fire, or other disaster.

While Wong himself is the only person on stage, the stars of the piece are the Anishinaabe siblings Lindsay and Vanessa Gray. Lindsay in fact appears as a main character in *Indian Givers*, then a shy high school student committed to environmental protection and with a keen interest in learning more about their ancestors' language and ways of life. Today, the siblings are profiled land defenders and activists, who began "Toxic Tours" of the Aamjiwnaang reserve. While the work stems from Wong's own personal experience and perspective, he delicately negotiates the issue of appropriation, letting the Grays play a crucial role in the creative processes of storytelling and staging. The creative play with media forms provides new avenues for connection with the Grays' activism, offering new affective modes of relation that are arguably harder to achieve by watching their online activist videos. The theatrical piece thus exemplifies a pathway for collaboration and conversation between non-Indigenous and Indigenous communities. The play comes into being through the collaboration between Wong/Howman and the Grays, as they learn to share knowledge of their respective experiences. The success of *The Chemical Valley Project* thus lies precisely in the ways in which it exemplifies a possibility of progress through the formation and reinforcement of new communities.

While the power of petro-industries in Canada and the deep-rooted extractivist ideologies and practices on which the nation was built cannot be overestimated, the current energy impasse and, more broadly, the interregnum, does not have to mark the foreclosure of the future. It can be seen as "a situation of radical indeterminacy where existing assumptions and material relations can no longer hold or sustain us and in which we might activate the potential obscured by business-as-usual."¹⁸ One of the prospects for getting out of the interregnum is, for Bauman, centred on community-building. Rather than seeking prosperity in the "vicious circle of stuff-and-energy use/misuse/abuse," prosperity and modes of sustainable living should be sought inside "relationships, families, neighbourhoods, communities, meanings of life."¹⁹ Of course, such ideas have long been integral to Indigenous worldviews. Tallbear has recently proposed "a spatial narrative of caretaking relations—both human and other-than-human—as an alternative to the temporally progressive settler-colonial *American Dreaming*" that is built on extractivist policies and practices.²⁰ She proposes a relational web as metaphor that "requires us to pay attention to our relations and obligations here and now" as well as over time, one that resists those dreams of progress that are built on genocidal violence and an understanding of relations with humans and non-humans in terms of property.²¹

The artworks I have examined in this chapter articulate facets of living within the interregnum, helping us to understand this strange present, which is the first step towards meaningful change. The interregnum is a useful descriptor that reminds us of the profound indeterminacy

of the future and of the historical opportunity for the creation of different modes of being, acting, and knowing; as the discussed artworks show, in this opening, new forms of relations and communities can emerge, and in ways that work against the global trend toward social and political entropy.

Notes

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6

ROAD TO INJUSTICE

Ecological Impunity and Resistance in West Papua

Nabil Ahmed and Esther Cann

Nduga, December 1, 2018. A group of construction workers in the remote highlands of Papua,¹ while working on the Trans Papua Highway, is attacked by the West Papua National Liberation Army (TPN-PB), an armed separatist organization fighting for self-determination from Indonesia. At least 17 workers are massacred, who TPN-PB claims are Indonesian soldiers in civilian clothes. In retaliation, the military targets Papuan civilians with helicopters, heavy machine guns and grenades. A humanitarian crisis ensues, with thousands internally displaced, some hiding in the jungles. By June 2019, more than 50 direct civilian deaths are reported,² with the alleged further deaths of 139 from malnourishment and disease as the conflict's most recent casualty.³

The section of the Trans Papua Highway in Nduga where the massacre took place is located within the borders of Lorentz National Park, a UNESCO World Heritage Site. The mega infrastructure project, planned and developed without consultation with Papuans, is perceived by them as another colonizing tool to literally pave the way for more mining, logging, and oil palm plantations. Nduga is not only the newest flashpoint of the longest-running conflict in the Pacific, but also demonstrates a wider convergence of violence and resistance in a forgotten frontier of the climate emergency.

Introduction

West Papua and neighboring Papua New Guinea together sustain one of the world's largest intact tropical forests. Sixty percent of the plant species are endemic—found nowhere else in the world. West Papua is also a disputed territory. Widespread social and political repression by the Indonesian government is underwritten by everyday brute violence against Papuan civilians, including torture, extrajudicial killings and other forms of persecution.⁴ The state of near impunity and the dire human rights situation also translates and folds over into environmental conflicts such as land grabbing.

In environmental terms, West Papua is suffering from what we consider “ecological impunity.” Impunity is the absence of justice, an offense against the rule of law and dignity of victims, second only to the original crime.⁵ The term has come to define state crimes against civilians and citizens in times of both conflict and peace. Ecological impunity extends the definition of impunity to include assaults against the environment, including ecocide, which is yet to be recognized as an international crime.⁶ Therefore, a state of ecological impunity is one where crimes

such as ecocide are allowed to continue and the victims, be they nature or humans, have no recourse to legal redress. Yet, as we show, ecological impunity does not go unanswered. It exists in stories, diplomatic maneuvers, armed resistance, and acts of solidarity. It demands a right to truth.

Fighting ecological impunity is urgent, especially at the frontlines of the climate emergency such as the low-lying atoll Pacific islands.⁷ Yet the term “frontline” is often taken too literally in climate emergency narratives. For too long, perhaps conveniently, the world’s attention has either focused on places of consequence and impact or, more recently, on scenes of protest in Western capital cities rather than at the sites of extraction in the context of climate emergency. Indonesia’s position as one of the world’s largest oil palm producers and greenhouse gas-emitting nations is historically attributed to widespread forest destruction in Kalimantan and Sumatra.⁸ Yet as available land for oil palm plantations dwindles in those already devastated regions, West Papua is seen as the new frontier for converting forests into oil palm plantations. The communities fighting to defend their ancestral lands and culture in Papua are therefore at the geographical, social, and political frontline of the climate emergency.

Our essay aims to report on the contours of this frontline where ecology and violence intersect in occupied West Papua, especially around mining, oil palm plantations, and climate change. In particular, we will highlight the case of the Trans Papua Highway, the Indonesian government’s 4,300-kilometer planned road infrastructure project that poses major threats to the rainforest and to local livelihoods, cutting through customary land and cultures in the name of national development.

Recognizing and engaging with Melanesian cosmologies is essential in locating the intersection of climate change, ecological impunity, and the struggle for freedom in West Papua. Melanesian thought is deeply rooted in the spirituality of place. In the words of the Papua New Guinean thinker Bernard Narokobi, a Melanesian,

[...] sees the human person in his totality with the spirit world as well as the animal and the plant world. This human person is not absolute master of the universe but an important component in an interdependent world of the person with the animal, the plant and the spiritual.⁹

How are such conceptions of cosmologies expressed by West Papuans whose lands, livelihood, and food sources have been destroyed, and what do their stories teach us? West Papuans are central to their own land, as West Papua is central to the fight to arrest climate change, despite being framed as geographically and culturally “remote” by Indonesian and Western commentators.

The writing of this text has been shaped by human rights work, spatial forensics investigations, advocacy and scholarly research, individually and collaboratively with others working in and for Papua, as well as storytelling and projects with contemporary cultural institutions. As we write about environmental justice and cosmologies, we will strive to highlight Papuan perspectives, especially from Papuan women: community elders, student leaders, human rights defenders, and intellectuals. Some were recorded from a series of alternative forums initiated by INTERPRT¹⁰ and collaborators, a research and design studio that gathers and presents spatial evidence of underreported environmental crimes in the Pacific and advocates for ecocide as an international crime. INTERPRT’s methodology involves a lively dialog between environmental forensic analysis and environmental justice advocacy. If the factual measurements that organize the group’s maps, drawings, and visualizations create a point of relation to the world through scale, then the forums point to how these images can be positioned to support social action.

The First Weapon

Recent developments in West Papuan emancipatory politics have focused on recognizing the disputed territory as a Pacific island nation, with solidarity from neighbouring Island nations, namely Vanuatu. To give the example of Vanuatu's first prime minister, Father Walter Lini, his country was not to be fully independent until all colonized people in the Pacific were freed and Vanuatu continues to strongly advocate for Papuan independence today. Yet underpinning international diplomacy and political strategy, culture and kinship are what binds West Papuan and Ni-Vanuatu Pacific solidarity.¹¹ Our research also affirms West Papua as a Pacific island nation, as for Papuans, this recognition is seen as a vital message on self-determination to the world.

While the Nduga shootings have prompted heightened awareness of the Papuan struggle in the media, there remains little appetite among the wider international community to re-consider Papua's self-determination question. Yet Papuans continue to seek this political right, denied to them during the period of decolonization. As scholars and activists have commented, the process that led to the handover of the Dutch colony of West New Guinea to Indonesia in the 1960s, via a UN-led process heavily influenced by US and Indonesian interests, was deeply flawed.¹² In the 1969 plebiscite known, ironically, as "The Act of Free Choice," 1,025 Papuan representatives were violently intimidated into publicly voting for Indonesia under heavy military guard.¹³ The process of decolonization was a pretext for re-colonization.

Many West Papuans see their loss of sovereignty as originating in the extractivist interests of big mining. On April 7, 1967, while the territory of Dutch New Guinea was still under dispute at the United Nations, US mining giant Freeport became the first foreign company to sign a "Contract of Work" (CoW) with the Indonesian government for exploration and development of a copper mining project in present day West Papua. Initially, the contract granted exploration, development and mining rights to Freeport within a 100-square-kilometer area in the Papuan highlands (later extended to today's Grasberg mine). The construction of mining infrastructure in a treacherous mountain terrain presented unique challenges. Bechtel, the US engineering company which built the Hoover Dam, was contracted to cut a 120-kilometer access road from an elevation of 4,500 meters tunneled through the Carstenz Range, traversing tropical forests down to the Arafura Sea.¹⁴ Freeport's then-CEO boasted he was "thrusting a spear of development into the heartland of Irian Jaya."¹⁵ The Amungme tribe who owned the land were neither consulted nor given any compensation in the contract's inception, but were instead forced out.¹⁶ There were no environmental protection obligations whatsoever (Figure 6.1).

Not only was the copper held by Papua's mountains a major factor in the loss of Papuan sovereignty, but also the process of extraction has devastated the surrounding land, people, rivers, and sea. Mining activities have caused the gradual destruction of rainforest, agricultural land, and mangroves.¹⁷ At the time of writing, pollution has reportedly seeped into neighboring estuarine rivers, bringing harm to an ever-wider population.¹⁸ For West Papuan human rights defender Rosa Moiwend, Grasberg was the "first weapon"¹⁹ that targeted Papuans, politically, socially and ecologically.

This Land Is My Body

Today in a time of climate breakdown, the vast tropical forests in the ancestral lands of many West Papuan tribes are under threat from logging, timber and oil palm plantations, with a huge increase in forest conversion for plantations. There are currently 28 oil palm plantations operating on indigenous land. Out of these, two-thirds were established on land cleared after 2010,²⁰ following land acquisition processes which have been largely mendacious, illegal, and

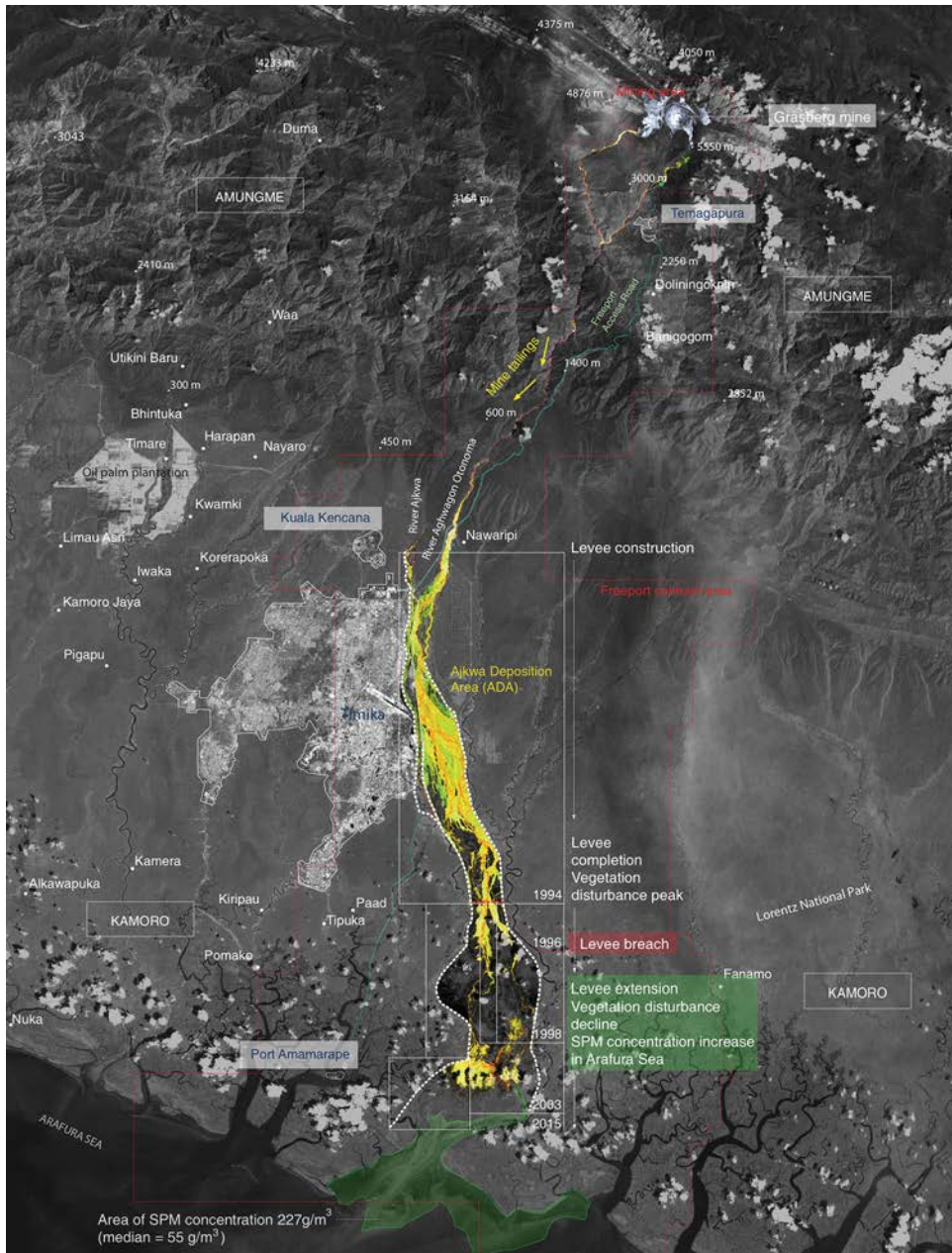


Figure 6.1 Environmental violence from the Grasberg mine, INTERPRT and Mike Alonzo, 2015

accompanied by security forces. The landowners have routinely been denied meaningful opportunities to either give or withhold Free, Prior Informed Consent.²¹ The largest land grab to date took place via the Merauke Integrated Food and Energy Estate project (MIFEE), launched in 2010, which planned to make Papua the “rice barn of the nation” by clearing primary forest,

swamp, and grasslands. Nine years after the project's official launch, 2.5 million hectares of land have been targeted for oil palm, industrial timber, and sugarcane.²² The military was involved throughout, with a local commander saying that one of their main tasks was to open more land in the Merauke area for rice cultivation.²³ The scale of generational violence in Merauke and the demand for justice is captured in the testimony of Dominika Tafor, a student activist and an indigenous woman from the Yimnawai Gir community in Arso, Merauke:

Indigenous communities throughout the land of Papua, and especially here in Arso, do not get the attention we need from the Republic of Indonesia. That means we feel that we are not Indonesians. This is a big question. I'm the second generation, I was born as a victim of oil palm investment. Once again, I ask the Indonesian nation with total respect, to take responsibility for the serious human rights violations it commits against us, the indigenous community. And I ask the international community to look at why we have become victims on our own land. We ask the world and the Indonesian nation to take responsibility.²⁴

The bulldozing of millions of hectares of primary forest has not only robbed indigenous Papuans of their land, livelihoods, and food; it has attacked the foundations of their identity. Amungme leader Mama Yosepa describes why the destruction of her land by Freeport is so crushing for the Amungme, saying, "this land is my body, Nemangkawi Mountain is my heart, Wonongan Lake is my marrow, and this river is my breath. Yet you have been eating me."²⁵ (Figures 6.2 and 6.3).

At a workshop on ecological crimes initiated by INTERPRT and London Mining Network in Norway, 2018, she said, more simply, "I gave birth to the mountain... I am the mountain" and "the top of my head has been cut off," embodying the sacredness of mountains recognized across Melanesia.²⁶ Her relationship to her land echoes that of other Papuan tribes, living hundreds of miles away and speaking different languages. Representatives of the Malind Anim tribe in south Papua explain: "The relationship with nature (forest, land, animals and water) is like the



Figure 6.2 Dominika Tafor, *Land Grab in West Papua: Testimonies from the Ground* (2009–2017). Edited by INTERPRT in collaboration with Awas MIFEE. Video still, Papuan Voices, 2017



Figure 6.3 Mama Yosepha Alomang, Fighting environmental crime in West Papua. INTERPRT/ London Mining Network/Office for Contemporary Art Norway, 2018

connection between a child and their mother... the forest is our mother, and the people will not sell their own mother.”²⁷ Rosa Moiwend, also a Malind woman whose people and culture are threatened by MIFEE, describes the effect on indigenous people thus: “[...] our native language is being spoken more and more infrequently because it is a language that is inseparable from the land, the water, the forests, the livestock... When any of these elements are lost, the language is also lost.”²⁸ She goes on to explain the erosion of her culture, alongside the loss of the natural features which shape their lives:

Stories that have passed down through the generations from our ancestors become more and more difficult to understand because the sacred borders are replaced by rice-fields, fields of maize and palm oil plantations. The identity of the Malind people is gradually getting lost, along with the destruction of the natural features that are the symbol of each clan. The Gebze with their coconut symbol, the Mahuze with their sago symbol, the Basiks with their pig symbol, the Samkki with their kangaroo symbol, the Kaize with their Kasuari and Balagaise (falcon) symbol; everything will get lost.²⁹

Yet Papuans are not the only ones losing out from environmental destruction of their land. So is the planet. Forest fires are a destructive method of clearing forests for expanding oil palm frontiers, with devastating impacts for the climate. Of the 112,000 oil palm plantation-related forest fire hotspots monitored in Indonesia between August 1 and October 26 in the summer of 2015, 10% (11,590) were in Papua, concentrated in the MIFEE area in Merauke. “The connection is clear,” stated Greenpeace Indonesia campaigner Yuyun Indradi. “If you look at the map, the concentration of the hot spots in Merauke is in the MIFEE area.”³⁰ These forest fires release more emissions in an already warming planet, as all the while, rising sea levels threaten their Pacific island neighbors.

Road to Injustice

Built in the 1970s, Freeport's access road provided a model of infrastructure weaponized against a people. Today, it is the most militarized road in all of Indonesia, carrying the cheapest copper in the world to Port Amamapare where it is loaded onto cargo ships for distant markets. We first learned of the more recent Trans Papua Highway from one of the leaders of the West Papuan independence movement. He effectively identified the highway as a planning tool of the occupation. Conceived during President Suharto's New Order era, the construction of the Trans Papua Highway has been attempted by several Indonesian governments since the 1980s, with incumbent President Joko Widodo taking up the baton in 2014 (Figure 6.4).³¹

By making previously remote forests accessible, it is designed to accelerate all previous attacks against nature in West Papua. It is a road to injustice where violence erupting from the Nduga section of the highway has brought Papua's self-determination conflict into sharp relief.

While road and infrastructure projects are taking place elsewhere in Indonesia, particularly in isolated forested areas threatening rich ecosystems, local resistance to Indonesian rule and reports of military involvement are the added dimensions for instability around the Trans Papua Highway.³² It makes the need for meaningful consultation and participation of local people—recognized by the Sustainable Development Goals, to which Indonesia is committed—particularly important. However, according to Amnesty International, there has been no such participation,³³ painfully echoing the “Act of Free Choice” through which Papua became part of Indonesia. Furthermore, given the Indonesian armed forces history of human rights violations, there is deep distrust towards them among Papuans. As the crisis in Nduga demonstrates,



Figure 6.4 Trans Papua Highway, a section going through Lorentz National Park, INTERPRT, 2020

violence erupted in part because the road infrastructure was being built by a military perceived as enforcers of an occupation.

Indonesia has a long and sinister history of military mixing with business interests. Under current President Joko Widodo, *dwifungsi*—which encouraged military involvement in many aspects of civilian life under the terror of Suharto's New Order regime—is quietly re-emerging, with the Indonesian military increasingly taking on civilian functions such as guarding prisons, helping farmers plant rice and securing railway networks and public transportation.³⁴ Al Araf, director of Indonesian watchdog Imparsial, has called for reforms to extract the military from public life.³⁵ Such reforms have yet to materialize, and the ongoing conflict in Nduga illustrates the problematic nature of these blurred boundaries.

Papuans, as well as various civil society actors, have called for the Nduga military operation to cease, so that internally displaced villagers can return to their homes.³⁶ But Nduga Operation Commander Colonel Jonathan Binsar Parluthutan Sianipar has a different vision. When asked how long the operation would last, he replied, "Until the OPM [Free Papua Movement] is gone. This operation also runs parallel to the forming of a military district command and a sub-district military command in Kenyam [Nduga's regency capital]. After that, (we) move on to other districts."³⁷

The military's expansionist project in Papua is well underway. Of the twenty recently built or upgraded military commands across Indonesia, nine are in Papua.³⁸ These are inevitably seen by many Papuans as an extension of ongoing colonial occupation. While a majority of the road routes of the Trans Papua Highway have been bulldozed, much of the roadworks, such as paving and bridge construction, remain in the early stages, especially in the most difficult terrain. Many Papuans are distrustful of such projects, not only because of their frequent militarization, discussed above, but also owing to a perception that in the past, some road building projects have been a pretext for clearing precious hardwoods, with the area illegally felled for "road building," then left to the swift embrace of the jungle.

The Trans Papua Highway cuts right through the Lorentz National Park, rich in biodiversity, with many species unknown to science, enveloped in tropical and cloud forests, mountain peaks, swamps and mangroves. While Nduga has been reported either as a political conflict or – by the Indonesian government—as a terrorist attack, the violence took on an ecological dimension during road construction inside Lorentz National Park, by threatening local trees. The *Nothofagus* genus represents a tree species found in West Papua, across Australia and many other forests in the southern hemisphere. Its trees are uniquely susceptible to *Phytophthora cinnamomi*, a lethal plant pathogen that is particularly adept at spreading through road construction processes and infrastructural incursion into remote forests.³⁹ That the pathogen infestation has been detected in a section of the Trans Papua Highway near Nduga is of grave concern.⁴⁰ No environmental impact assessment was carried out regarding the dangers of road construction through the park's fragile biodiversity. Around 120 miles of new road will pass through Lorentz, greatly increasing human access to future mining concessions inside the park.⁴¹ According to an investigation by the Indonesian research institute LIPI, which questions for whom the Trans Papua Highway is really intended, timber camps are already logging within the national park.⁴² The Indonesian government, while recognizing the presence of *P. cinnamomi* and placing a temporary moratorium on road construction inside the Park, has blamed Papua's fluctuating climate for the arrival of this disease.⁴³

These events in West Papua are part of a wider pattern where development and destruction of nature are interlinked. Countries harboring large tropical forests with biodiverse ecosystems are now major sites of infrastructure expansion, with vast tracts of forests globally—110 million hectares between 2000 and 2012—lost through road and infrastructure expansion.⁴⁴

Indonesia's own record elsewhere is indicative of what awaits its troubled Papua and West Papua provinces. In 2011–2012, the two years when Indonesia outpaced Brazil in terms of the rate of forest loss, its road networks expanded by around 42%.⁴⁵ By connecting hitherto remote areas such as dense forests and mountainous terrain, the road network will open up West Papua to ever-increasing threats of peatland destruction, deforestation, and mineral exploitation. Major new deforestation hotspots will be created in central, southeastern and central-eastern Papua as a result of fragmentation and access.⁴⁶ As Papuan resistance to road building shows, such state-sanctioned ecological impunity does not go unanswered.

Conclusion

Security forces in West Papua's mining and plantation areas primarily serve the interests of extractive industries, agribusinesses and government "development" projects such as the controversial Trans Papua Highway, which will open up remote, resource-rich areas and their inhabitants to new forms of exploitation. These are often spaces of resistance inhabited by freedom fighters, far from civil and military control, deep in the jungles. A long-suffering people's fight for political sovereignty is echoed by the actions of ordinary villagers seeking to retain control of their lands, as they stage blockades, sit-ins, and information campaigns to highlight their plight. As land, culture, and bodies intertwine, storytelling can ground will to action. But while Papuans are resisting settler colonial occupation vigorously, it is almost impossible for them to fight powerful companies effectively. In the neoliberal money economy, they are desperately poor. And the Indonesian military and police who supposedly oversee the rule of law are in the pay of these powerful companies,⁴⁷ creating a perfect storm of ecological impunity.

In a warming world, the fight to save our planet from irreversible accelerated climate change is well represented through media images of placards waved in Western cities, whereas an urgent frontline of this struggle is being fought by some of the world's economically poorest people. Failures in Indonesia's upholding of the rule of law, or worse, using the law to repress, leave these communities with little protection, and for the crimes being perpetrated against their land and culture, there are no legal structures in place to prohibit such actions. We have no doubt that the severity of the crimes make them an offense not only against Papuans, but also against humanity and nature more widely. Yet while West Papuans continue to endure the systematic criminal attacks we have described here, most governments of the world remain impassive. The local practices and transnational solidarity network that inform our writing respond loudly to such a moral outrage. In the long struggle, self-determination and accountability are a shared horizon of action.

Notes

- 1 In this essay we interchange the words Papua and West Papua to denote the land of the Papuans, as is customary. While both terms are colloquially used, West Papua is the term favored by most Papuans to distinguish from neighboring Papua New Guinea. At the same time both Papua and West Papua are names of provinces of the disputed territories of Indonesia.
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PART II

Climate Violence

At the turn of this century, climate change—if on the radar at all—was deemed an abstract concept by many people around the world. Few had directly experienced severe impacts of climate breakdown, with the exception of residents of the Circumpolar North, where environmental disruption has been more magnified, and Indigenous communities more broadly, who have experienced centuries of colonial-driven climate transformation.¹ Even scientific reports from the time tended to project that wide-scale impacts would be felt only far into the future: 2025, 2050, and 2100.² Imprecision and abstraction, opportunized by climate-change deniers in the US, manufactured confusion in the media's climate coverage and delayed public acknowledgment of the growing crisis, including, subsequently, meaningful public policy responses.

Today, the situation is different: climate transformation is a lived reality, with a majority of people acknowledging that it is real, present, and human-caused. What changed the situation is the direct experience of climate violence, even if many still don't perceive it as violence or fully grasp its dire urgency: that “our house is on fire,” to quote the impassioned words of Swedish youth activist Greta Thunberg.³ Yet even those most concerned about climate breakdown and its manifold effects tend to see it as the unintentional by-product of environmental negligence or natural variance, not as a deliberate project, and fail to appreciate or stress its uneven and disproportionate impacts on the least resourced (evident in Thunberg's inclusive “our”). In critical counterpoint, other voices, including the architectural theorist Eyal Weizman, in the context of a collaboration with photographer Fazal Sheikh, observes that, in regards to Israel's systematic dispossession of Palestinian Bedouins from the Negev Desert, when “we look at climate change from the point of view of the history of colonialism, we no longer simply see it as a collateral effect of modernity, but rather as its very target and aim.”⁴ Christian Parenti has likewise underscored the colonial and capitalist underpinnings of climate change, as well as its geographical specificity, in his study of what he calls the “tropic of chaos,” referring to the Earth's Equatorial latitudes, where overlapping histories of Cold War militarism and neoliberal capitalism have consigned such regions to structural destabilization, where climate change is experienced in exponentially damaging ways according to the “catastrophic convergence” of militarism, impoverishment, and environmental breakdown.⁵

Climate violence can be quick *and* slow, punctual *and* protracted.⁶ Extreme weather events like wildfires, floods, and hurricanes or cyclones can strike suddenly, while their less-spectacular effects can last decades or more. Climate transformation, according to geological scale, transpires

over millennia as well as within shorter time spans. At our present conjuncture—at the nexus of ongoing Capitalocene environmental destruction, extractive onslaughts on fragile ecosystems, endless wars and military campaigns, and ineffective global climate governance—the frequency and severity of such events are only increasing, with socio-environmental entanglements intensifying. The 2020 coronavirus pandemic, likely originating in climate-impacting practices of deforestation and industrial agriculture that have opened new zoonotic pathways of multi-species intimacy, has made an already challenging environmental situation much worse. The super cyclone Amphan, arriving in South Asia during the pandemic in late May 2020, amplified the devastation and suffering, particularly for those in south Bangladesh and coastal India, making effective response to the multiplying crises ever more challenging for governments and mutual-aid networks. Mamata Banerjee, the chief minister of West Bengal, called Amphan “another virus from the sky,” while Chandan Das, resident of the Sundarbans, captured the sense of collective pain with these words: “The Sundarbans is finished. Amphan has killed it. All our crops, even our trees have been destroyed. What will we do?”⁷ Although the region may not be quite “finished”—we remain resistant to game-over scenarios, even while we understand the collective grieving—the Sundarbans has been severely impacted by the catastrophic convergence of cyclone and pandemic, only exacerbating the ongoing threats of submergence owing to rising seas.

Climate violence is both direct and induced, including by corporate perpetrators and fossil capital's structural causality. The destruction committed by corporations and nation states via energy-source exploration, extraction, transportation, and the burning of fossil fuels, as well as during the process of acquiring access to and control of territories for such enterprises—sometimes resulting in disastrous industrial accidents such as the Union Carbide gas leak of 1984 in Bhopal, India, and BP's Deepwater Horizon blowout in the Gulf of Mexico in 2010—constitutes some of the various origins and consequences of climate violence. So, too, do the repressive and deadly tactics used by states, their police and militaries, and by corporations against land and water defenders, as at Standing Rock in the US, the Wet'suwet'en in northern British Columbia, West Papua in Indonesia, and transnational Amazonia. The resulting extreme drought and rising temperatures experienced worldwide, owing to centuries of carbon emissions, renders subsistence agriculture untenable (for instance, in Syria and Guatemala), causing great suffering to frontline communities, and catalyzing the cascades of mass migration, urbanization, impoverishment, domestic violence, and civil breakdown.

Climate violence casualties include both the calculable and the unknowable. The 2013 Yarnell Hill wildfire in Arizona killed nineteen members of the Granite Mountain Hotshots firefighters, while approximately one billion animals perished in the 2019–20 Australian wildfires, though the precise number remains ultimately undeterminable. All were climate change casualties, both tragedies exacerbated by climate-change induced extreme drought. Meanwhile, with greater authoritarian, militarized governance and corporate extraction occurring around the world, the extrajudicial murder of environmental defenders, including many Indigenous activists, is increasing significantly.⁸

If human survival requires secure habitation, nutritious food, and freshwater sources, climate violence negatively impacts all three, leading to growing numbers of climate refugees, state and sub-state competition for resources, and increasing geopolitical conflicts.⁹ At the same time, corporations and nation-states (with China increasingly taking a leading role), are appropriating lands and resources worldwide for agribusiness plantations, privatized water and seeds markets, rare earth mining for materials like lithium, cobalt, and cadmium, desert solar arrays for renewable energy systems and server farms, and ever new cybernetic and AI-assisted methods for fossil fuel extraction.¹⁰ While the list of what constitutes climate violence is extensive, its systems are

deeply enmeshed with the ecological, social, cultural, economic, and the political—disproportionately affecting impoverished and marginalized human communities and ecosystem biodiversity, including the many animals and plants with whom we share this Earth.

Just as climate violence has transformed and made immediate the global perception of climate change-related risks and vulnerabilities—pushing the abstract into the real—artist and activist practices have played a crucial role in expanding our climate-sensing capabilities. With innovative representational techniques, they stand to contribute to the meaningful narration of climate violence in ways that connect abstract systems to direct experience, providing ethico-political framings that help enable transformative activist and organizing agency. Contributors to this section offer compelling approaches to understanding and exposing the myriad facets of climate violence by engaging with, and highlighting, exemplary aesthetic and activist practices.

Notes

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7

INTO THE HEART OF THE OCCUPIED FOREST

Macarena Gómez-Barris

Amongst the world's atmospheric scientists, the consensus is that 12% of all 'man-made' climate emissions now comes from deforestation, mostly from tropical areas.¹ The deforestation of tropical forests is responsible for the rise of carbon dioxide, the main greenhouse gas that remains trapped in the atmosphere and traps solar radiation, which in turn exacerbates climate change. In the late 1990s the report "The Last Frontier Forest: Ecosystems and Economies on the Edge," co-authored by Dirk Bryant, Daniel Nielsen, and Laura Tangle, was already sounding warnings about such planetary outcomes, triggering public outcry when it found that more than half of the world's original forests had already been eradicated.² The report's main objective was to describe the status of the world's forests, pointing to the Global South as the areas of the planet that contained "the large, ecologically intact, and relatively undisturbed natural forests *that still remain*" [my emphasis].

Written during the pivotal era of neoliberal structural transformation, "The Last Frontier Forest" used the phrase *that still remain* to attend to forest systems within an increasingly catastrophic global picture. Indeed, to refer to what remains can invoke its opposite, in this case referencing the biodiverse life that had already been disappeared by mass deforestation. *That still remain* brings into analytical relief the temporal and empirical structure of critical anteriority, or the anticipation of biodiverse extinction. We might also read *that still remain* as a clarion cry with respects to the grave and continuing impact of environmental disaster, where extinction already loomed large on the near future horizon of what I have elsewhere described as the colonial Anthropocene.³ In the language of remaining forest we can apprehend the imprisoning logics of extinction. And in the refrain *that still remain* we can already imagine endings. Colonialism disciplines a normative expansionist imagination to anticipate death and destruction. Yet the notion of endings and beginnings is always scrambled by the temporalities and consequences of the colonial Anthropocene.

From the vantage point of frontier capitalism, the non-renewable resources that still remain represent a source of capitalist profit for those that squeeze biodiverse territories for its raw and primary materials. Noting that the frontier evoked romantic imaginaries of fecund, if extractible geographies, the authors described the need to protect and conserve the world's remaining tropical forest locations. They also invoked the fragile ecosystems that hung in balance in the face of intensifying frontier capitalism.

Though the emergency described in the report responds to empirical facts and its representational language is precise, hidden within its pages is the epistemological violence of Indigenous erasure. Like much of conservation discourse that protects and conserves, its primary concern is to bring into the focus the remaining forest, rather those that live there and who have cultivated biodiversity for centuries. After all, it is the world's Indigenous forest peoples that are most directly impacted by the political economy of frontier capitalism. The forest and those who inhabit it are inextricably linked and such entanglement cannot be described through the logics of the remainder.

Following Anna Tsing, we might describe the temporal structure of the 1990s as the period of the “not yet regulated,”⁴ or the time when the state abandons its commitment to regulate capital. It was precisely during the 1990s that privatization and deregulation undid the most protections for Indigenous territories, including eliminating Article 27 from the Mexican Constitution that had famously shielded the Indigenous *ejido* communal system since the 1910 revolution. Such dismantling and counter-revolutionary legislation led to widescale dispossession in Mexico and throughout the Americas, as well as widespread collective resistance, such as the Zapatista uprisings. Against the logics of extraction, deforestation, and extinction, we might consider the empirical fact of *that still remain* as a counter-referent, a refusal, a collective cry of resistance aligned with the ongoing project of decolonization. *That still remain* refuses settler and extractive erasure. And, Indigeneity, as Kanaka Maoli scholar J. Kehaulani Kauanui puts it, endures the onslaught that continually confronts the genocidal project of colonialism.⁵ It is this dialectic of elimination and refusal, the death drive of capital, and the living force of land and water defenders who resist its incursions that lies at the heart of the occupied forest.

To work against the normalizing language and the extractive view, I use the concept of *the occupied forest*, by which I mean territories of struggle over biodiversity that have been increasingly militarized and that are increasingly violent geographies of land and water defense in response to new forms of corporate and state encroachment underwritten by the legal apparatus.

Still Here

In hindsight, the phrasing *that still remain* might also pertain to those species and living systems that are “not yet extinct,” or the not yet fully realized futurity of the colonial Anthropocene's genocidal and ecocidal destruction. *Not yet*. As Latin America, Asia, and Africa entered into increasingly unequal agreements with the International Monetary Fund, the World Bank, and the Washington Consensus, the rise of debt economies and the quest for primitive accumulation produced devastating consequences for the forest, and for the human and non-human life that depended upon it for co-existence. In the geographies of the Global South and Indigenous territories of the Global North, suffering has been disproportional for those in the ecotones of clear cutting, those in the peripheries of the rural/urban divide, and those situated in the shadows of colonial capitalism. The rise of predatory and frontier capitalism has closed in on the untamed forest and those that inhabit it, intensifying the environmental crisis by appropriating and extracting primary materials for commercial enterprises, feeding the voraciousness of the colonial project.

Deforestation is a pivotal issue of the climate crisis, with Indigenous peoples at the forefront of the climate justice movement.⁶ Kyle White offers three ways to consider the climate predicament upon localized territories of struggle that have relevance to my discussion of the occupied forest. First, he notes that anthropogenic (human-caused) climate change is an intensification of environmental change imposed on Indigenous peoples by colonialism. Second, renewing

Indigenous knowledges, such as traditional ecological knowledge, can bring together Indigenous communities to strengthen their own self-determined planning for climate change. And third, Indigenous peoples often imagine climate change futures from their perspectives, first, as societies with deep collective histories that are well organized to adapt environmental change and second, as societies who must reckon with the disruptions of historic and ongoing practices of colonialism, capitalism, and industrialization. Indeed, in such theorizations, Indigeneity is not an afterthought, but a central axis and episteme for understanding occupation as a settler extractive condition that has shaped important responses. Indigenous peoples know the historical significance of land, river, and tree defense, and the processes of collective management already working with knowledge about geological time.⁷ The ecologies of the forest and protection cannot be delinked from the long arc of forest peoples' struggles. Indeed, one source of our current climate predicament is the colonial condition and mode of being that reduces territories and forests to commodities, and Indigeneity to the remainder.

Since the 1990s, and with renewed intensification over the past ten years, the Americas has experienced a new period of what Eduardo Galeano first called the *Open Veins of Latin America*.⁸ Though it is rarely framed this way, fracking, hydroelectricity, mining, tourism, petroleum and mineral extraction, and forest monoculture, including the expansion of soybean cultivation and palm oil plantations, are symptoms of the system of extractive capitalism that follows the logics of elimination and dispossession by the corporate and military state. In the resource-rich territories of the Global South, extractivism organizes the local at the scales of the mega and super mega, terminology that occupies territories with newfound spatial capacities.⁹ In such locations, environmental testimonies, and visual evidence of dispossession on cellphones, sometimes taken on a single camera, documents what otherwise would be disappeared from the public view.¹⁰

Coloniality has rendered nature and usurped language in ways that obstruct our capacity to truly perceive the catastrophe. The ruins in the wake of dam flooding, the recent and ongoing fires burning in the Amazon, and the loss, theft, and continual genocide through slow and immediate violence are all largely hidden from the domain of consumers in urban spaces. These biodiverse geographies in the Global South are the shadow spaces of corporate intrusion upon resource-rich spaces of primary non-renewable resources. Such geographies have unreflexively been dubbed as possessing the resource burden, a terminology that normalizes and facilitates the violent processes of extraction. We might ask: Who bears the burden of the curse? There are racialized undertones in the terminology of the resource curse that need to be continually challenged, reworked, resisted, and subverted. Indeed, how to represent spaces of biodiversity and its elimination is central to this challenge.

Perceiving What We Mourn

If we are living through an intensified period of extractivism, in a matrix of competing representations of the natural and post-natural world, then there is no single order of representation that can apprehend the forest. What can we learn by looking closely at the renderings of the occupied forest? What does it mean to focus on the forest and its life and death as a way for us to reflect upon our knowledge production and our relation to the world of ecology in this urgent moment of mass deforestation?

As we know from a spate of recent books on forests and their behavior in the aftermath of clearing, the living forest is much more than a historical artifact of human representation. It possesses its own logics, interacting as a system in concert with the atmosphere, the soils, the sun, tree, and within non-human or inhuman arrangements.¹¹ Francisco Varela, Evan Thompson, and Eleanor Rosch describe not only the interaction of biological matter and systems as

interconnected, but show how our own forms of perception are deeply imbricated with the environment. As they say, “We see features of this environment, such as sunlight or oxygen, as independent of the organism only because our frame of reference is relative. The interconnectedness, of the world, says otherwise.” These authors show how “living beings and their environments stand in relation to each other through mutual specification and codetermination” (pp. 198–199).

This genealogy of cognitive science shows how embodied perception and modes of being are central to cognitive processes and historical consciousness that can be grounded in specific modes of knowledge production. The notion of the embodied mind, which follows Varela, Thompson, and Rosch’s work, and which builds upon the elaborations of Merleau-Ponty on the phenomenology of perception, describes how the subject brings into being what it perceives. In other words, this body of work is confluent with European ideas of cognition, but it also emerges from deep observations of and relationships with the forest of the Bio-Bio in Chile. In their pivotal effort to integrate biology, cognition, and epistemology into one scientific knowledge formation, Maturana and Varela’s *The Tree of Knowledge: The Biological Roots of Human Understanding* (1989) explains the reciprocal character of perception and interactivity that is a ‘dance of congruity’ between a living system and the surrounding environment. Its lasting contribution is to recognize science as a value-laden enterprise, and to overcome the dualisms embedded within modernity. The problem in the text in my opinion is that rather than turning to Indigenous, Mapuche, Pehuenche, and Huilliche worldviews and philosophies for a grounded understanding of their biological arguments, the authors turn to Buddhism and essentialize it as an apolitical and universal episteme that is far removed from its originating and even transculturated context.¹²

The issue of obliterating Indigenous knowledge production is a reiterative form of epistemological violence that has material effects. Recently, prominent Finnish environmental philosopher Johanna Oksala publicly stated that by focusing on Indigenous modes of being or cosmologies, non-Indigenous peoples cannot relate or find routes out of the predicament of climate change. She also explained that we cannot contend with our melancholia in front of worsening ecological crisis by using “cosmologies” from Indigenous societies that do not apply to the majority of “us,” and so instead must return to Nietzsche and the Eurocontinental philosophical tradition.¹³ The we of the Anthropocene, however, is not without its own troubling universalizing framing that writes out the uneven and differential effects of coloniality, especially in relation to Indigenous and Afro-diasporic histories and communities. In her disentanglement of the racial regime of geological knowledge, Kathryn Yusoff recently described this as, “To be included in the we of the Anthropocene is to be silenced by a claim to universalism that fails to notice its subjugations.”¹⁴ Reframing the temporality and the we of the Anthropocene, as I and others have suggested, allows us to acknowledge the slow and accelerating violence that have already produced dystopias across racialized geographies.

Putting reductive representations of Indigenous thinking, philosophy, and cosmologies aside, the issue with framing a potential return to a Euro-centrist solution ignores the nature/culture divide and other forms of binarized thinking at the heart of the colonial history of ideas. In his discussion of the Quichua speaking Runa of Ecuador’s Upper Amazon, for instance, Eduardo Kohn makes explicit the living logics that tropical forests exhibit, and he invites us to rethink our understanding of the human in the first place.¹⁵ As he describes in relation to human and nonhuman entanglements, the work is an ontological exploration of the world that lies beyond the human. He is also interested in breaking down the barriers between the human and non-human, a precept that follows much of the by-now large body of work in Brazilian Anthropology.¹⁶ The ontological and relational turn in comparative Indigenous studies of the Americas, and in

Critical Indigenous Studies, actually asks us to begin from the perspective of what Jodi Byrd importantly refers to as grounded relationality.¹⁷ These principles consider how to imagine interdependence and social connection at the heart of any future oriented political project in the name of the forest.

Forest Films

Complex representations that illuminate forms of relationality and social ontologies are critical in this regard. Yet these relations often function under the weight of occupation and within geographies of dispossession. Rather than see the frontier as a traveling space, or a geography of unlimited resources, as the extractive scientific, state, or corporate view might have it, we need to consider the colonial/modern forest as a densely occupied space of harsh and discordant activities. For instance the filmic work of Mapuche director Francisco Huichaqueo, in *Mencer Ni Pewma* (2011) represents the forest as an affective space of confusion, elision, and of disappearance, rather than as an intact ecological wonderland. The 38-minute experimental film expresses a history of militant Mapuche Indigenous refusal in the face of the forces of dispossession that date back to encroachment by the Spanish militias in the sixteenth century. Occupation, in Huichaqueo's film, refers not only to military and police violence against Mapuche land defense, but to the neocolonial invasion of monocultural species, or the foreign rows and rows of radius pine and eucalyptus plantations that have overtaken Indigenous territories since the 1990s.

I have written at length about the Mapuche Indigenous territorial struggle in the face of pine and eucalyptus plantation expansion in the Bio-Bio region of Southern Chile (2014, 2017). Like other semi-tropical and tropical forest biospheres throughout the Americas, the original Pehuen forests of the Wallmapu region were dramatically reduced through state forest laws that privatized Indigenous territories, with devastating consequences for those who live with the ongoing consequences of reduction, enclosure, and removal. In the film, we hear confused lamenting echoes that emanate from the ancestors from the other side of the colonial divide, where the charred landscape of ubiquitous monocultural plantations pierces the veil between living and nonliving. The ancestors' cry mourns the loss of human and nonhuman life in the wake of plantation expansion. As these disembodied figures search for anchor points in the depleted forest, they mourn the near extinction of the native Pehuen forests, the monkey puzzle trees that once inhabited the region. Unlike the genre of European and Anglo-American literature on the forests that focuses on purity or nostalgia, Huichaqueo's representation of the forest is one of occupied space, a past-present-future forest imaginary that is overrun by plantation corporations, and greedy actors who force Mapuche peoples into a state of dispossession and destitution.¹⁸

In terms of representations of the occupied forest, we could also turn to the work of non-Indigenous artists Ursula Biemann and Paolo Tavares's *Forest Law* (2014), a synchronized 38-minute video projection that was shot with two cameras in Eastern Ecuador. This work is not produced from within occupied communities in the way that Francisco Huichaqueo's film is, but made by connected allies who understand the importance and mediations of international circuits of artistic production and circulation. Referring to the forest's representation within the world of the human *Forest Law/Selva jurídica* seems to both celebrate and condemn a history of nature representation that either depends upon the vision of *terra nullius* as colonized empty space, or to imagining the forest as a space of purity, thus reproducing an extractive view. In this forest cultural production the violent terrain of occupation enters the frame differently than it does in Huichaqueo's filmic language, and it does so through the viewpoint of climate and inter-species justice as well as centering the struggle of the Kichwa peoples of Surayaku (Figure 7.1).



Figure 7.1 Ursula Biemann & Paulo Tavares, *Forest Law*, two-channel video installation (installation shot of José Gualinga, Sarayaku), 2014

In the frame of both channels we see an Indigenous land defender, who problematically in my estimation, goes unnamed. He powerfully states the collective struggles of land and water defense: “Sarayaku siempre ha tenido que defender su territorio, su ambiente, su vida / Sarayaku has always had to defend its territory, its environment, its life.”/ “Hay mucho interés en explotar los recursos, la madera, la minería, y el petróleo.” There is much interest in exploiting its resources, its forest, its minerals, oil.”/ “Frente a eso nosotros tenemos la decisión de decir no.”/ So we have decided to say no.” Behind him is the Bobonaza River, a tributary that drains into the Pastanza River and ultimately into the Amazon River, as it runs in its entirety through the Amazonian forest. Though the exhibition that surrounds the two-channel film offers documentation of the struggle for multispecies justice, and against genocide and ecocide in Sarayaku, the film itself instead chooses to focus on the speaking presence of the single figure. The stillness of the human figure dressed in red, with the layered green tropical forest in the background, as if to connote the continuity of ecological prisms between human and nonhuman,¹⁹ must be put into the context of the landmark legal cases brought forth by the Kichwa peoples in relation to the Rights of Nature. Even in this quieter film, the cacophony of occupation is omnipresent.

The title *Forest Law* reverses the subject/object divide, placing the forest at the center in a filmic imaginary that makes the living forest its protagonist. *Forest Law* opens with an aerial view of the Amazon forest covered in clouds and the subtitles refer to how the tropical forests of the Earth act as a “major cooling system of the ecosphere. They do this by sustaining the clouds and rain above the forest canopy. A four-degree rise would be enough to disable the Amazonian ecosystem and turn it into dry scrub.” By moving quickly from the scale of planet Earth, to the Amazon, to the Sarayaku region of the Eastern Amazon in the narrative description of the film, *Forest Law* interweaves the scales of the planetary, transnational Amazonian, regional, as an important situatedness for the viewer’s experience, grounding Sarayaku in both time and place.

We see the plastic bottle and measurements of management and cataloguing, and also hear from scientists that understand the forest as an endless source of knowledge, genetic, and medicinal production. In the layers of lush forest life, we approximate how the scars from oil drilling diminish the capacity of Eastern Amazonian's biodiversity. The consequences and disruptions of extractivism is present both inside and outside of the frame, yet it is not the protagonist here. Instead, the central figure is the living forest and its interactions with humans, like the figure of Franco Viteri, who describes his riches because of his sustained relationship to the forest.

When I first saw *Forest Law* on my small laptop computer in 2017, and later was able to see the work at a private screening at the University of California Santa Cruz at the Mary Porter Sesnos Art Gallery, I was moved by the saturation and myriad green colors on the screen, as well as the multitiered architectural environment of the forest.²⁰ Having spent time conducting research in the forest, these spatial structures and their clustering forms and views illustrated the powerful built environment of the Amazon. The film captures spatial openness and closure, and the relationship between layers of life that inhabit the breathing and living forest that is the protagonist of the two-channel work. Viewing the film in the flat dimensionality of one computer screen is different than encountering it as installation in three-dimensional two-screen space. With verdant moving forest frames hanging in the foreground of the exhibition, a powerful photo-text assemblage can be viewed in a glass case to one side. Contained within it are the documents that legislate the forest, yet there is also evidence of how the state is implicated in the toxic practices of the petro-extractive industry. In particular, the government of Ecuador acknowledged responsibility for illegally licensing to an oil company to conduct its business on Indigenous territory with impunity and without the community's consent.

Environmental testimonies point to the way the forest is a source of life, yet it also exists as a physical, legal, and cosmological entity. As Ursula Biemann describes the work on her website:

Forest Law, 2014, is a 38-minute video essay and book drawn from research carried out by Biemann and Tavares in the Ecuadorian Amazon. It considers the legal cases which plead for the rights of nature against the dramatic expansion of large-scale extraction activities in the region, including the trial won by the indigenous people of Sarayuku based on their cosmology of the living forest. The project creatively maps the historical, political, and ecological dimensions of these trials on behalf of the forest and the people who cultivate the forest, tracing the entanglements and frictions between the ethical and epistemic stakes these cases raise.

In making the film, the directors acknowledge engaging the work of Michel Serres' *The Natural Contract* (1990) that calls for human negotiation with the Earth to find a balance, and his book is also included in the exhibition alongside projections of film clips from relevant trials, maps of the area, and soil from the Sarayaku forest. This contextual material and Serres' book point to the decade of the 1990s as a moment of possibility, when capitalism's broken pact with the non-human is made visible and a period wherein Indigenous social movements organize collective responses for a new contract, one that revalues the forest and the network of living relations within it.

Perceiving with Forest Theory

It seems important for us to understand that there is a range of perceptual forms within the occupied forest. There are those that come from occupying forces, or the regime of visibility that I call the extractive view, and those that emerge from within the underland and the

undergrowth, or the spaces that offer us submerged perspectives from below. The old/new plantation economies of extractivism facilitated by colonial and neoliberal laws, present a major challenge to local and embodied land and water defense. In such occupied spaces and racialized geographies, we must learn from those that have already experienced the catastrophe from within the heart of the occupied forest.

The forest is not merely a pristine environment, but also a container of land and water defense in the face of colonial and neo-colonial extraction. What can we learn from the wars and affects that take place within the occupied forest? How can it be chronicled through the space of mourning, cacophony, and ultimately in relation to the devastation of the colonial Anthropocene? How can we build solidarities with the ongoing struggle to defend Indigenous territories?

There is much to learn from the broad theoretical and empirical fictive and non-fiction literature that takes forests as a protagonist of the natural world and as the diagnostic center of the Anthropocene. My point is also to turn us towards a different genealogy of the forest, one grounded within the submerged perspectives of Southern theory. Three decades ago, Humberto Maturana and Francisco Varela theorized alternative modes of human and biological perception. Their interdisciplinary collaborative work, *El árbol del conocimiento* (“The Tree of Knowledge”) first published in 1984, three years before Deleuze and Guattari’s *A Thousand Plateaus* that equates the forest to the human mind), deals complexly with the human and non-human predicament of “no future” presented to us by extractive capitalism. Maturana and Varela’s study subtly originates and learns from the forests of the Bío-Bío region in Southern Chile where the ancient Pehuén tree, sacred to the Mapuche, serves as a model for how they map human hermeneutics and perception. Of many aspects of this work that could be highlighted here, a signature insight is how all organisms are constitutively and autonomously reproducing circuits of living systems. Another is the cognitive blur between perception and actual experience.

In other words, for Maturana and Varela, thought is an embodied act that requires representation, not as epiphenomenal to the living world, but as constitutive of it and interlinked with the affective responses of human activity. And this work on the sociality of cognition emerges directly from their observations in Southern Chile. The forest film shows us this inter-relationality between the human and non-human world at this time of anterior and posterior temporalities, in this time of war against the Earth. We must engage fully with these representations of the forest as well as anti-extractive activisms and Indigenous relationality. These are the ongoing, persistent, and embodied modes of perception and collective activity that come deep from within the heart of the occupied forest.

Notes

- 1 “We are destroying rainforests so quickly they may be gone in 100 years,” John Vidal, *The Guardian*, January 23, 2017, www.theguardian.com/global-development-professionals-network/2017/jan/23/destroying-rainforests-quickly-gone-100-years-deforestation, viewed October 7, 2019.
- 2 See “The Last Frontier Forest: Ecosystems and Economies on the Edge,” <https://pdf.wri.org/lastfrontierforests.pdf>, viewed on October 1, 2020.
- 3 See Macarena Gómez-Barris, “The Colonial Anthropocene: Damage, Remapping, and Resurgent Resources,” <https://antipodeonline.org/2019/03/19/the-colonial-anthropocene/>.
- 4 See Anna Tsing’s “Natural Resources and Capitalist Frontiers,” by Anna Lowenhaupt Tsing, *Economic and Political Weekly*, November 29, 2003, 38(48), 5100–5106.
- 5 See J. Kehaulani Kauanui, “A Structure, Not an Event”: Settler Colonialism and Enduring Indigeneity,” *Lateral: Journal of the Cultural Studies Association*, Issue 5.1, Spring 2016.

- 6 See Igor Krupnik and Dyanna Jolly (eds), *The Earth is Faster Now: Indigenous Observations of Arctic Environmental Change* (Fairbanks, Alaska: Arctic Research Consortium of the United States). Also see Subhankar Banerjee's book, *Arctic Voices: Resistance at the Tipping Point* (New York: Seven Stories Press, 2013) that prioritizes Indigenous voices from the Arctic North.
- 7 There is important new scholarship on the intersections of climate crisis, anti-Blackness, anti-Indigeneity and decolonization in relation to geological time. See Kathryn Yusoff's *A Billion Black Anthropocenes* as a critical text that builds upon Black Studies to show the racialized histories of geological thinking. Indigeneity could be more present in the work. For new work that brings Black and Indigenous Studies in conversation on questions of environmental humanities see Tiffany Lethabo King, *The Black Shoals: Offshore Formations of Black and Native Studies* (Durham: Duke University Press, 2019).
- 8 See Eduardo Galeano's, *The Open Veins of Latin America* (New York: Monthly Review Press, 1973).
- 9 See Macarena Gómez-Barris, *The Extractive Zone: Social Ecologies and Decolonial Perspectives* (Durham: Duke University Press, 2017). Also see "Extractivism and Neoextractivism: Two Sides of the Same Coin," Alberto Acosta, www.tni.org/files/download/beyonddevelopment_extractivism.pdf. Viewed September 29, 2019.
- 10 "The Apocalyptic and Expulsive Force of Dam Occupation: Seeing with Carolina Caycedo's "A Gente Río, Be Dammed," <https://multimedia.hemi.press/carolina-caycedo/essay/>.
- 11 The language of the inhuman follows Mel Chen and Dana Luciano who develop the concept to get us out of the human/nonhuman binary and impasse, Introduction to special issue, *Queer Inhumanisms, GLQ: A Journal of Gay and Lesbian Studies*, 2019.
- 12 For a classic discussion of this see in terms of US, rather than South American, appropriations of Eastern philosophies see, "Radical American Environmentalism and Wilderness Preservation: A Third World Critique", by Ramachandra Guha, *Environmental Ethics*, 11(1) (Spring 1989), 71–83.
- 13 Presentation at New School, "Night of Philosophy," October 5, 2019. The notion of Indigenous principles as being unrelatable was also brought up in a way that dismissed points of convergence between European and Indigenous intellectual traditions.
- 14 See Kathryn Yusoff's *A Billion Black Anthropocenes or None* (New York: Verso Books, 2019), p. 19.
- 15 See Eduardo Kohn's, *How Forests Think: Toward an Anthropology Beyond the Human* (Berkeley: University of California Press, 2003).
- 16 See the illuminating forum on Eduardo Kohn's work and his response, "Further Thoughts on Sylvan Thinking," *Journal for Ethnographic Theory*, 2014, 4(2), 275–288.
- 17 See Jodi Byrd's essay, "Variations under Domestication": Indigeneity and the Subject of Dispossession, in "Economies of Dispossession: Indigeneity, Race, Capitalism" special issue, Jodi A. Byrd, Alyosha Goldstein, Jodi Melamed, and Chandan Reddy, eds., *Social Text*, 2018, 36(2).
- 18 See Chapter 4, "An Archive for the Future: Seeing Through Occupation," *The Extractive Zone: Social Ecologies and Decolonial Perspectives* (Durham: Duke University Press, 2017), 66–90.
- 19 See Ed. Jeffrey Jerome Cohen's, *Prismatic Ecology* (Minneapolis: University of Minnesota Press, 2013).
- 20 Also see T.J. Demos' exhibition on the *Rights of Nature: The Art and Politics of Earth Jurisprudence*, where he presented this film as well: <https://cpb-us-e1.wpmucdn.com/sites.ucsc.edu/dist/0/196/files/2015/10/Demos-Rights-of-Nature-2015.compressed.pdf>, seen December 1, 2019.

8

THE COMING WAR AND THE IMPOSSIBLE ART

Zapatista Creativity in a Context of Environmental Destruction and Internal Warfare

Alessandro Zagato and Natalia Arcos

“The Occident defines itself with a gesture: that of appropriating what cannot already be felt. ‘Occidere’: ‘to assassinate’, tear apart, annihilate—all ways of radically appropriating what lives outside of us.”

—Julien Coupat¹

With the installation of the new government and the appointment of Andrés Manuel Lopez Obrador (AMLO) as president in December 2018, Mexican and international civil societies and mainstream media nurtured hope that this country would finally get through an unprecedented and highly awaited structural transformation. There were also big expectations from the national and international left, who saw in the new government a possible turn toward a more egalitarian, possibly “social democratic,” configuration of the state.

AMLO became the elected president² with 54% of the share, confirming the figures forecast since the beginning of the electoral campaign. This was his third attempt. The previous two were tainted by irregularities and fraud. His party, MORENA,³ and the coalition that supported him,⁴ won the majority of seats in both chambers as well as in the main national constituencies, including Mexico City. On that post-electoral Sunday night, a wave of euphoria flooded the streets of a country exhausted after twelve years of a “war on drugs” strategy, widespread violence, brutality, and poverty levels hovering around 50%.

Mexicans were hoping that a new political elite would put a final stop to the dramatic problems that have affected the country at least since its entrance in the Free Trade agreement of 1994, and in particular since the beginning of the war against drug trafficking begun by President Felipe Calderon in 2006 and continued during the presidency of Enrique Peña Nieto. The country slowly sank into a swamp of widespread internal warfare and environmental crisis, with peaks of violence and cruelty like those leading to the kidnapping and mass murder of students of Ayotzinapa⁵ (Guerrero), and of teachers in Nochixtlán (Oaxaca) in 2016. These are still unresolved cases, and no justice has been offered by the government to the victims and their families.

It is worth considering some concrete figures of the cataclysm hitting Mexican society—this “storm,” as the Zapatistas usually call it in their communiqués. In the seven-year period between 2007 and 2014, about 164,000 people have been murdered, more than have died in the conflicts of Afghanistan and Iraq over the same time period. According to the secretary of public security

and the National Search Commissioner (*Comisionado Nacional de Búsqueda*), more than 40,000 people are currently reported as missing⁶ (*desaparecidos*)—a figure that does not take account of the large amount of unreported cases.⁷ These are numbers that still fail to account for the symbolic and practical brutality afflicting Mexican society, the trauma suffered by countless communities from the northern to the southern borders, and the magnitude of the structural evolution underway. Furthermore, as the result of the implementation of regimes of privatization, deregulation, and liberalization and their current extension under a rationale of “accumulation by dispossession through extractivism,” natural resources and human beings are being overexploited throughout the country.⁸ After government actions taken during the current and past decade,⁹ “it is estimated that a quarter of the national territory [more than 50 million hectares of the 200 composing Mexico] has been leased to mining companies”¹⁰ (Figure 8.1).

Endemic warfare, social fragmentation, and the eradication of forms of life that are not functional to corporate logics might be interpreted as necessary steps toward a full “corporatization” of the state.¹¹ This concept points to a process of “removing the constraints that the nation state placed on many of the potentials of capital.” Such operation is taking place with varying intensities at the global scale. It involves “radical changes or transformations” of “the bureaucratic, institutional and socio-political relational order of the nation-state... including the values that are integral to it.”¹² Corporatization is therefore a tendency that implies a protracted highly devastating course of action — an aggression on places, and aspects of human life that need to be eradicated or transformed.

In Mexico, long-established forms of social/institutional cohesiveness are being forcibly replaced by anarchic arbitrariness, fomented by aleatory power alliances, violence, and widespread corruption.¹³ The forceful consolidation of the Mexican corporate state implies the repression of egalitarian tendencies, laws, institutions, and independent formations shaping (or even just attempting to shape) Mexican society. Such process unfolds above and beyond mainstream political disputes and governmental changes.



Figure 8.1 Collective Zapatista painting presented in Morelia during the Comparte Festival, 2016

The signals and programmatic trends displayed during the first semester of AMLO's government are failing to suggest any rupture with (or even just a relief from) ongoing tendencies. On the contrary, after just six months, nine community leaders and human rights defenders, and ten journalists have been murdered.¹⁴ Particularly worrying is the role played by the organized crime in the assassinations of indigenous leaders and councilors of the National Indigenous Congress, like, for example, Samir Flores Soberanes, a Nahuatl peasant activist murdered in February 2019 for opposing the so-called "Integral Plan Morelos," a Mexican government's infrastructural energy plan for the center of the country. These repressive mechanisms are based on a triangulation of economic, political, and criminal powers. Sustained by a political/ideological discourse that pretends to break with the past, including through ostentatious statements like the declared "end of neoliberalism,"¹⁵ and supported by an outstanding popular consensus, the new government is clearly reinforcing, advancing, and legitimizing state militarization, unilateral aggression on resisting groups and communities, and corporate environmental exploitation. This is the reason why many organized civil groups have taken a firm distance from the new political elite. According to our analysis, there are three particular (interlinked) policies/programs being implemented that prefigure a line of structural continuity.

The first one is the "Mayan Train" (*Tren Maya*), an infrastructural mega project whose implications and significance touch on the core of the actual crisis. The Mayan Train is a 1,525-kilometer-long railroad announced in September 2018. It will begin in Palenque, Chiapas, and travel northeast towards Cancún (in Quintana Roo) via three routes that encircle the Yucatan peninsula and stop at fifteen stations. Apparently, the project aims to connect tourist destinations in Yucatán, including historic Mayan sites. This development will have a decisive impact in the configuration of the southern region. Organized indigenous groups currently inhabiting interested areas have highlighted the fact that the train will promote the construction of brand new habitational and recreational centers along its route serving the touristic industry from Palenque to Merida. In addition, they criticized that the consultation of indigenous groups has not been complied with, as established in the Convention 169 of the International Labor Organization—and that there are insufficient studies on the environmental, social, cultural, and economic impacts of the train. The construction of the railroad of the Mayan Train, in addition to having an environmental impact on the region of the Yucatan Peninsula, could affect the customs and traditions of the Mayan peoples (a total of 82 indigenous communities) settled in this part of the Mesoamerican Biological Corridor, said César Romero Herrera, member of the National Commission of Protected Natural Areas.¹⁶ He added that the Mayan Train should not interrupt the Biological Corridor and affect the development of natural and cultural heritage, nor damage the 17 protected areas of the Yucatan Peninsula.

A second crucial governmental program is the so-called "Transithmic Corridor" (*Corredor Transistmico*), a slightly older plan that the United States are supporting strongly, since it would create a sort of new border running from the Isthmus of Tehuantepec (Oaxaca) to Cotzalcoalcos (Veracruz) and constitute a second barrier (after the southern frontier) to the transit of migrants toward the north. The project is now underway under the name Transoceanic Corridor. It will seek to connect the Pacific and Atlantic Oceans, through ports and railways that will speed up trade with Asia, the United States, Canada, and Europe. Like the Mayan Train, this development aims to accelerate and increase processes of accumulation by dispossession and land grabbing, urban development on rural land, occupation of water bodies, and creation of an exploited working force in indigenous territories. It will also accelerate the creation of so-called "special economic zones" (SEZ) where corporate initiative is eased through the implementation of special tax regimes, strategic geography, and cheap labor—different conditions from the rest of the country such as those shaping the northern frontier.

The third great structural program commenced by the new government (and approved on March 26, 2019) is the constitution of a so-called National Guard (*Guardia Nacional*), a new military body controlled by the Ministry of Defense and performing public security tasks such as prevention, prosecution, and the investigation of crimes. This reform could be a point of no return for Mexico. Its approval represents the government's renunciation of building civil and democratic security institutions and procedures. It will consolidate a 12-year-long process of militarization of Mexican public life, giving continuity to a military type of strategy that has exacerbated violence and contributed to the deterioration of social life and widespread human rights violations.¹⁷ By giving to the army unprecedented "civil" powers and in the absence of mechanisms of accountability or obligations of transparency, the creation of a National Guard is in line with some of the worse corporate authoritarian tendencies shaping the Latin American region. We are talking about a deployment that has begun with 50,000 agents and that will reach 110,000. The new Armed Force was established with the approval of all the groups represented in the federal Legislative Power. There is consensus even among the business chambers, the media consortia, financial groups, and ecclesiastical powers.

The 266 coordinations where the National Guard will settle include autonomous Zapatista municipalities. The map¹⁸ clearly shows that the new military force aims at taking position in the heart of the movement and the Zapatista Army of National Liberation (EZLN). The Zapatista region will have more military settlements than other regions with high rates of violence (this is supposed to be the rationale for the distribution of the National Guard), despite the fact that governmental figures themselves prove that crime rates in autonomous territories are among the lowest in the country.¹⁹ As Zósimo Camacho argues, in the vision of AMLO all territories must be recuperated. Not only those controlled by organized crime, but also by anti-systemic (and thus illegal) communities.²⁰ In a recent communique the Zapatistas denounced a 100% increase of military incursions on their territory by the Mexican Army as of December 2018, including terrestrial patrols and overflights from helicopters (Figure 8.2).

The above-illustrated tendencies show how widespread warfare becomes a form of governance that facilitates the appropriation of communal and public resources, the deterrence of dissent, and a generalized process of the transformation of existing forms of life. According to Subcomandante Marcos

in the current era, the will that capitalism attempts to impose is to destroy/depopulate and reconstruct/reorder conquered territories. Indeed, war today is not satisfied with conquering a territory and demanding tribute from the defeated force. In the current phase of capitalism it is necessary to destroy the conquered territory and depopulate it, that is, destroy its social fabric. I am speaking here of the annihilation of everything that gives cohesion to a society. But war from above does not stop there. Simultaneous with destruction and depopulation is the reconstruction of that territory and the reordering of its social fabric, but now with another logic, another method, other actors, and aims. In sum: war imposes a new geography. If in an international war this process occurs in a conquered nation and it is operated by an aggressor nation, in a local or national or civil war the territory to destroy/depopulate and reconstruct/reorder is common to the forces in battle.²¹

Thus, the consequence of such aggression is the subjection of indigenous populations, not just because their lands are removed from them, but because of the subjective transformations that people necessarily have to get through. Current processes of state corporatization require the production of a militarized and socially fragmented geography: depopulation, the annihilation



Figure 8.2 Subcomandante Marcos in La Realidad celebrating Galeano's funeral, Chiapas, Mexico, 2014

of everything that provides cohesion to a society, the imposition of a new configuration enabling the institution of, to use Fanon's notion, "zones of non-being" where humanity is constantly violated. An ontological transformation is at stake here—the creation of a different humanity in regions of the south of Mexico that are mainly inhabited by indigenous groups and legally organized under collective forms of land use.²² We are witnessing here an escalation of "internal colonialism," intended, as Gonzalez Casanova puts it, as a process in which social life is organized under racial and ethnic exclusion or inclusion criteria, and mechanisms of oppression and accumulation analogous to those of the colony.²³

Is a Resistant Popular Art Possible in a Context of War?

The answer to this question is obviously positive. Art is always possible, even under the severest forms of oppression. And this is not just because of humanistic considerations, like art's "universality." It is possible in the first instance because the current conjuncture makes a political response necessary, and politics is inseparable from considerations of an aesthetic nature. Here we are assuming Jacques Rancière's point that the areas of politics and aesthetics are inseparable, since politics always manifests itself as a subversion of the sensible, or, better said, of the "distribution of the sensible," the regime of conditions of possibility to perceive, think, and act in a given socio-historical situation.²⁴ It is, in Rancière's perspective, a configuration of pieces, positions, and hierarchies that is based on the distribution of spaces, times, and forms of activity that determines the way in which something in common lends itself to participation. The unequal distribution of places and functions makes so that groups and individuals become relegated in relatively fixed and clearly identifiable categories—a non-egalitarian inventory of human beings (Figure 8.3).



Figure 8.3 Mural in the Caracol of La Realidad, Chiapas, Mexico, 2014

The affirmation that a political act is always at the same time an aesthetic act should not be confused with the perverse control of politics by the will of art, and the use of people (or the masses) as a work of art. Our interest focuses instead on the aesthetic act as a configuration of experience that can create new modes of sensory perception, induce new forms of political subjectivity, and anticipate futures, that is, build other possible worlds, such as those already pre-figured in the organization and artistic production of the Zapatista communities.

As we said, for Rancière “the aesthetic regime of the arts disrupts the apportionment of spaces.” In addition, it “

calls into question the neutralized status of *technè*, the idea of technique as the imposition of a form of thought on inert matter. That is to say that it brings to light, once again, the distribution of occupations that upholds the apportionment of domains of activity.”²⁵

As highlighted above, in Mexico this logistic predisposition of power becomes evident in the developmental/infrastructural (and military) nature of governmental policies—its management of space functions and processes, orienting people’s subjective existence. This might happen through infrastructural developments that, as the Invisible Committee explains, constitute the essence of contemporary power, which is “of an architectural and impersonal nature, and not representative and personal.”²⁶ Power, argues the Committee, “is the very organization of this world—this engineered, configured, designed world... Those who determine the functionality of spaces, those who govern the media and the environments, those who manage resources, those who manage accessibility govern people.”²⁷ Even the development of an apparently

innocent (“Mayan”) train²⁸ constitutes an attack on the territory, a first step forward toward its reconfiguration, and of the forms of lives inhabiting it—it is part of the war moved against peoples and environment. For Rosa Luxemburg, militarism goes together with capitalist accumulation in all its historical phases. This is occurring, however, in a present time marked by the return of primitive forms of accumulation and dispossession performed through violence and structural logistic development.

Although the contemporary Zapatista movement is internationally known and remembered for the armed uprising of 1994, its trajectory is shaped by an early repudiation of warfare and the switch of the focus toward the construction of an independent, egalitarian, and liberated way of living collectively, which they define as “autonomy.” In an interview of 2001, Subcomandante Marcos affirmed that “the aim of the EZLN is to lose its E,” which is to say *Ejército*, the military dimension—“this is an army that wants to disappear,” he argued. Indeed, over the last twenty-five years, the Zapatistas transformed revolutionary warfare into an imaginative and essentially peaceful political process. Not only have the Zapatistas developed their independent education, health care, and justice systems, but they have also given an increasing prominence to popular creativity and art (Figure 8.4).



Figure 8.4 Camilo, untitled painting, 2013

The production of art in Zapatismo—beyond the aesthetic/political dualism that characterizes the movement and that we have discussed above—is marked by strong epistemological challenges. These challenges emerge at different levels, inviting the observer of Zapatista visual, scenic, poetic, and musical arts to interpret their production in radically different ways; or even to give up his or her expectations of critical reading. Also, art presents itself as resisting commercial co-optation. The theory that integrates it and the curatorial praxis that organizes it do not facilitate the institutional-functional “hygenization” of these arts in rebellion. Taking a position in the avant-garde line of the aesthetics of liberation, Zapatista art proposes a collective, anonymous, self-taught, pedagogical, sporadic, and spontaneous approach. With a strong identity held in highly recognizable symbols and icons, Zapatista works of art are not responding to the parameters of the history of Western art or to the spectacular maneuvers of contemporary art. In this rests one of the main challenges for art theorists approaching the movement. As the symbolic construction of a confederation of autonomies of indigenous peasants in resistance against capitalism, Zapatista art constantly resorts to the past-future thematic axis to point out the oppression of colonialism, counterinsurgency, and the liberation process.

The prominence of art is due to the fact that according to the Zapatistas the construction of a radically different social configuration also passes through the production of new aesthetics and functions versus those imposed by state and corporate powers. To the point that they have issued communiques in form of poems,²⁹ and they have based their autonomous and horizontal forms of organization in one (poetic) oxymoron the “ruling by obeying” (*mandar obedeciendo*) which reflects the ambivalent and contradictory nature of power.

Among the contemporary revolutionary movements, Zapatismo stands out for its singular ability to articulate discourse and political praxis with a highly developed aesthetics. This inclination is manifested both in the being/appearing of the movement (even of its army, frequently displayed as a performative and communicative tool)³⁰ and in its artistic production. In previous publications we have highlighted how this ability developed “organically” to the movement itself and not only as an accessory or purely instrumental feature.³¹ One of the historical reasons for this articulation has to do with the “encounter of cosmologies” that marks the evolution of Zapatismo since its origins.³² We are referring to the encounter of the revolutionaries who arrived in the Lacandon Forest in 1983, with the ancestral forms of resistance, organization, and knowledge of the indigenous groups inhabiting this region. This encounter constituted a real event, a powerful disruption of the original plans, as well as the opening of unprecedented possibilities around which a new political, social, ideological subjectivity—including a new aesthetics—started to take shape and find expression.

Thus, in the analysis of the EZLN, art is conceived as a heuristic, imaginative, and productive field inseparable from the collective process of emancipation. Indeed artistic expressions have the property of exceeding the social historical context, the cultures, the complexities, and, in general, the materialities in which they are manifested. As philosopher Alain Badiou argues, art does not maintain a “homological” relation with the “real of History.”³³ It has rather a “transhistorical and prophetic value.” Meaning that prefiguration of futures is intrinsic to it. However, Zapatista futuring breaks with the static and detached forms of prefiguration frequently proposed by contemporary art, since its aesthetics are grounded in—and inseparable from—their concrete struggle, and the materiality of a peasant society (of which Zapatista artists constitute a productive part).

“The aesthetic effect”—insists Badiou—“is certainly imaginary; but this imaginary is not the reflection of the real, since it is the real of this reflection.”³⁴ Art, in other words, does not correspond to representation—however, starting from representation, it can produce new forms of presentation. This is the political function that the Zapatistas attribute to—and seek in it. For art

is not a simple reflection of what there is. On the contrary, it tends to maintain an open edge, a gap in the historical conditions of its production. Even in a context of widespread warfare that seems to be foreclosing any possibility outside the struggle for survival. It is from this opening toward a field of possibilities that the future can be anticipated, and the new emerge. This is a fundamental task in a conjuncture that seems paralyzed between a world in ruins and another that still needs to be born. It is a time of radical uncertainty where, Alvaro García Linera says, quoting Shakespeare

“all solid things vanish in the air”. But for that reason it is also a more fertile time, because there are no inherited certainties to which to cling to order the world. These certainties must be built with the chaotic particles of this cosmic cloud that leaves behind the death of past narratives.³⁵

The cosmic cloud imagined by Linera, a fragmented and chaotic “toolbox” that we inherit from the past, includes the ideologies and forms of organization that have characterized the social and revolutionary movements of the last century. The EZLN has not in any way discarded these ideologies and forms of organization, but has used them creatively and not dogmatically, deconstructing and reconstructing them, incorporating elements of indigenous cosmology—ways of doing, knowledge, and solidarities that are present and active inside the population, among ordinary people.

One of these virtues is collectivism—the refusal of individualism. Same as with the “ruling by obeying” oxymoron shaping their politics, subordination to the collective informs artistic production in Zapatismo. In the works that were presented in the “Comparte,”—their concrete characteristics and production processes—the figure of the common/collective constantly stands out, displacing the individualities that belong to a western conception of art since the Renaissance and that are glorified by the contemporary market.

For example, with respect to the Zapatista painters and their works, one aspect that immediately stands up is that they are anonymous. One could highlight the fact that neither are all contemporary artists like the (renowned) Banksy, for example, are actually known. However, the face or name of a Zapatista artist will be unknown, like that thousands of other people integrating the Zapatista communities. Therefore, anonymity is not a decision of strategic positioning taken by a particular individual, but rather a habit of protection (coming from a military background) and identification established decades ago by the EZLN. Moreover, the Zapatista artist is, with certainty, a full-time peasant; he or she can also be a truck driver, or a health or education promoter, or a councilor of a Rebel Municipality or of a Good Government Board. Definitely, she will not be a full-time artist and neither will she have been trained in the academy. Her life is inserted in the community, collective work, and in the resistance. This is also how she understands painting as an activity.

The Zapatista peasants operate within a production system that was liberated from *caciquismo*, that is, from an agricultural and farming mode of production based on the division between those who possess the means of production (among them, and, in particular, land) and the labor force. In these communities, land is shared between families and surplus production is redistributed collectively, within the movement itself, to support autonomous projects. For this reason, and given the particular relationship between indigenous subjectivity and land, the Zapatista peasant tends to perceive and develop his activity as free (or, more correct still, liberating). His resistance stands against a model of consumption that he perceives as degrading and absurd—a horizon that is not part of his ambitions. Zapatista peasants practice art alongside their agricultural work to the point that the two activities end up converging: both have a marked collective,

creative dimension, and are not exercised under the laws of the capitalist market. In both activities, the Zapatista peasant develops, enriches, and satisfies his spirit. In this sense, their way of life tends to that of a polymorphous worker. Art outside or beyond capitalist production could be conceived as free labor, as a human productive activity. According to Enrique Dussel, the movement practices an “obediential” aesthetics, analogous to the obediential power of politics.

The creative core of this new aesthetic is encrypted in the communities that have kept their originality first, and which we identify since decades as communities that have a culture that, in certain historical moments, become popular revolutionary cultures... When that happens, the community educates the artist and creates what we could call an obediential aesthetics.³⁶

The images of the future that the Zapatistas offer us are already inscribed in their present becoming. However, these ideas and tendencies have not just to do with them. If we take their slogan *Nuestra lucha es para todos* (“our fight is for all”) seriously, then we should attempt at translating their singularity into our living, working, and creating contexts. That does not mean reproducing a model but applying ideas of autonomy and creatively produce collective experiences of rupture with—or “exodus from”—structures of oppression, exploitation, individualism, and environmental destruction. As Research Group Art and Politics (GIAP)—an independent collective that was born in 2013 under the impulse of the new political sequence that EZLN opened at that time—we are highly committed with Zapatista art and aesthetics as an element “organic” to the politics of this revolutionary movement. On the one hand, our research provides an account of the practical challenges involved in collaborating with an indigenous movement that has centered its activity on the development of its own autonomy, which implies a very strong moderation of what we could define as “external” influences—even due to a situation of widespread (and in their case counterinsurgent) warfare. Zapatismo is also a radically collectivist movement, which rejects individualism and is reluctant to make visible the personal opinions of its militants (as long as they are not the result of a collective discussion/reflection process). Our political interest in Zapatista and (more generally) peasant-indigenous art has to do with our commitment in the production of a diffuse popular intellectuality/creativity in social contexts like Chiapas, where colonial and post-colonial forms of oppression have limited the flourishing of the people from below. On the other hand, our activity is aimed at supporting and potentiating a growing artistic and political movement that (even beyond Zapatismo) challenges a contemporary art model completely subject to the logic of global capitalism. The main tendencies of this stance are decentralization, that is, the construction of micro-artistic/political *dispositifs* in marginalized places—totally removed and excluded by the trajectories of contemporary art; and the production of a new universality from local worldviews (but rejecting identitarianism) and in contradiction with the universalism of contemporary art.

Notes

- 1 Julien Coupat, “Diálogo con los muertos,” *Artillería Inmanente*, May 28, 2019 <https://artilleriainmanente.noblogs.org/post/2019/05/28/muertos/>
- 2 Elections took place the first of July 2018.
- 3 MORENA, Movement for National Regeneration.
- 4 Including PT (the Labor Party) and the conservative right-wing PES (*Partido Encuentro Social*).
- 5 For an analysis of that event, see Alessandro Zagato, “State and Warfare in Mexico. The Case of Ayotzinapa,” *Social Analysis* 62/1 (2018): 55–75.
- 6 See www.animalpolitico.com/2019/01/40-mil-desaparecidos-mexico-victimas-sin-identificar/

- 7 Raúl Ramírez Baena, executive director of the Citizen Commission for Human Rights of the Northwest, stressed that more than 99% of the atrocities committed by military elements in the framework of the “war on drugs” were left in impunity. Therefore, it is urgent to have a plan for the gradual withdrawal of the military to their bases. If not, “the panorama of abuses and violations could continue or even worsen.” “Inquieta a organizaciones decisión de AMLO sobre Fuerzas Armadas,” *La Jornada*, August 24, 2018, www.jornada.com.mx/ultimas/2018/08/24/inquieta-a-organizaciones-decision-de-amlo-sobre-fuerzas-armadas-655.html.
- 8 Victor Toledo, “México: la rebelión silenciosa ya comenzó,” *La Jornada*, September 13, 2016, www.jornada.unam.mx/2016/09/13/opinion/016a2pol.
- 9 With the energy reform approved by the Senate of the Republic on December 11, 2013 (along with the aggregate laws of hydrocarbons, electric industry, geothermal energy, and mining, among others), Articles 25, 27, and 28 of the Mexican Constitution have been modified and the energy sector opened up to the initiative of private international enterprises. With the reform, the extraction and exploitation of hydrocarbons, mining, and the public service of energy provision are considered activities of a primary strategic and social interest, as well as a matter of public security. See Zagato, “State and Warfare in Mexico. The Case of Ayotzinapa.”
- 10 Toledo, “México: la rebelión silenciosa ya comenzó.”
- 11 Bruce Kapferer, “The Aporia of Power: Crisis and the Emergence of the Corporate State,” *Social Analysis* 54/1 (2010): 125–151.
- 12 Bruce Kapferer, Oral presentation at “Egalitarianism” workshop, Rosendal, Norway, 21 August, 2017.
- 13 Zagato, “State and Warfare in Mexico. The Case of Ayotzinapa.”
- 14 See www.laizquierdadiario.mx/Nueve-defensores-de-DIDHH-y-seis-periodistas-asesinados-bajo-el-gobierno-de-AMLO.
- 15 See www.telesurtv.net/news/presidente-mexicano-lopez-obrador-decreta-fin-neoliberalismo-20190318-0008.html.
- 16 See <https://desinformemonos.org/construccion-del-tren-maya-causara-desequilibrio-ecologico-y-afectara-costumbres-de-los-pueblos-mayas-conanp/>
- 17 See, for example, Alessandro Zagato, “Teachers’ Struggles and Low Intensity Warfare in the South of Mexico,” *Focaal Blog*, July 25, 2016, www.focaalblog.com/2016/07/25/alessandro-zagato-teachers-struggles-and-low-intensity-warfare-in-the-southof-mexico.
- 18 A map illustrating the distribution of the national guard is available at www.contralinea.com.mx/archivo-revista/2019/05/04/mapa-el-despliegue-militar-de-la-guardia-nacional-en-266-coordinaciones/
- 19 See www.contralinea.com.mx/archivo-revista/2019/05/26/la-guardia-nacional-y-los-territorios-zapatistas/
- 20 Zósimo Camacho, “La guardia Nacional y los Territorios Zapatistas,” *Contralinea*, May 26, 2019, www.contralinea.com.mx/archivo-revista/2019/05/26/la-guardia-nacional-y-los-territorios-zapatistas/
- 21 EZLN, “Sobre las Guerras: Fragmento de la carta primera del SCI Marcos a Don Luis Villoro, inicio del intercambio epistolar sobre Ética y Política,” February 14, 2011, <http://enlacezapatista.ezln.org.mx/2011/02/14/sobre-las-guerrasfragmento-de-la-carta-primeradel-sci-marcos-a-don-luis-villoro-inicio-del-intercambio-epistolar-sobre-etica-y-politica/>
- 22 With a territory of almost 200 million hectares, Mexico is the only country in the world with more than a half of its territory (106 million hectares) is collectively managed by almost 6 million peasants under the legal forms of *ejidos* and agrarian communities.
- 23 Pablo González Casanova, “Colonialismo Interno (Una Redefinición),” Universidad Nacional Autónoma De México, 2013, http://conceptos.sociales.unam.mx/conceptos_final/412trabajo.pdf
- 24 Jacques Rancière, *The Politics of Aesthetics* (New York: Continuum, 2006).
- 25 Rancière, *The Politics of Aesthetics*, 43.
- 26 Invisible Committee, *To Our Friends* (Paris: Semiotexte, 2015).
- 27 Invisible Committee, *To Our Friends*.
- 28 This is how the government named such infrastructure.
- 29 As the one issued after the “march of silence” of December 2012.
- 30 See, for example, a video that we recorded in Oventik in 2017 of a highly performative troop exercise presented by the EZLN www.youtube.com/watch?v=YYtOp0uxbno
- 31 Alessandro Zagato and Natalia Arcos, “El Festival ‘Comparte por la Humanidad’. Estéticas y Poéticas de la Rebeldía en el Movimiento Zapatista,” *Revista Páginas* vol. 9, no. 21 (2017), <http://revistapaginas.unr.edu.ar/index.php/RevPaginas/issue/view/21>

- 32 Zagato and Arcos, “El Festival.”
- 33 Alain Badiou, “The Autonomy of the Aesthetic Process,” *Radical Philosophy*, no. 178, 2013, www.radicalphilosophy.com/article/the-autonomy-of-the-aesthetic-process
- 34 Badiou, “The Autonomy of the Aesthetic Process.”
- 35 Álvaro García Linera, “La globalización ha muerto,” *La Jornada*, December 28, 2016, www.jornada.unam.mx/2016/12/28/politica/013a1pol
- 36 Enrique Dussel, “Siete Hipótesis Para Una Estética de la Liberación,” *Praxis: Revista de Filosofía*, No. 77 (2018), 29, www.revistas.una.ac.cr/index.php/praxis/article/view/10520/15448.

9

VIEW FROM THE TERRACENE

Sara Mameni

Since its advent around the year 2000, and perhaps due to its increasingly widespread usage, the term Anthropocene has been met with many objections and alternative coinages. Scholars have taken issue with the hubris of naming an epoch after the human, an alarmingly familiar move to any feminist ear or student of colonial and imperial histories well accustomed to the human's desire for expansion and settlement across wide geographies at the expense of the non-human, the sub-human and the less-than-human. With this civilizational record, the Anthropos of the Anthropocene is a reverberating echo of historical practices that have quantified and converted every aspect of the planet into the property of the human from whose perspective all others are perceived, judged and managed. As Donna Haraway has aptly warned, "the myth system associated with the Anthropos is a setup, and the stories end badly."¹ Leaving the concept unchallenged is to participate in the bad narrative plot wherein the human is the hero (or rather the villain) of a new era, this time colonizing more than just geographical territories on this planet (and dreaming of the next), but the very geological make-up of the Earth itself.

While there is a rigorous debate around what constitutes the beginning of the Anthropocene (whether it is the invention of the steam engine in the late-eighteenth century,² the beginning of the colonial era,³ or the agricultural settlements of ancient Mesopotamia⁴), scholars agree that the term is an attempt to conceive of humans as a geological force. According to this timeline, the data for anthropogenic change intensifies in the mid-twentieth century with the accelerated extraction and consumption of fossil fuels leading to high concentrations of atmospheric CO₂.⁵ The narrative flow of the Anthropocene hence relies on familiar benchmarks of technological innovations for the purposes of capital accumulation and, as Jason Moore suggests, conceives of the human as separate from the web of life.⁶ Is it any surprise that one alternative coinage for our current era is the Anthrobscene?⁷

In this essay, I want to offer a new terminology with which to think. I want to propose the word "Terracene" a compound of Terra, Terror and -cene as a descriptive terminology for thinking our contemporary geological and geopolitical moment. The term Terracene is meant to interrogate the notion of the Anthropocene from the vantage point of the wastelands shaped and maintained under the War on Terror since 2001. While the words "terror" and "terra" do not share an etymological root, the alliterative intersection of the two allows us to think through the processes of desertification and wastelanding that the War on Terror has enabled, while holding space for multiple *terrans* (those inhabiting "terra") to conceptualize the geosphere. At the most

basic level, the Anthropocene should be interrogated from the vantage point of the War on Terror because of the historical coincidence of the two terminologies in the early 2000s as frameworks for understanding a new world order. Much like the Anthropocene, “terror,” as Junaid Rana notes, “has become a keyword of the twenty-first century.”⁸ Yet despite their discursive force for envisioning the current state and governance of the planet, the two have rarely been considered together in any meaningful way.

This lack of attention to the Anthropocene from the vantage point of the War on Terror does not diminish the many overlaps between the two concepts. First and foremost, the traffic between the two ideas stems from the open-ended ways in which each is defined. The notion of the Anthropocene is notorious for being ambiguous because its ecological data cannot be readily sensed in our immediate surroundings, requiring alternative temporalities to comprehend its condition. To truly engage with the Anthropocene, we have to understand ourselves as part of a human species over a very long period of time. This is difficult to do because, as Chakrabarty has noted, “we humans never experience ourselves as a species,” since “one never experiences being a concept.”⁹ To be the *Anthropos* of the Anthropocene requires the speculative exercise of becoming an abstract concept: the Human.

Similarly, terror has frustrated any clear definition, making it difficult to determine against what or whom the notorious war is being waged. The terrorist, as Gayatri Spivak noted in a 2011 speech, is an “abstract enemy.”¹⁰ One that can mutate and evolve in unknown ways. This abstraction opens up the notion to a substantial level of uncertainty, so that being a terrorist becomes a slippery state of being.

Amidst the abstraction, what unites Anthropocene and the War on Terror more firmly is that they each attempt to describe an antagonist. The age of the Anthropocene pays homage to a human who has interfered with the atmospheric and geological makeup of the planet. This human has caused a transformation in the ecosystem in such a way that portends a danger to its own existence. Notedly, the Anthropocene is “not a crisis for the inorganic planet” as such, but rather a predicament of the viability of human life in its current form.¹¹ The *Anthropos* is thus not simply the enemy of the planet, but a threat to itself and its own well-being. This is precisely what binds the Anthropocene to terror in a tight knot, for it is terror that describes this condition of being in danger. To be under terror is to experience the precarity of life, to be threatened by an abstract or unknown peril. The *Anthropos* of the Anthropocene is, in this sense, actually a terrorist who has already wrecked, and threatens to do more damage to, the symbiotic ecologies to which it belongs, thus making the planet uninhabitable for all forms of organic life.

Current discourses on terror, however, foreclose this close connection. The term terrorist is not currently used to designate the human species at large. On the contrary, terrorism has been cut off from the *Anthropos* and is applied not to the dangers the human poses but to what threatens the human from the *outside*. This construction of an outside as the domain of terror is best described by Elizabeth Povinelli who argues that while the Terrorist has been “primarily associated with fundamentalist Islam and the radical Green movement,”¹² the “terrorist is also the virus and the waste dump, the drug-resistant bacterial infection, and the nuclear fallout.”¹³ Here, terror is not the dumping of waste but the waste dump itself. It is not the building of nuclear weapons but the aftermath of its explosion. Today, terrorism is not a term used for the collective human species who has unraveled the ecological balance that supports its well-being. Instead it is used to bracket off the Human from a multi-species assemblage that threatens it from an external, abstract danger zone.

The terrorist is hence a racializing concept describing those who fall outside of the category of the human. Terrorism is an entangled fusion of the non-human (such as infectious disease) and the less-than-human (such as viral bio-terrorists). Terrorists do not build wastelands but are

the virus that inhabits them. In Povinelli's description above, momentous sites of the Anthropocene—the waste dump and the nuclear fallout—are offered as multispecies dwellings of hazardous chemicals and infectious disease forming geographies of waste and terror. The concept of terrorism thus creates a conceptual barrier to keeping the category of the human species intact. Instead, it breaks off the globe into distinct dwellings of terror, whose movement and migration are inhibited and vigorously policed. These wastelands are not inhabited by the human of the Anthropocene but by the racialized excluded categories that threaten its being. As such, they are bordered off into regions of terror, whose viral spread and “migrating terror”¹⁴ are governed by the War on Terror.

I propose the term Terracene to designate these sites of terror where the human has been evacuated but where racialized others remain under military occupation and surveillance. These sites are the infamous scenes of the Anthropocene. They are chemical landfills, contaminated waters, scorched farmlands and oil spills. The term Terracene allows us to think with the inhabitants of geographies of terror under military governance. It prompts us to consider what futures can arise in their midst. Seen from the perspective of militarized wastelands, the Anthropocene scenario is not a speculative future but an active present that I have named the Terracene. The Terracene is the hostile present of a terrorized geosphere. It is a habitat to multiple terrans who already experience the terror of the Anthropos and have been cast outside of its biopolitical protection. Terracene names militarization, in the form of War on Terror, as the current organizing logic of the planet and its ecological systems.

Ruderal Futures

So what futures does the Terracene offer us? I propose that we think such futures alongside those imagined by Anna Tsing: as habitats of mushrooms and fungi, those “disturbance-based ecologies in which many species sometimes live together without either harmony or conquest.”¹⁵ In a similar vein, we can navigate our futures with Kenneth Hephland's “defiant gardens,” with sprouting of vegetation in hostile settings, “along a railroad track . . . , an industrial area, or a parking lot.”¹⁶ We can follow such ruderal species, those variety of “plants that grow in waste and particularly on disturbed sites, such as garbage dumps, vacant lots, and industrial wastelands.”¹⁷ To think the future of the Terracene, we need to acclimate to what we may call ruderal futures, to germination out of waste and refuse.

Unlike the Anthropos, who stands witness to its own immortalization in the Earth's crust, the terran dwellers of the Terracene are neither the (guilty) beneficiaries of the innovative glories and progress of the human, nor do they seek to draw boundaries between interlocking species beings. This is because they reside in wastelands. Wastelands are sites rendered worthless through militarization and resource extraction for the purposes of capital accumulation. As Traci Brynne Voyles explains it, wastelands are indigenous lands under settler colonialism where resources are extracted and pollutants are dumped.¹⁸ Lands become wastelands through the active devaluation of complex lifeforms and the breakup and dissolution of their networks through violence and warfare. “The ‘wasteland’,” writes Voyles, “is a racial and spatial signifier that renders the environment and the bodies that inhabit it pollutable.”¹⁹ Wastelands are not the mere collateral damage of colonial and imperial histories, but sites actively maintained in a state of ruination so that they remain uninhabitable far into the future. How do we think the Anthropocene through such sites whose very subterranean fossils have fueled the wars that have destroyed habitats, prompted mass migrations, destroyed ecosystems and biodiverse lifeworlds? How do we conceive of the Anthropocene through the polluted and pollutable wastelands under terror? What ruderal futures are possible in wastelands?

Art and visual culture are where questions of futurity are best imagined and explored. Here I want to consider a sculptural installation titled *Study for a Monument* (2013–2015) by the Canadian artist Abbas Akhavan to imagine ruderal futures of the Terracene.

This work consists of a series of bronze casts of plant species belonging to the region around the two rivers of Tigris and Euphrates, originating in Turkey and running through Iraq and Syria into the Persian Gulf. This is an area that is under ecosystem degradation due to ongoing war (such as the massive drainage of marshlands by Iraqi forces following the first Gulf War to curb rebellion), dam construction, and the diversion of water supplies that effect plants, birds and marine life.²⁰ For his plant samples, the artist drew from the collection at the Edinburgh Botanic Gardens and the Royal Botanical Gardens at Kew in London, which, since the 1960s, and in collaboration with the Ministry of Agriculture in Baghdad, has archived “species of flora native to Iraq’s deserts, marshes, plains and mountains.”²¹ The plants appearing in this archive are ghostly remainders of the current hostile environment.

For the installation, Akhavan used photographs of fresh and pressed flowers (such as *Delphinium micranthum* and *Iris barnumae*) to make bronze sculptures, using the lost wax technique, displaying them on white sheets on the ground (Figure 9.1). These bronze casts transform the fragility of pressed flowers into sturdy metallic forms that faintly retain the vibrancy of plants in the rusted green, red and grey hues of bronze. Enlarged to the scale of human bodies, these bronze plants lay like funerary corpses on white sheets, commemorating their joint disappearances. Akhavan’s use of bronze, which is the oldest metal used for the fabrication of weaponry, renders endangered plants in a medium that has been deployed against them.



Figure 9.1 Abbas Akhavan, *Study for a Monument*, 2013

The installation is both a battlefield and a garden. Rendered in bronze, the plants become discarded bits of weaponry fallen and rusting where plants used to be. Battlefields were, indeed, once-ecologically diverse grounds that have transformed into scenes of conflict.²² As such, battlefields might be conceived of as gardens, or rather “anti-gardens,”²³ that undergo depopulation. While the flora selected by the artist are endangered, can they also be imagined as ruderal plants, those resilient species that are first to grow back over wastelands?²⁴ Can these plants grow, in a transformed state, out of bronze and into a new vital form?

This line of questioning is difficult to sustain because metals are so often associated with inertia, or dead weight. “Who would choose *metal*,” the political ecologist Jane Bennett writes emphatically, “as the symbol of vitality?”²⁵ Yet this association is based on the divergent scale and temporality of our bodies with those of metals. We experience metals as fixed, heavy, dead and unmoving because, as Bennett explains it, “their rate of speed and pace of change are *slow* compared to the duration and velocity of the human bodies participating in and perceiving them.”²⁶ To see bronze as alive requires an adjustment of our perception to metal’s deep time. It demands that we recognize the limits of our perception in relation to a metal’s rate of movement and change. For it is the vitality of metals that allows them to become alloys such as bronze (made out of copper and tin) and sculptural mediums that can take on different shapes and forms.

Significantly, Bennett’s argument for the vitality of metals rests on testimonies of victims of war and others who lose their sense of touch after violent experiences. In such cases, people describe their lives as inert and unmoving, numbed and inactive. “Sometimes,” Bennett argues, “a life is experienced less as beatitude and more as terror, less as the plenitude of the virtual and more as a radically meaningless void.”²⁷ For Bennett, such cases cannot be dismissed as devoid of life, but as differentiated forms of life’s expression. Ultimately, she argues that life under terror has a metallic quality, one that can become inert and immobile, but which open up to metallurgical transformation.

The bronze plants resting on the ground in Akhavan’s installation give form to such metallic experiences. They embody the metallic life of species turned to ashes, but for whom a ruderal future awaits. If the Anthropocene imagines a future where the human has contributed to its own extinction, Akhavan’s work brings that future into our present.

Metallurgy of Terror

To think the metallic affect of terror within the wastelands of war and extraction, I want to conclude this essay by turning to a recent film, *A Girl Walks Home Alone At Night*, directed by Ana Lily Aminpour (2014). The film takes place in “Bad City,” a post-oil extraction, post-war, apocalyptic wasteland. Bad City is derelict. Its horizon line is jagged, shaped by rusted oil rigs and pumping jacks nodding in the wind. Ditches and wells puncture its landscape filled with rust and rubbish. At times, as the camera pans across the land, dead bodies appear piled up into open cavities. Where did these heaps of refuse—human and non-human alike—come from? The film does not explain. We, the audience, are left to surmise from the Farsi language spoken by the city’s inhabitants and the industrial landscape, that Bad City is an Iranian city in the aftermath of petroleum extraction. Perhaps this is a southern Iranian boom town (such as Abadan) reaching its economic zenith in the 1960s for the benefit of the British Petroleum company. The film’s black and white color, and its nostalgic music punctuating the storyline, stylistically arrests its characters in the pre-revolutionary, bygone era. Yet what is left of the boomtown is now a thinly populated façade, plagued with poverty and melancholic figures turning to drugs and sex work for their survival. Bad City is a post-oil boom society that did not reap the benefits of its subterranean resources, but which remains as the fossil of things past.

Haunting Bad City is the film's iconic protagonist, simply known as "The Girl," roaming the city in the dead of night. In the filmic narrative, The Girl is developed to be a vampire donning a black veil that covers her figure from head to toe as she skids around on her skateboard. Her victims are scoundrels and abusive men, whose metallic smell of blood draw her in. When she meets her victims preying on the vulnerable, she bares her fangs and bites into their flesh. The Gothic genre, as Neda Atanasoski has argued, is concerned with mapping "monstrous geographies."²⁸ Inhabited by viral figures, these are stretches of land that Junaid Rana has similarly called "geographies of terror," rife with ethnic and racial conflict within colonial and imperial narratives. In her reading of Bram Stoker's nineteenth-century novel, *Dracula*, Atanasoski highlights the Muslim/Christian conflict that made the bloodthirsty figure of Dracula a symbol for political conflict in the Balkans in the late 1990s. She asserts that the US media representation of the ethno-religious conflict in the Balkans became a pretext for mapping out the "monstrous geography" of the war on terror and the centrality of Islam within that representation.

In the context of *A Girl Walks Home Alone At Night*, the specificity of Iran—located on what the US president George W. Bush famously dubbed the "axis of evil"—allows for the transposition of the vampire from its geographical home in the Balkans to the post-9/11 Iranian landscape. The vampire in this film is masterfully portrayed as a Muslim feminist wrapped in her black *chador*, hunting and haunting patriarchal figures. Her ethno-religious specificity places her within the blood-lines of *Dracula*, for as Atanasoski explains, Dracula "continually reenacts his redemption of Kosovo, which was lost to the Christian world when the Ottomans defeated the medieval Serbian Empire in the Fourteenth-century."²⁹ Through fanged reproductivity, The Girl in the film becomes the Iranian inheritor of the Balkan vampiric bloodline.

What makes this film an apt index of the Terracene is the intersection between geographies and geologies of terror. Vampire mythologies are compelling in this context because of the complex nature of blood within their structure. While blood inevitably enables ethnic and racial interpretations for vampiric embodiment, its metallic materiality—rich with iron—connects the vampire to the geological bowels of the earth. As Atanasoski explains, Stoker proposed a "geological explanation for the origins of vampirism."³⁰ He described the wonders of the Undead as follows:

The very place where he has been alive, Undead for all these centuries, is full of strangeness of the *geologic* and chemical world. There are deep caverns and fissures that reach one know whither. There have been volcanos, some of whose openings still send out waters of strange properties, and gases that kill or make to vivify. Doubtless, there is something magnetic or electric in some of these combinations of occult forces which work for physical life in strange ways.³¹

The vampire's landscape, described in vivid imagery by Stoker as filled with "deep caverns and fissures," recalls the hollow pits in Bad City. These are wells with towering rusted oil rigs and pump jacks, cluing us into the origins of the dead bodies buried within. The geological make-up of Bad City, situated on bedrock rich with oil and gas, produces "waters of strange properties, and gases that kill or make to vivify," as described by Stoker. This geologic affinity furthermore facilitates the appearance of the vampire into the post-extractive, post-9/11 Iranian landscape of the film.

The geologic explanation in Stoker's text that is most noteworthy in the context of my essay is the "magnetic or electric" quality of the Earth that produces the Undead vampire. On the surface, we may read this reference to "magnetic or electric" qualities as a description of new technologies of industrial production within the landscape. On the other hand, it may allude to

the metallic quality of blood, which can produce and respond to “magnetic” fields as well as electrical currents. Read in this way, a vampire is undead because of the paradoxical inertia and vitality of metals across vast stretches of time. As discussed above, for Bennett, metals are vital when imagined as moving at different speeds than the mortal body. Metal’s vitality is, in this sense, akin to that of the undead vampire, who has lived on for centuries.

The inhabitants of Bad City embody what Bennett understands as the metallic life of terrorized peoples. As noted above, in the aftermath of life-shattering violence, life becomes experienced as inert and solid like the heavy, dead weight of metals. We can extend Bennett’s language to note that poisonous metals are also what is residually found in the bodies, vegetations and the material make-up of lands besieged by war and industry. This is one way of understanding what Rob Nixon has called “slow violence,” a phrase which describes the temporality of wastelands.³² Bad City oscillates between a post-war and post-extractive wasteland. It resides in a temporal collapse across unknown stretches of time after industrial, extractive and lethal battles have ended. These are distant futures that may have no existing memories of the original causes of war. They may not recall or experience the economic benefits of industry, but nonetheless feel the presence of this past in the half-life of waste and poisonous matter that shape the landscape. Nixon writes,

we track the persistence of unofficial hostilities in the cellular domain, the untidy, attritional lethality that moves through the tissue, blood and bones of combatants and noncombatants alike, moving through as well of the living body of the land itself.³³

These are moments when terror and the Anthropocene intersect, turning the land itself into a lethal habitat. This is when poisonous metals move through the cellular makeup of bodies, plants and the land itself, enmeshing geographies and geologies of terror.

As with Akhavan’s sculptural installation, the filmic representation of the Terracene in *A Girl Walks Home Alone At Night* is one where the line between life and un-life becomes blurred. Metals grow green with ruderal vegetation, while toxic or radioactive corpses become reanimated as the vampiric undead for centuries into the future. In art and visual culture of the Terracene, people, plants and industry enmesh to produce habitats within wastelands questioning what counts as the Human. As Kim Tallbear writes, “Indigenous standpoints accord greater animacy to nonhumans, including nonorganisms, such as stones and places, which help form (indigenous) peoples as humans constituted in much more complex ways than in simply human biological terms.”³⁴ Wastelands are not the sites of inert bygone pasts but vibrant actors in the present. Thinking with the vibrancy of materials, such as metals, anchor us within the interconnectedness of all terrans, where life/non-life distinctions no longer hold; as it is precisely such divisions that cast racialized bodies outside of the category of Human.

Notes

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- 3 Heather Davis and Zoe Todd, “On the Importance of a Date, or Decolonizing the Anthropocene,” *ACME: An International Journal for Critical Geographies* 16 (2017), 761–780.
- 4 The Fertile Crescent, where agricultural settlements first began has left the earliest fossil records of human activity, see Jan Zalasiewicz, Mark Williams, Alan Haywood, and Michael Ellis, “The Anthropocene: A Ne Epoch of Geological Time?” *Philosophical Transactions of The Royal Society* 369 (2011), 835–841.

- 5 Will Steffen, Paul J. Crutzen, and John R. McNeill, "The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?," *Ambio* 36(8) (2007), 614–621.
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- 7 Jussi Parikka, *A Geology of Media* (Minneapolis: University of Minnesota Press, 2014), 16; Jussi Parikka, *The Anthrobscene* (Minneapolis, University of Minnesota Press, 2014).
- 8 Junaid Rana, *Terrifying Muslims: Race and Labor in the South Asian Diaspora* (Durham: Duke University Press, 2011), 55.
- 9 Gayatri Chakrabarty Spivak, *An Aesthetic Education in the Era of Globalization* (Cambridge: Harvard University Press, 2012), 220.
- 10 Chakrabarty, *An Aesthetic Education*, 373.
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- 12 Elizabeth Povinelli, *Geontologies: A Requiem to Late Liberalism* (Durham: Duke University Press, 2016), 19.
- 13 Elizabeth Povinelli, "The Three Figures of Geontology," in *Anthropocene Feminism*. Ed. Richard Grusin (Minneapolis: University of Minnesota Press, 2017), 49–64: 61.
- 14 Rana, 6.
- 15 Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton: Princeton University Press, 2015), 5.
- 16 Kenneth I. Helphand, *Defiant Gardens: Making Gardens in Wartime* (San Antonio: Trinity University Press), 2006, 9.
- 17 Helphand, *Defiant Gardens*, 12.
- 18 Traci Brynne Voyles, *Wastelanding: Legacies of Uranium Mining in Navajo Country* (Minneapolis: University of Minnesota Press, 2013).
- 19 Brynne Voyles, *Wastelanding*, 9.
- 20 See Adil Al-Handal and Chuanmin Hu, "MODIS Observations of Human-Induced Changes in the Mesopotamian Marshes in Iraq," *Wetlands* 35 (2015), 31–40; and T.T. Nielsen and H.K. Adriansen, "Government Policies and Land Degradation in the Middle East," *Land Degradation & Development* 16 (2005), 1515–1561.
- 21 Georgina Jackson, "The Body in Ruins: Abbas Akhavan's *Study for a Monument*," *Afterall* 42 (Autumn/Winter, 2016), 126–131, 127.
- 22 Helphand, *Defiant Gardens*, 15.
- 23 This is Helphand's term, see Helphand, *Defiant Gardens*.
- 24 According to the artist's conversations with gardeners, these are native and endemic plants that are not all endangered but remain compromised in post-war conditions. I'd like to thank the artist for providing context and feedback on his work.
- 25 Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke University Press, 2010), 55.
- 26 Bennett, *Vibrant Matter*, 58.
- 27 Bennett, *Vibrant Matter*, 54.
- 28 Neda Atanasoski, *Humanitarian Violence: The U.S. deployment of Diversity* (Minneapolis: University of Minnesota Press, 2013), 128.
- 29 Atanasoski, *Humanitarian Violence*, 141.
- 30 Atanasoski, *Humanitarian Violence*.
- 31 Bram Stoker, *Dracula* (Hertfordshire: Wordsworth Editions Limited, 1993), Introduction by David Rogers, 266.
- 32 Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge: Harvard University Press, 2013).
- 33 Nixon, *Slow Violence*, 200.
- 34 Kim Tallbear, "Beyond the Life/Non-Life Binary: A Feminist-Indigenous Reading of Cryopreservation, Interspecies Thinking, and the New Materialisms," *Cryopolitics: Frozen Life in a Melting World*, J. Radin and E. Kowal eds (MIT Press, 2017) 179–202, 187.

10

WASTE YOU CAN'T DENY

A Slow Trans-aesthetic in *The Blue Barrel Grove*

Sintia Issa

A climate of paranoia pervaded public life in Lebanon in 1988 when the now-defunct leftist, pan-Arabist newspaper *As-Safir* broke news of “the death deal,”¹ a story taken up recently by Beirut-based artist and poet Jessika Khazrik in *The Blue Barrel Grove* (TBBG).²

On September 21, 1987, late into the country's civil war (1975–1990), the Lebanese Forces (LF) militia let in via Port Beirut 15,800 barrels and twenty containers of toxic waste in collaboration with a mafia, presumably ‘Ndrangheta.³ This cocktail of “polluting, explosive, toxic, and highly toxic”⁴ chemicals included by-products of pesticide and pharmaceutical production, expired adhesives, dirty detergents,⁵ heavy metals, and Hexachlorobutadiene (HCBd),⁶ among others. This illicit trade involved no fewer than four corporations. On the Italian side, Ecolife gathered toxic wastes from Italian and possibly European industries, and then subcontracted Jelly Wax to dispose of them. On the Lebanese side, the LF-affiliated Nassar Shipping oversaw the transnational trade, disguising the barrels as “raw, chemical materials for industry and agriculture,” while Adonis Productions and Engineering (APE) sold them to local industries.⁷

In spite of multiple layers of concealment, language exposed this deception.⁸ In the office of Adib Alameddine, the Lebanese consul to Italy, suspicion surrounded a “certificate of clearance” from APE, attesting that “on this day [21 October 1987], the entire shipment of industrial waste, 4311 tons and 318 kg that the ship *Radhošt'* unloaded has been destroyed.”⁹ A hypothetical stamp of the Lebanese Republic at the bottom of the page was especially alarming: the cedar tree, emblem of Lebanon, looked like a pine tree, and was encircled by the erroneously named “Republiche Libanes,” a fabricated republic in a fabricated language. Following the Lebanese Army's investigation, the Ministry of Health formed a scientific commission to assess the damage, including Wilson Rizk, nuclear engineer and hydrologist, and Pierre Malychef, eco-toxicologist and herbal pharmacologist.

The scientists became public figures, and frequently shared the stories of the afterlives of the barrels and the muck on national television and in the press. Malychef exposed APE for selling barrels as specially discounted “raw materials” to perfume and make-up producers.¹⁰ Rizk recounts that before the “death deal” became public, villagers used to clean the barrels they found to store oil, Arak, olives, and pickles.¹¹ New geographies of contamination kept popping up around Port Beirut and in areas controlled by the militia in the Mount Lebanon region, including the quarry in Shnan'ir. It became obvious that toxic compounds have permeated Lebanese households, landscapes, cities and villages, which unleashed a barrel mania that suspended sound

judgement. Terrified residents burnt any and all barrels they then found, a hysteria that also befell the militia during a particularly dramatic return-to-sender operation. In a great hurry to dispose of deadly matter that day, the truck driver could not get himself to slow down on the sharpest turn in the town of Ghazir, losing from his cargo a large container that left the road a toxic swamp.¹² Toxic waste impeded clear thought precisely because the residents of Lebanon perceived it to be unpredictable, dangerous, and uncontainable. Like its sibling, military waste—including landmines and cluster bombs left during the civil war and the Israeli occupation of south Lebanon—it has functioned as an area-denial weapon, severing long histories of sustenance from the land. Just as the southern villager is unable to grow crops in her militarized land, no one ventures near the haunted forest of Shnan'ir, apart from the quarry's bulldozers, exploited and ill-equipped laborers, the artist, and her companion.¹³ This event is still unfinished.

Jessika Khazrik grew up in the 1990s within walking distance to Shnan'ir, and was taught not to set foot in the abandoned forest.¹⁴ Her proximity to this toxic geography led her to develop *TBBG* (2014–), an ongoing artistic and research practice in a range of media: tours, performances, poetry, sculptural, photographic and sound installations, digital paintings, and a play that was never performed. Khazrik works with Malychef's body of work—the tests he commissioned, the documents he obtained or produced, and a lifetime's worth of notebooks and photographs—to challenge dominant modes of governing waste and speculatively imagine other ways of relating to it, starting from language.

Nifāyāt... or Stories of Exile and Denial

In the “toxic tour” she led around the Normandy landfill in Beirut *Anything But Being (Buried) Underground: The Normandy We want* (2016), Khazrik turned my attention to the etymology of *nifāyāt*, Arabic for “wastes,” and always pluralized. Its root is the verb *nafā*, meaning to “refuse” or deny” but also to “banish” or “exile;” *nifāyāt*, then, becomes *matters to exile and deny*. This exile is a modern legacy with a French connection. In his outré treatise, *History of Shit* (1978), French psychoanalyst Dominique Laporte traces the exile of waste to a sixteenth-century French royal edict, and ties, in a most subversive gesture, the history of the subject—the Cartesian “I”—with the excremental history of private property. “To each his shit” was the order of the day. It forced households to contain *their* excreta and effluents in their *private* homes and prohibited, subject to fines and corporeal punishments, their disposal in the *public* street until collection, the day of their banishment outside the city walls.¹⁵ I speculate that *nifāyāt* became an administrative denomination for waste in *fin-de-siècle* Beirut under Ottoman rule and in the context of a massive urban campaign to “modernize” the city inspired by the Haussmannization of Paris.¹⁶ It gradually replaced *zbeleh*, rooted in *zubul* and meaning “fertile manure,” the colloquial preference to this day. Oppositional ways of relating to waste by different actors over time are still inscribed in language.

I Couldn't but Dance

In the first iteration of the *TBBG*, Khazrik turned this exile into a trope in *I Couldn't but Dance* (2014), a walk-through performance around sculptural arrangements she conceived for storytelling. The artist choreographed her movements from one sculpture to the next to narrate the shipmen's epical journey at sea: it was first exiled from Italy to Venezuela,—where it was *refused*—¹⁷Somalia,—refused—Syria,—refused— and finally Port Beirut where it was embraced for an alleged \$22 million pocketed by the militia.¹⁸ This cartography of exile illustrates how the “routine transnational practice” of dumping northern toxic waste in the South embodies “hierarchical relations” between wealthy and impoverished nations.¹⁹ In an infamous 1992 memo by its former president Lawrence Summers, describing industrial waste dumping in Africa as an

“impeccable economic logic,” the World Bank (WB) promoted the global toxic waste trade as a ‘solution’ for the North.²⁰ This unmistakably racist practice that wastes geographies in the South is a form of “waste colonialism” premised on “the assumed entitlement to use Land as a sink.”²¹ This story is part of this history of colonialism.

Waste Eats Your Histories

Nijāyāt also denotes matters denied, the expertise of the militia and later the Lebanese state of which it became a part. To bury the story, like countless more traumatic war crimes, and preempt civil strife, the judiciary protected the political interests of the LF by re-purposing Malychef’s investigation documents—the photographs and tests he commissioned—as incriminating evidence against him. Stripped of its scientific and documentary authoritativeness, this body of work became the basis to charge the scientist with “slander, fabricating false evidence, and giving false testimony” in 1995.²² Denying collective harm and ecocide is not a Lebanese exception but part of a broader governance of toxicity.²³ In *Waste Eats Your Histories* (2016), a photographic installation that Khazrik curated from Malychef’s collection, the photographs return to the museum to reclaim their evidentiary power.²⁴ An avid photographer, the scientist documented endemic flora, discarded blue barrels, and informal dumpsites in Lebanon between 1958 and 2002. On a blue wall, after the blue barrels, the artist mounted over a hundred postcard-sized photographs of trash occupying riverbeds, floating in the sea, or burning with the land and the surrounding weeds. She also framed them in different shades of blue to situate these multiple displacements of the landscape in a longer history of ecological and waste mismanagement that materialized spectacularly in a “garbage crisis” in 2015. In these photographs, human presence is rare; only the scientists and military men are featured—as if these wasted ecologies were part of a post-disaster zone that left no humans in its wake (Figures 10.1 and 10.2).



Figure 10.1 Jessica Khazrik, *Waste Eats Your Histories*, 2016

Note: 136 photographic prints from the estate of Pierre Malychef. Photographs taken between 1956–2002; *All the Flowers that Were Thrown on My Head Come Back Painting*, 2016. Four inkjet prints mounted on dibond, Sursock Museum

Source: Courtesy of the artist



Figure 10.2 Jessica Khazrik, *Waste Eats Your Histories* (detail), 2016

If the gaze of the scientist left no room for ‘peopled’ politics, it is the role of the engaged artist to surpass the scientist’s representation to work for the dispossessed. Postcolonial literary scholar Rob Nixon poignantly identifies a radical form of exile without even moving, of being “stranded in a place stripped of the very characteristics that made it inhabitable.”²⁵ Communities inhabiting these wastelands have lost not only land and resources, but also each other. The cancer epidemic in villages along the river banks of the Litany in south Lebanon and the Beka’ regions, for instance, exemplifies this displacement. Decades of deregulated industrial dumping in the river have transformed it from a source of sustenance to an uncontainably, hazardous body.²⁶ Given this long history of displacement, it is generative for the artist to consider how to intervene in the scientist’s images to visualize the landscape as a site of struggle. Reconfiguring his photographs to re-situate communities in the land, without aestheticizing their dispossession, might be the starting point of an aesthetic imperative to counter the defeatist, *fait accompli*, post-disaster zone representation.

Against *Nifāyāt*: Groundworks for a Slow Trans-aesthetic

Exhuming the evidence is a first strategy against the politics of *nifāyāt*: exile and denial. Moreover, throughout *TBBG*, Khazrik engages in what I define as a *trans-aesthetic* of waste to evoke, represent, perform, or animate *transformative porosities* and *transgressive potentialities* inherent in the prefix *trans-*. *Trans-* suggests a first sense of movement “across,” that is, “from one place, person, thing, or state to another.” It also suggests a second sense of “surpassing, transcending,” a function that overturns and moves “beyond” classificatory signification.²⁷ The “trans-” in *trans-aesthetic* suggests, on the one hand, an attunement to the material properties and infrastructural politics of waste, and the another a foundational challenge to the epistemological order of which it has been a part since modernity. I draw on salient contributions from feminist science studies, new materialism, critical waste studies, and ecocriticism to flesh out the meanings of “across” and “beyond;” underscore their political valences; and analyze how they are deployed aesthetically in *TBBG* against the politics of exile and denial that governs waste and toxic exposures.

Myra Hird’s materialist analysis of waste reveals the latter’s leaching propensities across “geological strata, containment and disposal, and between space and time.”²⁸ The incomparable Michelle Murphy coins “chemical infrastructures” to tie the molecular alterations of toxic

exposures to political and economic structures, between “moments of production and consumption” and movements across “scales of life” and “national borders.”²⁹ Donna Haraway transcends modern epistemological and dualistic categories like human/machine and nature/culture for alternative symbiotic co-constitution paradigms that inspire me to theorize waste beyond *nifāyat*’s human/waste separation since modernity. These ideas ground my analysis of Khazrik’s polyvalent trans-aesthetic imaginary, enabling me both to underscore uncontested porosities and move beyond ossified modes of knowing and relating to waste. In this framework, waste is *trans-scalar* because it bio-accumulates in and moves across scales, bodies, and landscapes, transforming them at a molecular level. It is *trans-national* as it moves across militarized borders that facilitate (toxic) geopolitical and economic flows while leaving migrants to die at sea. It is *trans-temporal* because its toxic effects are an unfolding “slow violence,” in the words of Nixon, exceeding the dumping event.³⁰ Finally, it is *trans-rational* because its material propensities destabilize scientific containment, and, indeed, make possible surpassing a modern epistemology and colonial order of the world founded on Subject/object distinctions.

Developing over five years, time required to engage with the different political facets of this toxic story, *TBBG* is a *slow* practice. I describe it as such while gesturing toward Isabelle Stengers’ call for a “slow science” attuned to broader social and economic structures, which makes resisting the co-optation of science by industrial capitalism possible.³¹ Khazrik’s slow practice demands that we take a necessarily long pause to both rethink waste beyond the simplistic understanding of it as stuff to discard, and work through the messy and complex constellation in which it is produced and disposed of. Fundamentally, this decidedly slow trans-aesthetic practice challenges the climate politics of “urgency” that disregard structural hierarchies and sweep once again under the rug the violent histories that have produced the global regime of colonization-extraction-production-consumption of which waste is a part. I echo Indigenous scholar Kyle Whyte’s insistence that the discourse of urgency is “antithetical to allyship with Indigenous peoples” everywhere and their decolonial struggle.³² I have become more weary as the WB has coopted it again recently to promote debt-ridden “resilient” infrastructure in the South to supposedly combat climate change.³³

To agitate for a disruptive slowdown against urgency which perpetuates, and often turns a blind eye to power differentials in the global toxic waste trade, let us first come close to the haunted forest, attune to matter, and listen to the echo...

MOUNT MOUND REFUSE

“This is a landscape so dynamic that [it] leads to innumerable moments of recognition
... it is [itself] a protagonist.”

— Amitav Ghosh³⁴

“MOUNT MOUND REFUSE” is an ostensibly autobiographical poem, set in the forest of Shnan’ir, scene of a growing young love, burial ground of toxic sludge, blue barrel grove.³⁵

From the depths of this vast yet finite forest I saw us
Coming.
I, Little Arsonist and R__O in
From the depths of this vast yet finite forest whose limits
We Have noted before coming

The poet reminisces about a day she, Little Arsonist, spent with R__O in the forest, sometime in the twenty-first century, over a decade after the blue barrels were buried in 1987. As a

teenager she always knew there was something about the forbidden forest “whose limits We Have noted before coming,” an *a priori* awareness she inherited without perceiving. Khazrik's poem evokes what novelist Amitav Ghosh would describe as a “moment of recognition” that made possible “the passage from ignorance to knowledge” of toxic waste's aliveness.

HCBD HCBD

Hurling Calmly Between Dirt

Hamstrings Climbing Barrels' Debt

Khazrik re-writes a past memory with the newly discovered recognition of toxic waste's performativity as an “active participant in the world's becoming,” in the words of Karen Barad.³⁶ Here HCBD, a carcinogenic by-product of industrial rubber from northern industries, identified by Malychief in the toxic muck, becomes an agent of history.³⁷ Khazrik imagines it “Hurling Calmly Between Dirt,” suggesting proximity to their walking feet. The trans-scalar dimension is evoked, as their “Hamstrings Climbing Barrels' Debt”, and could alter Little Arsonist and R__O so intimately, at a molecular level, years after the event. The extended temporality of toxic exposures reveals how toxic waste is a “slow violence” that “occurs gradually and out of sight, a violence of delayed destruction [...] dispersed across time and space,” according to Nixon.³⁸ The violent effects of capitalist and military excess, like toxic or radioactive wastes percolating through bodies and landscapes *in time*, dispels presumed biological, geographical and temporal boundaries, and is implicit in the poem. “MOUNT MOUNT REFUSE” speculatively challenges the state's denial of this ongoing toxic exposure, first in the 1995 legal proceedings, then in a recurring narrative that frames it as a finished event, demanding that we move on.³⁹ But the muck remains as toxic today, insisting that history is not simply as a sequence of finished events.

hello Come Baby Dance

hello Come Baby Dance

All the chemical formulas we turned into poetry

Hurling Calmly Between Durt

Toying with language, HCBD becomes a humorously morbid literary protagonist that rises from the underground in dangerous speech-act, “hello Come Baby Dance, hello Come Baby Dance.” Flirtatious, it invites the artist and her lover to a porous crossing between life and death in the “Republiche Libanes,” home to a dance macabre. If Jane Bennett insists that “things” are *vital* because they have a capacity “to act as quasi agents [...] with trajectories, propensities, or tendencies of their own,”⁴⁰ the artist anthropomorphizes toxic matter in a trans-rational aesthetic, endowing it with the human capability of spoken language to challenge a subject/object ordering of the world where the human is the sole maker of meaning. She even animates matter with sound.

Here but have in this moment forgotten, the rattling sound

Of beasts, of our feet the soft thuds and whispers

Could be heard. It

Accelerated, stopped then relapsed in all directions. Was

Little Arsonist murmuring or was it R__O? I

At the heart of Nixon's theorizing is the question of how to represent this “slow,” “attritional,” and, especially, “invisible” violence? For Khazrik, sound emerges as a way out of this representational impasse to make perceptible what is buried in subterranean grounds and cannot be seen.

One loses her bearings to the “rattling sound of Beasts,” “murmurs,” and “whispers” of toxic waste pervading the landscape, sounds especially *vibrant*—I am calling to mind Bennett’s “vibrant matters” again, while also referring to literal vibrations—in the 60-minute sound performance and installation of the poem. The dual quadrophonic sound system Khazrik employs vitalizes matter in a suffused sound texture and experience of space.⁴¹

Not only does she challenge the understanding of matter as a debased and static entity, legacy of a modern ordering of the world rooted in Cartesian dualism, but the trans-rational aesthetic of animation and anthropomorphism represents matter’s vitality and unsettles *nifāyāt*’s impossible exiles and denials.⁴² Throughout the poem, breaks in sentence structure, dis-orderings of verb, object and noun, misplaced capitalizations here, lowercases there, and taunts to orthography support this “trans-rational” aesthetic, a term I take up after the Russian poet Aleksei Kruchenykh. He used it to describe *zaum*, the experimental aesthetic in poetry he co-developed in the midst of World War One and at the dawn of the Russian Revolution to challenge hegemonic signification.⁴³ Like Russian avant-garde poets, Khazrik’s trans-rational aesthetic espouses non-linear, sideways understanding, leaving just enough syntax to trouble the reader—but without obscuring meaning altogether. This subversive and symbolic linguistic aesthetic enacts cuts to the modern ordering of the world to surpass it, as chaotic, indeterminate, and uncontainable sounds “Accelerate, stop then relapse in all directions” to disorient the reader and listener. An unruly matter you can’t deny.

I Am Not Your History

Toxic matter returns powerfully in the anthropomorphic poem “I Am Not Your History” (2017) and narrates its afterlives.⁴⁴

I am what you want to leave. At other times, I am where you do not want to go [...]
I had already passed all borders, but this no longer matters since you are dead as I speak.
You can neither make me shrivel to dust nor shovel me away.
Together, we eat your body.

The artist sets the stage for a power exchange between a man and a recalcitrant protagonist in a literary feminist gesture that reclaims the *femme fatale*, a historically misogynist trope as old as biblical time. This post-human descendant of Eve, Salome, and Zulaikha is a seductive mistress of disguise impossible to manage; she intoxicates him and he cannot flee. Plural, like a militant guerrilla, but united “together [to] eat your body,” she is non-other than (toxic) waste matter(s) and he is non-other than techno-scientific man of capitalism. To decenter the human—this human—Khazrik “cultivate[s] a bit of anthropomorphism,” following Bennett’s suggestion, in a trans-rational aesthetic where matter inhabits language, human semiotic realm, once again.⁴⁵ If Hird believes that “waste invites [...] possibilities for acknowledging an inhuman epistemology,” then Khazrik conceives a literary space that represents this possibility, where speaking matter expunges (human) techno-scientific hubris—from recycling mythologies to containment.⁴⁶

Just like the economy produces waste, it produces war, and [...] produces me [...]
I am the death that you extend to things, atrociously in commotion, terrible if seen, proud if broken apart [...]
The less time I am given outside the time that ousted me, the more I am pulled back in, promoted and gauged as zero [...]

Geographer Nicky Gregson and others explain that the “object” is only a stage in the lives of matters, and occurs when they congeal as one during industrial production. It is precisely when they become a shiny and new object that conjoined matters acquire “value” in the global political economy.⁴⁷ Later, matter falls out of value when the object is discarded. But the protagonist reminds us that this falling from grace is temporary, as matter undergoes a process of re-valuation through re-use and recycling. These so-called sustainable “zero-waste” solutions are equated with “progress.” However, like geographer Vinay Gidwani we ought to return to underground geographies in the South to witness what makes this so-called sustainability possible. There, racialized bodies in the recycling economy “subsidize [...] our escalating fetish for electronic technologies [as workers] survive dangerously on what we nonchalantly use and discard.”⁴⁸ One is left to wonder, what is sustainable about sustainability when it is founded on toxic exposures for the dispossessed and racialized *other* making a toxic living on the wrong side of the planet? Another sustainability is possible and must begin with a significantly scaled down production and consumption for the North and a sharp turn away from imperialism, extractivism, and militarism.

“I am what you cannot contain,”—I mutter from under domestic mud [...]. I remain.

When it falls unambiguously, or so it seems, out of the value chain, unwanted matters become a “terrible if seen” exilic monster akin to Frankenstein—“waste” *tout court*, matter-to-disappear, *nifāyāt*—a problem to be solved, and therefore, the object of either waste colonialism or engineering. Hird writes that the science and engineering of landfills conjures waste as a determinate, stable object that could be managed scientifically, disregarding that this compost of matters interacts with increasingly unpredictable elements, like the changing climate, and develops contingent leaching propensities that could overturn techno-scientific fixes.⁴⁹ “From under domestic mud” waste “mutter[s]” what ought to frustrate techno-scientific man, “I am what you cannot contain.” Waste is ungovernable.

Toxic Climate

Always already inclined to spill, we encounter this propensity in *Two barrels kissing until their water meet(s)* (2014), a sculptural arrangement featuring a martini glass on a shelf containing a reconstructed sample of water from Port Beirut, which Malychef tested in the 1980s, with traces of cadmium, mercury, carbon monoxide, and other matters. Next to it stand two found blue barrels bearing the label “Dmitrievsky Chemicals,” a Russian manufacturer and distributor of industrial solvents.⁵⁰ Filled with water, the barrels are tilted, intersecting at the rims just as their waters are about to touch. Abeyant in precarious stillness, all it takes, the artist suggests, is a slight tremor, for the waters to meet. This aesthetic configuration with trans-national and trans-scalar connotations is also trans-temporal, evoking a contamination in waiting. “To be latent,” Murphy writes, “is to be ‘not yet’: a potential not yet manifest, a past not yet felt.”⁵¹ Frozen neither in space nor time, toxic matter is an agent in world making and ending processes that accelerate with vibrations, movements, and configurational shifts like the increasingly cultural ‘natural’ phenomena, including earthquakes, rising tides, hurricanes, and landslides of a changing climate (Figure 10.3).

(Toxic) waste, then, intersects with the climate, not only as an externality of a hot fossil fuel economy, but as material excess—always already unevenly produced and differentially experienced—in latency. To imagine the potential scale of this temporal and catastrophic relation, Camp Century is especially resonant. In the Cold War context, this 1956 American subglacial



Figure 10.3 Jessica Khazrik, *Two Barrels Kissing Until Their Water Meet(s)*, 2014

military base in Greenland was built to experiment with ballistic intra-glacial missiles targeting Russia. When it was abandoned a decade later, radioactive and chemical wastes were left behind on the assumption that snow accumulation would freeze them forever. But the warming climate is melting the snow and may free military wastes within a century to ruin social ecologies irreparably.⁵²

It is difficult to imagine what a joint toxicity–climate disaster would look like in Lebanon, partly because the scale of latent toxic infrastructures is unknown, as the landscape was used as a dumping ground for the North and local industries on multiple occasions.⁵³ Rizk speculates, however, that toxic waste from the 1987 shipment was dumped in the open landfill of Burj Hammoud and elsewhere along the coast.⁵⁴ The rising tide we have already begun to witness promises, in the very least, further bio-accumulation in a marine life already displaced after decades of waste mismanagement and 2006 targeted oil spill by Israel. In the Lebanese context, climate is a factor, but the actors remain the criminal oligarchy which routinely seizes any opportunity to make a buck, even at the risk of blowing half of Beirut to smithereens,⁵⁵ and the settler-colonial state to the south which wages conventional and biopolitical slow violent wars, a threat that is always imminent.⁵⁶

In the end, this inherently speculative, latent trans-aesthetic insists that the environment we know is transforming and will continue to transform. Some are inclined to contend with the reality of no return to “purity” in hopes for a radical potentiality within trans-scalar alterations that could be queer.⁵⁷ The artist embraces this position in *All the Flowers That Were Thrown at Me Come Back Panting* (2016–) (Figure 10.1), a series of digital paintings in which she fuses the scientist’s photographs of waste with his photographs of flowers to create a queer ecology.

Nevertheless, alter-futures, however radical, must neither deflect attention away from a joint structural-systemic critique, nor dissuade a laboring effort toward an internationalist revolution already underway. In this “time of crisis”—a recurring chorus because the existential threat is for once knocking on the doors of affluence in the North—what is needed is not the hasty and

tone-deaf discourse of urgency promoting debt programs and techno-scientific fixes, but urgent militancy. What is needed is militancy against the wasteful and wasting petro-capitalist political economy in the name of the white, middle-class, nuclear family; against the ideology of liberalism which celebrates a modern history of violence as “progress” and relegates politics to the individual’s freedom to consume, however “ethically”; and against the WB-IMF hegemonic financial front that shakes hands with subservient and self-serving oligarchs to shove neocolonial processes down our throats and call it resilient “development.”

Notes

- 1 As-Safir, “Safaqat al-mawt: ‘ikhrāj al-nifāyāt huwa al-muliḥ li-’ihtiawā’ihā akhtār māda kimā’iya qātila,” July 21, 1988.
- 2 Special thanks to Lindsey Dillon, Dennis Browe, Jessika Khazrik, Lara Bitar, and T.J. Demos for reading and commenting on an earlier draft of this essay, and Joelle Boutros for her invaluable archival research in Joelle Boutros, “Bidāyāt qadiyat al-nifāyāt al-sammat fi lubnān (1989–1989),” *Legal Agenda*, June 29, 2018. www.legal-agenda.com/article.php?id=4623 (accessed January 2020).
- 3 ‘Based in Calabria, Ndrangheta is notorious for its involvement in the global toxic waste trade. See Greenpeace, “The Toxic Ships: The Italian Hub, the Mediterranean area and Africa” (Greenpeace Italy report, 2010).
- 4 Pierre Atallah, *Al-Nifāyāt al-sammat fi bilād al-arz* (Beirut: Dar al-Nahar, 1998), 35.
- 5 As-Safir, “Safaqat al-mawt.”
- 6 Fouad Hamdan, “Waste Trade in the Mediterranean: Toxic Attack Against Lebanon. Case One: Toxics from Italy” (Green Peace Lebanon, 1996), 14.
- 7 Atallah, *Al-Nifāyāt*, 34. Quoted in Boutros, “Bidāyāt.”
- 8 I learned about this part of the story in the first iteration of *TBBG* at Beirut Art Center in 2014. Khazrik produced a sculptural interpretation of the stamp which she activated in interactive performances and storytelling.
- 9 Khazrik found it among Pierre Malychef’s documents. My translation.
- 10 Atallah, “Al-Nifāyāt,” 40. Quoted in Boutros, “Bidāyāt.”
- 11 Boutros, “Bidāyāt.”
- 12 This was reported in *Al-Nahar*, “Itālīā tarfud i’ādat al-nifāyāt ba’dama hadharat min talwīthihā al-miyāh,” June 13, 1988, according to Boutros, “Bidāyāt,” 2018.
- 13 Waste and quarries are essential to the real-estate economy in Lebanon, which I discuss in a forthcoming essay around Marwa Arsanios’ video installation *Falling Is Not Collapsing, Falling is Extending* (2016).
- 14 Personal communication.
- 15 Dominique Laporte, *History of Shit* (1978) (Cambridge, MA: The MIT Press, 2000).
- 16 Urban historian Jens Hanssen researched the advising role that French hygienist Benoît Boyer led in the campaign. He discusses Boyer’s “colonial anxiety” and obsession to contain waste and “wasted” social types in Jens Hanssen, “Colonial Anxiety, Scientific Missionaries and Social Containment in *fin de siècle* Beirut,” *Archeology and History in Lebanon* 22 (2005): 52–61.
- 17 Boutros, “Bidāyāt.”
- 18 Jessika Khazrik, “I Am Not Your History,” *The Funambulist* 14 (2017): 54–57.
- 19 David N. Pellow, *Resisting Global Toxics: Transnational Movements for Environmental Justice* (Cambridge, MA: MIT Press, 2007), 99.
- 20 Quoted in Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, MA: Harvard University Press, 2011), 2.
- 21 Max Liboiron, “Waste Colonialism,” *Discard Studies*, November 1, 2018. <https://discardstudies.com/2018/11/01/waste-colonialism/> (accessed January 2020)
- 22 *Al-Nahar*, “Tawqif al-khabīr al-bīṭ Malychef bi-tuhmat shahādat kādhiba wa tahrīd shuhūd,” March 1, 1995. Quoted in Boutros, “Bidāyāt.”
- 23 This also happens in northern democracies. Michelle Murphy recounts how Health Canada denied the rise of rare cancers among members of the Athabasca Chipewyan First Nation in Fort Chipewyan, Alberta, caused by tar sands’ extraction, by filing a formal complaint against the local doctor. See Michelle Murphy, “Chemical Regimes of Living,” *Environmental History* 13 (2008): 695.
- 24 Part of *Let’s Talk About the Weather: Art and Ecology in a Time of Crisis*, a collective exhibition at Sursock Museum in Beirut.

- 25 Nixon, *Slow Violence*, 19.
- 26 Janoubia, "The River of Death (1): Litany Continues to Spread Death across its Banks," June 26, 2018.
- 27 "Trans-, prefix," OED Online, September 2019, Oxford University Press.
- 28 Myra Hird, "Knowing Waste: Toward an Inhuman Epistemology," *Social Epistemology* 26 (2012): 454.
- 29 Michelle Murphy, "Distributed Reproduction, Chemical Violence, and Latency," *The Scholar and Feminist Online* 11.3 (2013), <https://sfonline.barnard.edu/life-un-ltd-feminism-bioscience-race/distributed-reproduction-chemical-violence-and-latency/> (accessed January 2020).
- 30 Nixon, *Slow Violence*.
- 31 Isabelle Stengers, *Another Science is Possible: a Manifesto for Slow Science* (Cambridge: Polity, 2018).
- 32 Kyle Whyte, "Who Has the Right to Declare the Urgency of Addressing Climate Change?," paper presented at a Conference on Indigeneity and Climate Justice 2019, University of California Santa Cruz, May 30, 2019.
- 33 I briefly explore the topic in Sintia Issa, "Lebanese Uprising: Infrastructure and the Trap of Neoliberal Development," *Legal Agenda*, November 7, 2019, <https://legal-agenda.com/en/article.php?id=6118> (accessed January 2020).
- 34 Amitav Ghosh, *The Great Derangement: Climate Change and the Unthinkable* (Chicago: Chicago University Press, 2017), 6.
- 35 Published in Kohl: *A Journal for Body and Gender Research*.
- 36 Karen Barad, *Meeting the University Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007), 178.
- 37 Dipesh Chakrabarty unpacks dominant conceptions of nature in Western (liberal and Marxist) political philosophy. Across the spectrum, History was founded on Cartesian dualism and understood as a property of Man. Khazrik challenges this anthropocentric conception of history. Dipesh Chakrabarty, "The Climate of History: Four Theses," *Critical Inquiry* 35 (2009): 203.
- 38 Nixon, *Slow Violence*, 4.
- 39 Joelle Boutros, al-nifāyāt al-sammāt fi lubnān al-jiz' al thānī (1994–1994): al-sulta tataharrah nahū... tams al-qadīyat," *Legal Agenda*, July 29, 2019.
- 40 Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham, NC: Duke University Press, 2009), viii.
- 41 The specificity of this sound system was discussed in a personal communication.
- 42 Haraway, Barad, Bennett, Ghosh, Gilles Deleuze, and Felix Guattari, among others, have contested the separation of body and mind, nature and culture, matter and spirit, subject and object in different ways.
- 43 See Anna Lawton and Herbert Eagle, *Words in Revolution: Russian Futurist Manifestoes, 1912–1928* (Washington, DC: New Academia Publishing, 2005).
- 44 Published in *The Funambulist* 14.
- 45 Bennett, *Vibrant Matters*, xvi.
- 46 Hird, "Knowing Waste," 453.
- 47 Nicky Gregson et al., "Following Things of Rubbish Value: End-Of-Life Ships, 'Chock- Chocky' Furniture and the Bangladeshi Middle Class Consumer," *Geoforum* 41(2010): 846–854.
- 48 Vinay Gidwani, "Remaindered Things and Remaindered Lives: Traveling with *Delhi's* Waste," in *Finding Delhi*, edited Bharati Chaturvedi (Delhi: Penguin Books, 2010), 47.
- 49 Hird, "Knowing Waste," 458.
- 50 First shown at Beirut Art Center in 2014.
- 51 Michelle Murphy, "Distributed Reproduction."
- 52 William Colgan et al., "The Abandoned Ice Sheet Base at Camp Century, Greenland, in a Warming Climate: Reconsidering Camp Century," *Geophysical Research Letters* 43 (2016): 8091–8096.
- 53 There have been toxic waste trades with Germany, Belgium, Canada, and Russia, among others. See Fouad Hamdan, "Waste Trade in the Mediterranean: Waste Attack Against Lebanon. Case Three: Plastic Waste from Germany in 1996," Green Peace Report (Valletta/Beirut: Greenpeace Mediterranean, 1997).
- 54 Boutros, "Bidāyāt."
- 55 I am referencing the massive explosion of 2750 tons of ammonium nitrate at the Port of Beirut on August 4, 2020.
- 56 To read more about this biopolitical war, see Vasiliki Touhouliotis, "Weak Seed and a Poisoned Land: Slow Violence and the Toxic Infrastructures of War in South Lebanon," *Environmental Humanities* 10 (2018): 86–106.
- 57 For a discussion of this, see Heather Davis, "Toxic Progeny: The Plastisphere and Other Queer Futures," *philoSOPHIA* 5 (2015): 231–250.

11

THE PERPETUAL PRESENT, PAST, AND FUTURE

Slow Violence and Chinese Frameworks of In/Visibility and Time in Zhao Liang's *Behemoth*

Connie Zheng

An hour into Zhao Liang's film *Behemoth* [悲兮魔兽 in Chinese] (2015), the camera lingers on the faces of four unnamed men in mining helmets, their necks and cheeks flecked by metallic particles, necks daubed dark around the collar. Deposits of coal dust are collected in their ears, and their eyes are watery, drooped, ringed with black. An unseen narrator murmurs, "I stare at his features, baked as if by molten iron and soaked in sweat. That distressed visage nonetheless does not keep me from seeing clearly the way he looked before." The "before" in question refers to an unspecified moment in time, and the film occupies an ambiguous timeframe, in which temporal endpoints are collapsed and the spaces between "before" and "after" are indeterminate. The narrator, too, is left anonymous, and the viewer can only speculate as to who might be speaking, if not the men whose features have been "baked as if by molten iron." However, who gets to speak, in the context of a politically contentious work such as this? Air pollution was reported to have contributed to the premature deaths of 1.6 million Chinese citizens in 2014 alone, with environmental destruction largely attributed to the Chinese government's no-holds-barred policy of economic growth.¹ Investigative reporters and bloggers who cross the unspoken "red line" in environmental reporting are vulnerable to intimidation, censorship and arrest.² The truth is frequently obfuscated, voices are forcibly silenced or bought off, and the march toward industrial "progress" continues unabated. This is a narrative of Chinese environmental injustice that seems to be familiar to readers in the West.

This essay is interested, therefore, in moving beyond and subsequently problematizing established narratives around Chinese environmental disaster, with the aim of developing new models for thinking through ecological catastrophe. Focusing in particular on a dialectic between temporality and visibility in the context of anthropogenic climate change and environmental injustice, I propose to anchor my analysis on the "ecological documentary"³ *Behemoth*, which is well celebrated in the international film circuit, but has seen limited circulation domestically in China. While there is a formidable range of artists from mainland China creating work that confronts environmental destruction, from Li Juchuan's community-based *Everyone's East Lake* project (2010) to Brother Nut's *Project Dust* (2015), this essay will use *Behemoth* as its primary frame of analysis because it is a moderately recent work, a complex exploration of time and the accretive violence wrought by environmental injustice, and controversial enough in China so as to warrant further analysis around access and visibility. I take *Behemoth* as a lens through which to consider how

non-Chinese artistic practitioners and thinkers dealing with environmental disaster might engage critically with, and learn from, a cultural context whose sense of time has been informed by an approach to history that has traditionally taken a long view yet has experienced tremendous rupture over the past century. Furthermore, this essay will take the problematic of time and examine how a material that moves forward so intangibly—yet whose traces are unmistakably indelible—produces representational challenges in relation to in/visibility, privileging the circulation of certain *kinds of voices* over others. In the context of *Behemoth*, the clearest voice is that of the filmmaker—the voice tapped into international audiences and markets, allowing for linkages into channels of communication circulating outside of the censorship juggernaut of the Chinese government.

I argue that *Behemoth* productively visualizes a multivalent interplay of temporal registers that comprise the “slow violence”—to borrow the language of Rob Nixon—wrought upon coal miners in Inner Mongolia as they are conscripted to toil in toxic and dangerous conditions and to advance an empty myth of progress that leads to wasted materials and ruined landscapes. I further argue that, in spite of the limited and compromised visibility it provides for its subjects, *Behemoth* proposes relevant new ways of thinking about climate change and environmental crisis by opening productive questions around temporality and history.

Slow Violence

In Zhao Liang’s film *Behemoth*, the passage of time is registered in landscapes, bodies, and their movements through various circles of industrial hell. Wisps of passages from *Dante’s Inferno* are scattered interchangeably throughout the dialogue-free film with some of Zhao’s original text as a narrative membrane, following a crew of unnamed miners as they move between an unspecified mining site and domestic or hospital spaces. These figures are depicted first performing highly dangerous labor in environments filled with toxic iron and coal mining by-products and then bearing the corporeal effects of this labor: in the final third of the film, several miners are shown in a hospital, their bodies visibly weakened by the harsh conditions to which they have been subjected. This damning reel is interwoven with images of petitioners demanding compensation and treatment for their compromised health, shots of a graveyard, and footage of the ghost city of Ordos, an urban mausoleum devoid of humans and dense with condominium towers. There is a clear narrative arc to the film: in a post-screening discussion at the Lincoln Center in 2016, Zhao stated that the chronological structure of the work is based on the industry supply chain, as the camera traces the movement of iron ore to the coal mine, the melting of the iron in the mine, the creation of wires used in construction, and finally the output of this labor, in the form of Ordos’ urban developments.⁴ Yet the film does not express an entirely linear sense of time: moments are fractured, spliced, repeated, made circular. Time is a figure eight.

As Zhao cuts between scenes of Ordos, hellish underground landscapes and images of miners in hospital beds, as well as petitioners huddled in the freezing cold of Beijing, one can’t help but identify a sense of collapsed past, present, and future: the dreams of futurity are responsible for the sorrows of the present, while the actions of the past continue to dictate the health of our future. As Karen Barad asks in their essay “Troubling time/s and ecologies of nothingness,” “[is] there a sense of temporality that could provide a different way of positioning these markers of history and understand 1492 as living inside 1945, and even vice versa?”⁵ While Barad is specifically discussing the nuclear destruction of Hiroshima, which they contextualize within a longer history of Western colonialism, I propose that we extend this question of palimpsestic time to environmental disasters more broadly. When the workers in *Behemoth* so visibly manifest the material accumulations of environmental disaster, the accretive qualities of resource plunder and the immortality project of capitalism articulate themselves as the acts of “slow violence” that

they are. In *Slow Violence and the Environmentalism of the Poor*, Nixon defines “slow violence” as “a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all.”⁶ In *Behemoth*, the sounds of guttural coughs frequently anchor long, richly saturated stills of miners resting both at home and in hospitals into some combination of the present and the future, an ominous reminder of both the short-term and long-term consequences of their labor.

To use Roland Barthes’ term, the *punctum* moments in Zhao’s photography are those in which the miners’ bodies so thoroughly absorb the material accrual of their hard labor that they become momentarily alien, and a visual slippage occurs: there is a close-up of a neck with a line of coal-black dug into it, like a charcoal garrote; there is a scene of a left hand picking at the fleshy calluses of a right hand. Zhao frequently employs close-ups of the miners’ faces to intimate effect, the crevices of their features suffused with grainy coal particulates (Figure 11.1). The dust blackening their pores and papery wrinkles speak to the intersections between the timeline naturally contained within their bodies and the timeline enacted upon them by the relentless pace of industrial development, which is ultimately revealed as empty. One sense of time displaces another. The invisibility of these “long dyings,”⁷ as Nixon calls them, speaks to the different temporal scales on which climate change and visible corporeal damage register.

In this sense, the pacing of *Behemoth* becomes a political decision. As Nixon continues in the introduction to *Slow Violence*, “[the] insidious workings of slow violence derive largely from the unequal attention given to spectacular and unspectacular time.”⁸ Accretive and residual, the time of the coal miners at this unnamed pit in Inner Mongolia is unspectacular time framed in a spectacular setting, with wide, cinematic shots of mountaintops exploding and the red light of melting ores flickering to pulsating electronic music. In *Behemoth*, Zhao masterfully dramatizes the troubled scales of time experienced by the mortal and geologic bodies captured in his lens, yet I find myself confronted with an uneasiness regarding the overwhelmingly powerful voice of the film’s narrator, which belongs to Zhao himself. At one point, during a scene of miners driving empty trucks on a road, the narrator remarks that “the creatures who sort coal from rock are still in their inky makeup.” The largely aesthetic concerns embodied by lines such as these call into question the uneven power dynamics between filmmaker and filmed as well as the gulf



Figure 11.1 Zhao Liang, *Behemoth*, still, 2015

between subject and object, painfully reinforcing the challenges to visibility experienced by communities in China most vulnerable to environmental injustice.

Ecologies of In/Visibilities

While Zhao has stated that he originally shot the film in a “conventional documentary style”—including conducting interviews with his subjects—he ultimately chose to remove the verbal and linguistic components of the film in order to rely solely on the visual components of the story.⁹ In a post-screening discussion at Lincoln Center in 2016, Zhao mentioned that while his initial interest in the project was from an environmentalist perspective, his interest in this particular mine was largely aesthetic.¹⁰ Struck by the extraterrestrial qualities of this specific coal and iron mining area in Inner Mongolia, Zhao said, “I think the visual impact was what attracted me to this particular location.”¹¹ Similarly, in a 2016 *Film Comment* interview, Zhao stated that “the aesthetic meaning of images is more important [to me] than their journalistic value.”¹² Such statements bring to mind T.J. Demos’ book *Against the Anthropocene* and his critique of Edward Burtynsky’s grandiose photographic renderings of industrial landscapes. In this analysis, Demos brings Burtynsky to bear on the distancing effect produced by the artist’s strong emphasis on the aesthetic pleasure of the “petro-industrial sublime.”¹³ As Demos argues, in Burtynsky’s emphasis on the incredible aesthetic qualities of his sites, “what the photographer constructs is the petro-industrial sublime, emphasizing the awesome visuality of the catastrophic oil economy’s infrastructure founded on obsessive capitalist growth,” and that “the problem [with this approach] is that such images tend to naturalize petrocapitalism, with a mesmerizing imaging machine in thrall to the compositional and chromatic elements of the very framework responsible for our environmental destruction.”¹⁴ I am not suggesting here that Zhao’s aims for the film are not turned toward the direction of justice. Rather, I see his focus on privileging the imagistic primacy of the industrial behemoth as emblematic of the challenges posed by the Chinese state apparatus on the visibility and agency of the communities and individuals most exposed to the effects of environmental destruction and to the slow violence of toxic accrual.

Within a system of structural oppression and censorship, whose voice is permitted to circulate, both domestically and abroad? Can one potentially interpret aesthetic formality—and a strong emphasis on the visual quality of a work—as a means of coding politically charged subject matter within a linguistic and aesthetic container that is palatable, and perhaps appropriately illegible, to government censors? In interviews with international media, Zhao has frequently voiced his frustration regarding the ability of Chinese artists to make meaningful work with powerful social impact, thanks to the authoritarian policies of his home country. In one interview, he declares, “I have realized that my films have made very little difference in terms of societal improvement... Changing society through artworks would take hundreds of years.”¹⁵ Zhao’s cynical comments regarding the possibilities for art to trigger lasting political transformation seem to be specific to the situation in China, where options at present seem extremely limited. As Zhao and numerous US- or Europe-based journalists and critics covering *Behemoth* have noted, as late as 2017, the film was prohibited from being publicly screened in China. According to an interview with *Slant Magazine* in 2017, within three days of the film being selected to compete in the 72nd Venice International Film Festival, all information about the film was scrubbed from the Chinese internet.¹⁶ Furthermore, Chinese reporters were banned from writing about the film; as Zhao remarks, “[there] were over 100 Chinese reporters at the festival, and none interviewed me.”¹⁷ Nevertheless, the film is far from buried: for years, *Behemoth* has circulated in the international film circuit—in Sweden, Japan, the Netherlands, Austria, and Denmark, to name a few countries—and on the Chinese black market, in the form of pirated DVDs. (It should also be noted, however, that even pirating factories are

known to cooperate with the government; Zhao has stated that one company refused to distribute counterfeit copies of his documentary *Petition* because it is “seriously banned.”¹⁸⁾

Most of the attention surrounding *Behemoth* has focused on the figure of Zhao, who has been hailed as “legendary” (*Vice*) and “polemical” (*Slant*). Film reviews, such as those found in *The Guardian* or *BFI*, generally focus on the formal qualities of the work, as well as the domestic restrictions surrounding the film’s distribution and the difficulty that Zhao encountered gathering the footage. These challenges are substantial and it is with deep respect for Zhao that I call attention to the circumscribed and skewed visibility produced by the systems that control the circulation of the film, and these systems’ potential to impact the lives of the very people who brought the film to life. As Zhao has mentioned, he had to bypass the official channels of approval in order to shoot the film, given some of the legally and ethically questionable activities of the mine owners.¹⁹ By extension, one also wonders to what extent the subjects of the film might have been endangering themselves by collaborating with him, and how much of their silence in the film was their own choice. Without direct access to their voices, it is impossible to know.

Finally, it is also crucial to point out the threat of state violence that Chinese citizens chronically face, and how the shadow of that violence is enough to silence people. (The Chinese police are granted both legal and extra-legal powers to significantly restrict the liberties of those declared by authorities to present threats to “social stability,”²⁰ and Chinese authorities “disappeared, detained, or questioned at least 159 lawyers and activists throughout China” between July 9 and July 15, 2015.²¹) For groups experiencing particularly acute economic and political vulnerability, such as migrant laborers, visibility can be undesirable, even dangerous. As Zhao mentions in an interview with *Film Comment*, he has often worked on his films alone, without a crew, due to the political sensitivity surrounding his subject matter: “some of the topics I usually deal with... shouldn’t be exposed to many people during the shooting.”²² Visibility becomes a question one must negotiate with caution in the Chinese context, and it poses higher risks for those without access to foreign and domestic connections, mobility, and an international art market in which the Chinese government has invested substantial resources.

Borrowing Félix Guattari’s notion of ecologies as epistemological systems—interconnected networks of social and geologic relations and subjectivities adaptable to various scales and governed by nonlinear causality—I suggest that an abundant ecology of socio-politico-cultural resources surrounding Chinese artists can potentially also facilitate favorable conditions for a responsive “media ecology” internationally. While a thorough examination of the “resource ecology” supporting the field of contemporary artistic practice in China exceeds the scope of this essay, I briefly draw upon the work of Lin Zhang and Taj Frazier in noting the Chinese government’s extensive investment in its domestic art market as a method of developing its cultural currency abroad and its interest in politically contentious figures such as Ai Weiwei, whose father was the famed Communist revolutionary poet Ai Qing. Zhang and Frazier note that Ai is actually a much more complex figure than the anti-China activist that Western media tend to simplistically paint him as: in a comprehensive analysis of Ai’s works leading up to the 2008 Beijing Olympics, they point out that the Chinese government was actually “complicit in allowing Ai’s satellite show [at the 2000 Third Shanghai Biennale, which Ai supposedly contested] to take place exclusively for an international audience,” and that Ai’s aesthetic strategy in his accompanying photographs “subtly assisted the Chinese government in depicting China as a global power equal to other western powers.”²³ While I make no claims regarding the systems enabling the underground circulation of Zhao’s *Behemoth* in his home country, I highlight the complexities of reading Ai Weiwei’s work within a transnational context largely to point toward the challenges that Chinese artists—even those as well-connected as Ai—face in mounting any sort of protest visible, and legible, to international audiences.

“Chinese” Frameworks for Temporality?

In an interview excerpt from the preceding section of this essay, Zhao expresses a sense of temporality that feels expansive, if resigned, as well as a thread of humility regarding the powerful vector of time. Following this lead, can we identify a uniquely “Chinese” sense of time?

In his essay “The defining character of Chinese historical thinking,” Chun-Chieh Huang makes the bold assertion that in China, “to be human is to be historical.”²⁴ Drawing primarily upon centuries-old Chinese historical texts, Huang states that a Chinese sense of time is anchored in an awareness of “being in time that flows as we engage in various activities in the world.”²⁵ Q. Edward Wang continues and expands upon Huang’s claim by noting that while he does not believe in an “endogenous *Chinese* mode of historical thinking,”²⁶ he does identify a Chinese historical consciousness that has been shaped by “a course of development characterized by phasic differences.”²⁷ Setting up a “Western,” anthropocentric notion of time as a foil, Wang declares that “the Chinese notion of time always involves nature, or the physical world,” and that “to the Chinese it is against this infinite and eternal framework of reference that the evanescence and temporality of human history is best illustrated.”²⁸ One can see this vast temporal backdrop in the medium of Chinese landscape painting, whose flattened perspective visually de-privileges figures relative to their surrounding environment and “[tends] to depict a flow of energy that runs through both humans and environment.”²⁹ While neither Huang nor Wang address the entrance of climate breakdown into Chinese historical thinking in the essays cited above, I propose that we might find useful models for thinking through our present and future environmental cataclysm in these ideas of evanescence and dynamic temporalities.

In a complementary analysis, Paul Gladston eschews any faith in an essentialist “Chinese” sense of cultural identity—including *temporal* cultural identity—arguing rather for the development of a different set of theoretical paradigms. In an analysis of the rhetoric around contemporary art in China, Gladston posits that the notion of contemporary art within the localized context of the PRC is rooted within a dynamic, culturally specific notion of “present time,” as signified by the use of the phrase *dangdai* (当代) to describe contemporary art within China (*dangdai yishu*, 当代艺术). He notes that the phrase 当代 points toward a departure from the “sequential logic of a Western modernist conception [of time]” and hints at a “non-synchronous view of present modernity” contingent on “localized... sociocultural conditions.”³⁰ One can identify this model of temporality—nonlinear and anchored in specific conditions and events, such as the seemingly overnight development of Ordos city, and its subsequent ghostliness—in the slow pacing, largely non-sequential narrative structure, and long wordless tableaux that undergird Zhao Liang’s *Behemoth*.

Considering its long history of cultural and environmental imperialism, with military and economic advantages granted to those who effectively manipulated and exploited the environment—as documented by Mark Elvin in his book *The Retreat of the Elephants*—present conditions in China display not just a register of current environmental disaster, but also contain allusions to broader conditions of past and impending environmental cataclysm. While the long and diverse record of Chinese history present significant challenges in terms of formulating any general theories of temporality, I argue that its very visible heterogeneity—with its ruptured, colliding timescales—opens provocative possibilities for readers all too familiar with a homogenous, progress-driven model of neoliberal time to consider temporality as unfixed and nonlinear, the past and future as folded into the present, and our futures as not yet determined.

Conflicting Temporalities

In *The Marvelous Clouds: Toward a Philosophy of Elemental Media*, John Durham Peters points out that ancient Chinese calendar-keeping was highly unstable relative to the astronomically determined Julian calendar, thanks to its history of being used as an instrument to justify imperial rule and to consolidate each successive emperor's alignment with the "mandate of heaven."³¹ Peters notes that China averaged several new calendars a century between 200 and 1300 CE, and because each new emperor had the right to issue a new calendar after ascending to the throne, ancient Chinese society experienced "a constant revolution in the logistics of time."³² Therefore, while there might not be an *endogenous* Chinese notion of time, the highly heterogeneous, chaotic and dynamic arc of Chinese history over the past few centuries certainly points toward the possibility that there exists within the cultural consciousness of Chinese contemporary society a conception of time that is potentially more elastic and responsive to the fluctuations wrought by climate change than the comparatively shorter notion of "homogenous, empty time"—to use the language of Walter Benjamin—expressed within the globalized context of Western neoliberal time.

Considering the damage that the Modernist myth of linear progress has wrought upon our planet over the past century, it feels necessary to use this ontological opening as an opportunity to examine other models of temporality as well, and to consider the possibilities they offer. As Karen Barad astutely observes, the linear temporality of capitalism and accompanying myth of progress that have brought us well beyond the precipice of ecological disaster do not represent a universal, or even essentially "American," conception of time. They cite Daniel Wildcat, who argues for a spatial understanding of time in his essay "Indigenizing the Future: Why We Must Think Spatially in the Twenty-First Century." In turn citing Vine Deloria, Wildcat compares the relentlessly forward-moving, anthropocentric conception of time animating Anglo-European thought to the fundamentally place-based sense of time in Indigenous American worldviews.³³ A place-based understanding of time, where past, present, and future are mutually determining, takes into account the mineral, elemental, vegetable, and animal processes that have molded the surrounding ecosystem, processes that contain within them different registers of time, all working together to build an unfathomably complex calculus of life.

Rooted as they are in the conception of *qi*, traditional Chinese modes of thought emphasized an idea of "[environmental] nature" inextricably tied with "human culture," both elements moving in a "flow that underlies both nature and human life, a mutual resonance of all things."³⁴ (Of course, many scholars have challenged the supposed dichotomies between the words "nature" and "culture"; I articulate the above viewpoint only to illustrate a paradigm in Chinese ancient philosophy that is frequently cited by scholars.) However, Robert P. Weller notes that a variety of ancient Confucian-era texts endorsed humans' harnessing of this cosmic flow: he identifies a sense of "general comfort about pursuing humanist ends through a unity with the broader forces of the world."³⁵ Time, it seems, may have long been tethered to human ambitions in the Chinese context.

The ways in which human, corporate, and state ambitions have shaped the landscape and temporalities in China are effectively exhibited in Zhao's *Behemoth*, particularly in the scene captured in Figure 11.2. Directly preceding this scene is a long shot of a graveyard dense with tombstones, set against a horizon of charcoal cliffs and toy-like trucks crawling between land and sky. A close-up of the graveyard shows a jumbled topography of burial mounds in the foreground, smokestacks in the background, and a diminutive nude figure curled, fetus-like, in the grass among the graves (Figure 11.3). This palimpsest of timeframes—industrial, historical,



Figure 11.2 Zhao Liang, *Behemoth*, still, 2015



Figure 11.3 Zhao Liang, *Behemoth*, still, 2015

ancestral, and bodily—transitions into the image above (Figure 11.2), in which we see references to industry and the most idealistic aspects of Chinese-style social realism smashed together in an unnerving irony. This scene, with its stark portrayal of the failure of the Chinese state to embody the maternal paradigms projected by this monument, indicates not only an ideological conflict taking place upon the landscape, but also a temporal one. As a symbol of care and a view of growth premised on nurture rather than exploitation, the icon of a mother cradling a child represents a vision of long-term interdependency and symbiosis that seems to stand in direct opposition to the model of short-term profiteering and industrial plunder that has actually wrought itself upon the surrounding environment. The disjunct between these seemingly antagonistic stances toward planetary longevity, which has made its mark on ecologies across the globe, has proven to be both disturbing and deadly.

In Broken Time

The deeper and more dangerous our climate crisis grows, it seems increasingly crucial that we learn from worldviews differing radically from our own and which are grounded in humility and symbiosis, rather than anthropocentric myopia. Returning to Barad, I consider their observation that the synchronization of our present time to an apocalyptic future—"time fixated on its own dissolution"—possesses the insidiously "anesthetising effect of diverting questions of responsibility" and instead "[distracts] attention from the realities of war in its ongoingness."³⁶ I advocate instead for a consideration of the potentialities offered by a long, elastic view of time that engages with history to the extent that it reminds us of how the past is deeply embedded in the future and continues to instill in us a respect for the long timeline of history, simultaneously fueled by the urgency of the present moment. This is a long view of time in which there exists space for future openings, for accruals of change, for sustained, attenuating action.

As Naomi Klein astutely writes, "climate change is about how what we did generations in the past will inescapably affect not just the present, but generations in the future," observing that "we live in a culture of the perpetual present, one that deliberately severs itself from the past that created us and the future we are shaping with our actions."³⁷ She argues that knowing how to slow down strategically can enable our ability to observe the subtle changes accumulating in landscapes and bodies before it is too late—that in fact it can actually contribute to our sense of urgency. I extend Klein's argument by suggesting that engaging with Chinese historical thinking as a point of departure for considering multiplicities of temporalities often buried or invisibilized—beyond Modern capitalist time, beyond a sense of time tethered to apocalypse, beyond the perpetually present time of the media spectacle—can actually help us develop the kind of knowledge, sensitivity, and awareness required for living through the Anthropocene. Slow violence is all around us. We just need the right perspective to see it, and to respond with determined action.

In a country where several lifetimes of development have been compressed into a few short decades and whose citizens frequently refer to its "five thousand years of history" (上下五千年), time in China seems to be a material that simultaneously dilates and contracts, and I suggest that we might be able to use an investigation into conceptual models of temporality from within the Chinese context as a tool for generating new perspectives on approaching the most challenging ideological crisis of our time. The necessary antidote to slow violence, if such a thing is possible: a sustained process of hope. Hope in the sense that Rebecca Solnit frames it, contra Zhao, even as we use *Behemoth* as a point of departure to consider multiplicities of time—hope as "the belief that what we do matters" and as that which "locates itself in the premises that we don't know what will happen and that in the spaciousness of uncertainty is room to act."³⁸ Perhaps some of us won't see the fruits of this hope within our own lifetimes. As Solnit reminds us, however, some of the most radical social, political, economic, and environmental movements in history took generations to foment and materialize. Looking to the shattered, kaleidoscopic layers of the past can remind us of the possibilities of our future and of humans' capacity to survive all sorts of apocalypses: no one apocalyptic future is pre-determined, and in the space of flux—in broken temporality—there is space to act.

Notes

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12

REMEMBERING THE LAND

Art, Direct Action, and the Denial of Extractive Realities on Bougainville

*Amber Hickey*¹

The ghostly murmur of wind traveling through the defunct Panguna mine creeps under the skin of those at the site. This is Nasioi land. Communities in the mine's path were quickly and forcibly removed to sub-par housing built by Rio Tinto subsidiary Bougainville Copper Limited (BCL) when the company began preparing for the opening of the mine, on land claimed by Papua New Guinea.² In place of people, gardens and homes, pipes, pylons, and roads were erected. A pit "six kilometres long, four kilometres wide, and half a kilometre deep"³ was dug, and "30 million tons of overburden" was removed from the earth.⁴ Thirty years after the mine was shut down through direct action, the land is still contaminated and the industrial infrastructure remains—a specter of the violent extraction of mineral resources and people that occurred at the site. Bright blue tailings leaching from the site retain their misleadingly glorious hue, many years after operations ceased.⁵

In 1967, Australia's Conzinc Rio Tinto (CRA) laid claim to Bougainville's rich copper deposits.⁶ After years of local struggle against the mine that in 1969 passed into the hands of CRA subsidiary BCL,⁷ a carefully planned direct action campaign shut it down in 1988.⁸ The Papua New Guinea Defense Force (PNGDF) was mobilized to defend the mine, and the state and its allies imposed a blockade around Bougainville. The blockade cut off Bougainville's access to medicine, food, communication services, and banking services.⁹ Members of the quickly growing local resistance, the Bougainville Revolutionary Army (BRA), dug up the guns haphazardly shuttered in bunkers by the United States military after World War II and waged an armed defense of their territory and livelihood.¹⁰ This successful defense was waged primarily without the use of fossil fuels—the BRA powered their military vehicles with coconut oil in a decade-long conflict that became known as the Coconut Revolution.¹¹ This essay mobilizes Bougainvillean artist Taloi Havini's multidisciplinary work as a lens through which to understand this movement and its implications in relation to global generative refusal of extractive violence, under what Justin McBrien calls the *Necrocene*. As he states, "The Necrocene reframes the history of capitalism's expansion through the process of *becoming extinction*."¹² Taloi's work, within the context of the longstanding movement against the mine and for Bougainville's independence, shows us how the extinction of land, life, and culture (facilitated by capitalism) has been and continues to be refused through constantly unfolding resurgent practices on Bougainville. I argue that through looking toward this example of successful creative resistance, we can create space within which to imagine and enact contemporary methods of generative

refusal against the extractive industries across global geographies of struggle.¹³ I discuss the recent history of Bougainville in relation to the extractive industry, with a focus on the movement against the mine. I then turn to Taloi Havini's "Habitat" series, which illuminates the continuing manifestations of mining impacts, the complexity of the independence debate, and the continuation of practices of generative refusal. When their repeated assertions of independence were not recognized by other nation-states, Bougainvilleans chose to continue recognizing themselves as independent. They were left only with the option to refuse the state's refusal. Taloi's work, in its resistance to the ways Australia has historicized the conflict and its aftermath, shows and *is* a continuation of this legacy of generative refusal.

A Gift They Had No Right to Give

Key to understanding the conflict of the late 1980s–1990s is an awareness of the territorial history of Bougainville, which lies north of the Solomon Islands. Similar to the way other regions were divided into colonial territories, the Pacific was also “carved up.” Bougainville has longstanding cultural, economic, and geographical ties to the Solomon Islands, but has for many years been deemed part of Papua New Guinea (PNG).¹⁴ When PNG achieved independence from Australia in 1975, recently discovered copper and gold deposits in Bougainville were seen as a resource to support the newly independent PNG's economy. In other words, the formerly colonized were now taking on the role of the colonizer.¹⁵ The state relationship between PNG and Bougainville was externally mandated, grafted onto Bougainville without consideration of their own longstanding political affinities and cultural ties. In addition to being subsumed without consent into a series of nation-states to which they had no cultural alliances,¹⁶ Bougainville's land and resources at Panguna were given to PNG by Australia—a gift it had no right to give. While this decision affected everyone, it violated the customary power of Bougainvillean women in particular. Under Bougainville custom, the land is stewarded by women. According to Ruth Saovana-Spriggs:

Women's position of power has its origin in the land. The land here does not belong to the clan but to the lineage in which the females are the authority. Women's prerogative over land includes defining land boundaries for gardening purposes or for lease or purchase, if male relatives make such requests; giving permission to hunt, to harvest timber for commercial and personal use; and the exclusive right to veto decisions on land related matters. While the male relatives have rights to ownership, their rights are quite limited and are conditional on the female relatives' *'tok orait'* (permission).¹⁷

As noted by Thomas Koronaro, the National Coordinator of the Chiefs of Bougainville, in 1992:

The right to use any piece of land must be sought from the female members of the clan. This is an idea conceived by our ancestors since time immemorial.

[...] We do not agree with the foreign concepts of the land ownership policy as stated in the Mining Ordinance.¹⁸

Those who stewarded the land at Panguna, and those in other affected areas, were adamantly against the mine.¹⁹ PNG and Australia's overstepping of customary practices related to land ownership occurred within the context of a history of Bougainvilleans attempting to declare their own independence: “Bougainvilleans approached the United Nations three times, in 1962, 1968, and 1975, [...] and were rejected each time.”²⁰ In 1974, Marilyn Taleo Havini, Taloi's mother, designed the flag that would be raised on September 1, 1975, two weeks before PNG

acquired independence.²¹ The international community did not recognize Bougainville's assertion of independence. Despite this unsurprising move, Bougainvilleans continued to recognize themselves as independent – as they do today.

Laying the Pegs and Digging Them Up

By the time Conzinc Rio Tinto began laying the pegs for the mine and its immense supportive infrastructure, Bougainvilleans were well aware of the risk mining would impose. They had the privilege of observing and learning from history and were prepared to refuse the company's efforts without accommodations. At a 1988 meeting facilitated by representatives of Applied Geology Associates, community members stated, “ ‘we will never allow any more mining. [...] if necessary we will die on our own soil. [...]’ ”²² As is clear, death and extraction are intimately related. Not only do communities die for, against, and because of extraction, but the dangers of resisting extractive projects have been well documented, particularly in the wake of a series of murders of environmental activists. As Jeffery R. Webber and Todd Gordon assert in their discussion of dangers specific to the Canadian context (but relevant globally), “Any dissent quickly becomes a security matter—sometimes at a very high price for those resisting.”²³ The relationship between the state and extractive projects is becoming increasingly evident alongside the rise in laws that criminalize resistance to extraction, such as the series of those recently enacted in the United States.²⁴

In the early days of the resistance, women landowners in Rorovana pulled up the pegs that had been forced into the ground by prospectors in preparation for the construction of a port that would serve the mine. Their direct action was met with extreme violence – unarmed community members were beaten and sprayed with tear gas by riot police, who had been brought in to support prospecting efforts.²⁵ This response laid the ground for a legacy of violence enacted by the Australian and PNG states (in alliance with BCL), in defense of an extractive future – or the absence of a livable future.

When the mine began operations in 1972,²⁶ its impacts were immediately visible. Early on, a sharp increase in respiratory problems and other issues emerged. Trees were being sprayed with toxic chemicals to facilitate their clearing, without any consideration for the impact they would have on the community.²⁷ As the mining infrastructure hummed, species depleted and communities suffered from health issues stemming from environmental violence at Panguna.

Following over a decade of the mine's operation by PNG, a series of targeted attacks on the mining infrastructure forced BCL to cease operations. The PNGDF was sent to Bougainville, with significant support from BCL and the Australian military, and a ten-year armed conflict began.²⁸ Through looking at the historical record, it is clear that PNG was concerned that the mine's closure would have an impact on investments. They sought to quickly ensure the mine's re-opening, while also controlling the narrative regarding the conflict and protecting the image projected to potential investors.²⁹ Toward the beginning, there were several attempts to reach an agreement, but two central issues remained: PNG leadership did not want to permanently close the mine, nor did they want to recognize Bougainville's independence and the rights of landowners.³⁰ Bougainvilleans were not willing to accommodate PNG's demands, so they re-asserted their self-determination, therefore changing the conditions upon which demands were made.

Already Independent

Bougainville was host to a highly organized resistance movement across its mountainous geography, despite the PNG-imposed blockade. This included a pirate radio station, subversive maritime navigation (with the solidarity of the Solomon Islands), the resurgence of customary

medicinal knowledge, and the invention of strategies to continue living while asserting a future for themselves rather than in the service of the Necrocene. The solutions that emerged are the results of what Linda Tuhiwai Smith might deem decolonial knowledge. As Smith has stated, Indigenous communities have histories of performing place-based research, as well as knowledge systems worth valuing.³¹ Bougainvilleans under the blockade were able to turn toward customary knowledge, as well as perform land-informed research. As Josephine Tankunani Sirivi states:

Traditional gardening knowledge was rediscovered by people who had abandoned several practices because of town living and access to supermarkets. Now we no longer had cash, paid work or any access to processed food, yet we were able to produce enough to feed our people and to share with others. [...] These agricultural initiatives, for the most part, rendered the blockade useless and, in some instances, the people in the jungle were better off than those in the care centres.³²

Sirivi continues: “Traditional knowledge of bush medicine was also revived [...] and was integral to the survival of the people when there was no medicine and no hospital [...]”³³ Community members built a small-scale hydroelectric power infrastructure, learned to create soap, began a network of autonomous schools, established health clinics, and began producing coconut oil fuel.³⁴ These acts of knowledge remembrance and Indigenous research embody two terms that emerged during the conflict, “‘*yumi yet*’ (we are capable) and ‘*mekim na save*’ (learn by doing).”³⁵ As Daphne Zale states, “We were already practicing the concept of ‘independence’ in the bush.”³⁶

The conflict officially ended in 2001, following a series of formal meetings and the signing of a peace agreement.³⁷ The role of women in reaching this agreement is often overshadowed by narratives in which mediating nation-states take credit for the successful peace process. However, groups such as the Bougainville Women for Peace and Freedom played a key role in the peace process and continue during ongoing efforts toward reconciliation. Furthermore, they continue to insist on the time they need for true reconciliation to occur. Such processes cannot be rushed and therefore provide another example of refusing to accommodate neo-colonial demands. I now turn to Taloi Havini’s work, which is situated within the art world as well as in direct relation to the aforementioned histories and communities.

Art as Generative Refusal

Taloi Havini is a Bougainvillean artist, currently based in Sydney. Her family has long been involved with the struggle against mining and in support of independence. When the conflict arose, Taloi’s family was one of the last to leave Bougainville before flights ceased.³⁸ During the conflict Taloi’s father, Moses Havini, agreed to be the “voice of Bougainville to the outside world.”³⁹ Her mother worked mainly with women’s peace-making and faith-based groups, and contributed significantly to the documentation of human rights abuses in Bougainville.⁴⁰ Throughout Taloi’s work, an interest in uprooting assumptions about Bougainville and Australia’s role in the conflict is clear. Her work does more than shake up historical assumptions: much like the movement for independence in Bougainville, it refuses to accommodate the boundaries of colonial powers, instead insisting, through generative refusal, on an alternative. Here I focus on Taloi’s three-part series, “Habitat”. This highly sensory series of video installations looks at the Panguna mine region, as well as other affected areas, from a matrilineal perspective.⁴¹

Habitat Series (2016–2018)

Habitat: Konawiru, I (2016, 3:43) opens with a shot of the sky, framed by shrubbery that lines a narrow river in Konawiru. The camera then moves downwards and we see the wooden raft on which the artist sat while gathering this footage. A knife and canvas bag lie atop a small pile of leaves. The soothing sound of water surrounds the viewer, and blue butterflies fly across the frame. The perspective then changes to an aerial view of the waterways winding through Konawiru. This contrast between the water-level and aerial view is central to this first iteration of the series. As Taloi noted during one of our interviews, the aerial view is particularly meaningful for communities in Bougainville because they were first introduced to colonists via air rather than sea.⁴² Bougainville's mountainous geography largely protected it from imposition by boat. But during the rise of air war during World War II, outsiders were able to enter Bougainvillean space with far more expedience than before. The violence of helicopters and airplanes was again reinforced during the ten-year conflict in Bougainville. This first installment of the "Habitat" series is filmed mainly from the grounded viewpoint of the artist.

We see Lucy, one of the landowners in the area. Lucy guided Taloi during this trip to Konawiru, showing the damage done to the land. The footage featured in *Habitat I* contains the first comprehensive documentation of the extent of damage incurred through the mine's operation. We return to the aerial view, which features rusted pipes and contaminated liquids alongside seemingly lush greenery. Bougainville's terrain, as well as the prevalence of tectonic activity, made it unrealistic for BCL to construct a dam to collect mine tailings. The company instead decided to direct the tailings toward the island's west side. The repercussions of this deluge of contaminants are visible. What was forest is now swamp.

Habitat, II (2017, 10:40) cycles back to material in *Habitat I*, but expands upon the questions raised and stories shared. Most notable is the contrast between extractive and life-protecting labor. The work is presented on three screens, so we see the aerial and grounded view directly juxtaposed. We also see evidence of Taloi's extensive archival research. Watery renditions of cartographic surveys appear. The sound of an airplane engine replaces that of flowing water, and is intermittently interrupted by what sounds like an underwater signaling device. Bright blue



Figure 12.1 Taloi Havini, *Habitat: Konawiru*, still, 2016
Note: HD single-channel 16:9, HD, colour, sound, 3:43

waterfalls—uneasily, unnaturally beautiful—enter the screens. This shade of blue is far too vibrant, a sign of its extractive origins.

Many shots were created with a camera-equipped drone that Taloi was asked by the community to acquire, in order to document the harm caused by mining.⁴³ From above, we can see the veins in the landscape, connecting and delineating its topography. As the camera focuses on the rusting metal remnants of the mine infrastructure, the soundscape features samples gathered by Taloi at the site. We hear screeching, clanging, and slamming of pieces of this abandoned archive of extractive violence; it is as if the material used to build this infrastructure still holds memories of its own extraction.

We fly above waterways and large indentations in the land left by mining. The stillness of the next shot, featuring three different but adjacent views of land affected by mining, makes clear the slow pace with which the land is healing. This resistance to the legacy of waste produced by copper and gold mining is barely visible given the deep, geological timescale with which it occurs.

Bloody hands and knife gut a fish, in preparation for a meal. Hands swerve rhythmically as a woman named Agata performs alluvial mining—which in this case means the act of sorting minerals with high commodity value from other substances, such as rock, by hand. This is one of the extractive practices that remains, now that industrial mining operations have been shut down. It would be difficult to criticize the community for this, considering the challenges of returning to their pre-mining lifeways in the wake of the mine's closure and conflict's end. From above, we see the demanding physical labor of sweet potato farming. The order of the grid-like field defies the chaotic ruptures that were imposed upon this community for decades. Agata walks across the depleted land, approaching equipment with which she mines. Taloi's non-judgmental approach toward portraying this activity conveys the complexity of the situation. The piece does not show a simple binary of community versus miners, but how the two are at times merged. Agata gazes toward Taloi's camera-equipped drone, as if challenging the viewer to judge her and her community for this small-scale act of extraction. This shot encourages us to consider the importance of scale when considering extractive violence, as well as the ways extraction enters communities, transforms them, and is transformed by them. As Jason W. Moore points out, "Human organizations *are* environment-making processes and projects; in turn the web of life shapes human organization. [...] [S]pecific human organizations—such as capitalism—are revealed as producers and products of the web of life."⁴⁴ Extraction, like capitalism, produces certain ways of living (as well as certain ways of dying). While Agata performs alluvial mining, she and her community continue the practices that made survival possible during the blockade.

The camera retreats higher, further away from Agata as she continues sorting gold from rock. The system of value that places value on gold over rock is imposed, and, as Moore has noted, the transformation of systems of valuation was arguably one of the central signifiers of the onset of what he and others have called the Capitalocene.⁴⁵ The community continues to resist this imposed system of value.

Habitat, III (2018, 10:33) begins with the voice of Kuntamari Crofts, who is from the Nasioi region, saying in the Nasioi language:

Ni ai no oring ni Kai kansi ko. (We are here. We are present. We are here on our land.)

Kansi tana tana pi ma. (Looking after our land.)

Na na pi mang Oh au pima. (We are walking our land, taking care.)⁴⁶

We then see shots of the Bougainville landscape, turning to bright blue flowing contaminated waters. These shots orient the viewer, showing how the delineation between explicitly and subtly affected areas is blurred. We then see the vast expanse of the main mining area; it has been made into a canyon, perforated with the marks of machinery. Selections from archival mining propaganda videos appear, followed by a conversation with community members. A mining representative asks if they are interested in the possibility of a mine on their land, and the answer is a resounding “no.”

A woman wearing a Tuhu gazes into the camera. Additional archival video is juxtaposed with the words of Bougainvillean leader Raphael Bele: “To Bouganvilleans, land is like the skin on the back of your hand. You inherit it, it is your duty to pass it on to your children. You would not expect us to sell our skin, would you?” We see images of the burgeoning resistance in the 1960s and 1970s, then of the massive movement of earth brought about by mining. Most compelling is a shot of a home situated at the edge of the mine. It stands, strong but precarious, a symbol of the tension between life and profit. Soon all four screens are filled with records and statistics related to human rights abuses in Bouganville, data that was recorded by Marilyn Taleo Havini after the family fled to Australia during the war. We then see images of dancing, continuing cultural practices such as weaving, and wearing the customary Tuhu. It seems Taloi wants to ensure viewers do not see her community simply as victims of horrendous human rights abuses, but as people continuing to experience joy and cultural resurgence in the face of this legacy of colonial and extractive violence.

Close up images of skin fill the screens, and we again hear Kuntamari Crofts’ voice: “[...] *Oh noring ... nee oh noring mah*” (We are here. We are present. We will always be here).⁴⁷ The crevices in the skin are reminiscent of those seen across the land. This juxtaposition encourages the viewer to reflect more deeply on Bele’s words regarding the relationship between skin and land, a powerful comparison because of the matrilineal approach to land stewardship. The relationship between body and land in Indigenous communities has been widely discussed, but it becomes even clearer in contexts where land is customarily stewarded by women. Many have discussed the relationship between sexual violence and extraction, and, as is clear in human rights records and community testimonies, rape was a common strategy of war against Bouganvilleans during the conflict. The piece ends with an aerial view from the water’s edge to the land, perhaps the path that the overburden would have to take to return to the site from which it was removed.

Contemporary Sovereignty and the Question of the Mine

By the time this chapter is published, the vote that will decide Bougainville’s future will have occurred. The customary practices and values that saw a resurgence during the conflict remain central to the framework for self-determination envisioned by the community.⁴⁸ However, there has also been an increased interest in potentially re-opening the mine, under Bougainvillean leadership. Familiar narratives related to economic viability and a need for jobs are being waged by mine supporters—arguments that can be easily overturned. As Gordon and Webber point out, with reference to a United Nations research report focused on the Latin America and Caribbean contexts,

[...] the natural resources sector is a poor employment generator. Mining and oil investment, for example, is the lowest job creator out of twelve major industries featured in the ECLAC report, with only 0.5 jobs created per US\$1 million invested.⁴⁹

A move to re-open the mine would defy the history of the movement, and, perhaps, the potential for Bougainville to be not only a model for anti-colonial and environmental justice movements, but also alternatives to capitalism. As Moore suggests,

Popular strategies for liberation will succeed or fail on our capacity to forge a different ontology of nature, humanity, and justice—one that asks not merely how to redistribute wealth, but how to remake our place in nature in a way that promises emancipation for all life.⁵⁰

The movement against the Panguna mine did just that. It is not simply a matter of scaling up the solutions that emerged through this resistance, but of similarly affected communities finding locally grounded solutions relevant to their multitude of contexts. While some might be critical of Bougainville's forthcoming vote on independence from PNG, the independence it seeks has the potential to refigure and subvert the established conditions of statehood.

Conclusions

Taloi's "Habitat" series is a resurgent portrait of Bougainville and Bougainvilleans, as well as a critique of the harmful ways the place and its people have been seen and archived from a colonial perspective. It also looks at the living legacy of the mine on the communities that remain connected to the site. It encourages viewers to critically engage with colonial and extractive legacies within Bougainville and to rethink dominant modes of understanding land, methods of exchange, and collective memory.

Direct action, coupled with contemporary interventions such as those present within Taloi's work, assert a politics of refusing to accommodate the stories, value systems, and actions of the Necrocene. Bougainvilleans under the blockade enacted forms of *laborious activism*—creative, often labor-intensive solutions to the enforced lack of external resources the blockade brought. In addition to creating the conditions for their success, these forms of activism show us that a reality without "cheap nature," easy weapons shipments, and western medicines (and their attendant implications in pharmaceutical dominance) can result in the creation of a multitude of locally centered alternatives.⁵¹ These alternatives draw upon the land, seeking to remember its knowledge in ways often foreclosed through contemporary dominant economic conditions. Through Taloi's work, we can see how Bougainvilleans are still pushing back on the pressure to accommodate western norms of statehood – even while preparing for their vote on independence. Bougainvilleans are also generatively refusing the subjectivities imposed upon them by colonial powers, and instead asserting complicated and creative visions of community-led co-shaping of their collective future.

The longstanding yet still precarious decision not to accommodate colonial and extractive norms (the norms of the Necrocene) is a lesson to itself and other self-determining communities: if you desire another reality, do not accommodate this one. Alongside the specter of the mine, perhaps peace can only be reached without accommodations being made to the framework of capitalism and extractivism. One of the most compelling aspects of this movement is its breadth of prefigurative proposals. As John Jordan and Gavin Grindon state, "More information is not going to motivate us to act, [...] what makes us move is tasting dreams of what could be, stepping into the cracks where another world is coming into view."⁵² Bougainvilleans have already manifested such alternatives. Perhaps the real question is whether or not they will *remain* independent.

Notes

- 1 I am grateful to Taloi Havini for being generous with her time, and trusting me with this work. I also thank Maia Nuku for introducing me to Taloi. Bonnie Etherington, Pat Sims, Maia Nuku, Taloi Havini, Luke Fletcher of Jubilee Australia, and the editors offered feedback on drafts of this text (any errors are my own). Rachel Nelson helped me think through this potential project early on, and encouraged me to pursue it.
- 2 Marilyn Taleo Havini, "Introduction," in *As Mothers of the Land: The Birth of the Bougainville Women for Peace and Freedom*, eds Josephine Tankunani Sirivi and Marilyn Taleo Havini (Canberra: Pandanus Books, 2004), xvii–xviii; Eugene Ogan, "The Bougainville Conflict: Perspectives from Nasioi," *State Society and Governance in Melanesia* (Canberra: ANU Press, 1999).
- 3 Rosemarie Gillespie, "Ecocide, Industrial Chemical Contamination, and the Corporate Profit Imperative: The Case of Bougainville," *Social Justice* 23(4): 66, Environmental Victims (Winter 1996): 114.
- 4 Kristian Lasslett, *State Crime on the Margins of Empire: Rio Tinto, the War on Bougainville and Resistance to Mining* (London: Pluto Press, 2014), 44.
- 5 Copper in its unrefined form is a vibrant blue. The land and waterways in the Panguna Mine region are streaked with this harmful, yet strangely beautiful substance.
- 6 Lasslett, *State Crime*, 44.
- 7 Lasslett, *State Crime*.
- 8 This direct action campaign gained strength following a change in leadership of the Panguna Landowners Association in 1987. The former association leadership advocated for a higher share of mining profits, and was reportedly deeply influenced by PNG and BCL representatives. The new leadership was more representative of the general Bougainvillean consensus regarding the mine, and sought to shut it down.
- 9 Josephine Tankunani Sirivi, "Life in the Jungle During the Blockade," in Sirivi and Havini, *As Mothers of the Land*, 35.
- 10 Taloi Havini, interview with the author, April 11–12, 2019.
- 11 See *The Coconut Revolution*, directed by Dom Rotheroe (United Kingdom: Stampede Films, 2001).
- 12 Justin McBrien, "Accumulating Extinction: Planetary Catastrophism in the Necrocene," in *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism*, ed. Jason W. Moore (Oakland: PM Press, 2016), 116.
- 13 When using the term "generative refusal," I build upon the work of Audra Simpson, "Ethnographic Refusal: Indigeneity, 'Voice' and Colonial Citizenship," *Junctures: The Journal for Thematic Dialogue*, 9 (2007): 67–80; Audra Simpson, *Mohawk Interruptus: Political Life Across the Borders of Settler States* (Durham: Duke University Press, 2014); Leanne Betasamosake Simpson, "Indigenous Resurgent Mobilization," April 9, 2018, <http://blogs.law.columbia.edu/uprising/1313/leanne-betasamosake-simpson-indigenous-resurgent-mobilization/>; Carole McGranahan, "Refusal and the Gift of Citizenship," *Cultural Anthropology*, 31(3) (2016): 334–341; Glen Sean Coulthard, *Red Skin White Masks. Rejecting the Colonial Politics of Recognition* (Minneapolis: University of Minnesota Press, 2014).
- 14 Lasslett, *State Crime*, 12: 29–30.
- 15 There is also a history of Rio Tinto negatively affecting communities and environments in PNG, adding to the complexity of this legacy of colonial extraction.
- 16 Germany, then Australia, then PNG.
- 17 Ruth Saovana-Spriggs, "Bougainville Women's Role in Conflict Resolution in the Bougainville Peace Process," in *A Kind of Mending: Restorative Justice in the Pacific Islands*, eds Sinclair Dinnen, Anita Jowitt, Tess Newton (Canberra: ANU Press, 2010), 204.
- 18 Thomas Koronaro, National Coordinator of Chiefs of Bougainville, "Basic Ideas Behind the Bougainville Revolution" (November 1992), cited in Gillespie, "Ecocide," 111–112.
- 19 See, for instance: Jubilee Australia, *Voices of Bougainville. Nikana Kangsi, Nikana Dong Damana (Our Land, Our Future)* (Sydney: Jubilee Australia Research Centre, 2014), 22; Sirivi and Havini, *As Mothers of the Land*.
- 20 Gillespie, "Ecocide," 116.
- 21 Christine Leonard, "Home is Where the Heart Is," <https://pngaa.org/site/blog/article/home-is-where-the-heart-is-by-christine-leonard/>.
- 22 Applied Geology Associates Limited, Environmental, Socio-economic and Public Health Review of Bougainville Copper Mine, Panguna (Auckland, NZ: 1989): Appendix II. Cited in Lasslett, *State Crime*, 70.
- 23 Jeffery R. Webber and Todd Gordon, *Blood of Extraction: Canadian Imperialism in Latin America* (Winnipeg: Fernwood Books, 2016), 19.

- 24 See, for instance, Alleen Brown, "Trump Administration Asks Congress to Make Disrupting Pipeline Construction a Crime Punishable by 20 Years in Prison," *The Intercept*, June 4, 2019, <https://theintercept.com/2019/06/05/pipeline-protests-proposed-legislation-phmsa-alec/>; Susie Cagle, "'Protesters as terrorists': growing number of states turn anti-pipeline activism into a crime," *The Guardian*, July 8, 2019, www.theguardian.com/environment/2019/jul/08/wave-of-new-laws-aim-to-stifle-anti-pipeline-protests-activists-say.
- 25 Gillespie, "Ecocide," 112; Havini, "Introduction," xvii.
- 26 Gillespie, "Ecocide," 111.
- 27 Daphne Zale, "Human Rights Abuses and Survival Behind the Blockade," in *As Mothers of the Land*, 49; Jubilee Australia, *Voices of Bougainville*, 22.
- 28 Lasslett, *State Crime*, 122–123.
- 29 The mine played a significant role in the PNG's economy:
According to CRA figures, during the mine's life, the operation generated a total of K1.7 billion revenue (about US\$2 billion), of which 32.8 per cent went to non-government shareholders, 61.5 per cent went to the PNG national government, 4.3 per cent went to the North Solomons provincial government and 1.4 per cent went to landholders [...].
(Lasslett, *State Crime*, 45)
- See also Lasslett, *State Crime*, 101, 114, 117
- 30 Lasslett, *State Crime*, 113.
- 31 Linda Tuhiwai Smith and Eve Tuck, "Decolonizing Methodologies," *The Graduate Center, CUNY*, <https://youtu.be/rIZXQC27tvq>; Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples* (London: Zed Books, 1999).
- 32 Josephine Tankunani Sirivi, "Life in the Jungle during the Blockade," in *As Mothers of the Land*, 38. Care camps were said by the PNG to be places where locals could live and remain safe from the threats of living in a conflict zone, while being provided with basic necessities. The reality was much worse. Those who lived at care camps suffered from abuse, food shortages, and drastic limitations on their movements (see Sr Ruby Miringka, "Community Developments and BOCBIHP" in Sirivi and Havini, *As Mothers of the Land*, 102; Daphne Zale, "Human Rights Abuses and Survival behind the Blockade," 48).
- 33 Sirivi, "Life in the Jungle," 38.
- 34 Marilyn Taleo Havini, "Women in Community During the Blockade," in Sirivi and Havini, *As Mothers of the Land*, 70–71; Josephine Tankunani Sirivi, "Building a Jungle Society" in Sirivi and Havini, *As Mothers of the Land*, 73–76; Sr Ruby Miringka, "Community Developments and BOCBIHP" in Sirivi and Havini, *As Mothers of the Land*, 102–105.
- 35 Marilyn Taleo Havini, "Women in Community During the Blockade," in Sirivi and Havini, *As Mothers of the Land*, 69.
- 36 Daphne Zale, "Human Rights Abuses and Survival Behind the Blockade," in Sirivi and Havini, *As Mothers of the Land*, 50.
- 37 Lasslett, *State Crime*, 191.
- 38 Marilyn Taleo Havini, "Journey into Exile," in Sirivi and Havini, *As Mothers of the Land*, 23.
- 39 Havini, "Journey into Exile," 24.
- 40 See Marilyn Taleo Havini, *Compilation of human rights abuses against the people of Bougainville 1989–1995* (Erskineville: Bougainville Freedom Movement, 1995).
- 41 Taloi Havini, "Habitat, 2018," www.taloihavini.com/habitat-2018.
- 42 Taloi Havini, interview with the author, May 19, 2019.
- 43 Havini, interview.
- 44 Jason W. Moore, "The Rise of Cheap Nature," in Jason W. Moore, ed. *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism* (Oakland: PM Press, 2016), 79.
- 45 Moore, "The Rise of Cheap Nature," 98.
- 46 Taloi Havini, personal communication, August 12, 2019.
- 47 Taloi Havini, interview with the author, May 19, 2019; personal communication, August 12, 2019.
- 48 See the Summary of the BWPF Vision in Josephine Tankunani Sirivi "Reconciliation and Renewing the Vision," in Sirivi and Havini, *As Mothers of the Land*, 178–179. See also, THE CONSTITUTION OF THE AUTONOMOUS REGION OF BOUGAINVILLE (2004).
- 49 Webber and Gordon, *Blood of Extraction*, 9.
- 50 Moore, "The Rise of Cheap Nature," 114.
- 51 Moore, "The Rise of Cheap Nature," 78–115.
- 52 Laboratory of Insurrectionary Imagination, *A User's Guide to (Demanding) the Impossible* (London: Minor Compositions, 2011), 25.

13

MULTISPECIES CINEMA IN WRETCHED WATERS

The Slow Violence of the Rio Doce Disaster

Isabelle Carbonell

Before reading the following chapter, please visit www.theriverrunsred.com to experience first-hand the interactive film project which forms the basis for this writing.

Meandering givers of life, arteries of the earth, rivers bridge land and water, and are crucial for life to flourish. Yet so many rivers have become wretched waters: sites of contamination with extensive mining waste, oil refineries, pulp mills, hydroelectric dams, nuclear power plants, radioactive decay, pesticides, fertilizers, flame retardants, plasticizers, and other environmental devastation that is the result of centuries of “watershed colonialism”¹ and other anthropogenic activity. The phrase “wretched waters” echoes Franz Fanon’s groundbreaking book *The Wretched of the Earth* which called upon the oppressed—the wretched of the Earth—to collectively revolt against imperialism and colonialism and create a new world. I follow Jennifer Wenzel, Ros Gray, and Shela Sheikh’s pivot to reread and extend Fanon’s ideas to the more-than-human: the Earth, too, is wretched, and “in order to fully grasp the violence of colonialism upon its subjects... it is necessary to also address the violence carried out upon the landscape and environment.”² In these times of deep ecological crisis and wretched waters, nonfiction filmmaking allows a non-linguistic attunement to the world that opens new speculative possibilities for creating multiple future worlds; and multiple futures *must* be attended to in the dangerous exterminism of the singular universe of the so-called Anthropocene – a term I will disambiguate further on. A multispecies cinema, one attentive to slow violence,³ requires a methodology that is plural, polyvocal, multi-linear, world-making, future-making; it calls for acts of speculation which opens the imagination to relearn different ways to see, to hear, to know, to feel and to understand the long-now of our ecological crises. New speculative sensorial methodologies, like those used in the river projects *Testimonios Futuros* (2007), *Listening to the Mississippi* (2015/2019) and *The River Runs Red* (2018), are needed to avoid human exceptionalism, decolonize the Anthropocene, and practice a “pluriverse,” or a “world of many worlds.”⁴ A pluriverse acknowledges that multiple ontologies coexist, and that they are negotiating ongoingness in heterogeneity. In this pluriverse, multispecies cinema addresses complex systems and lifeworlds that contain historical junctures and multiple entanglements between humans, Aquans (defined below), and more-than-humans. This chapter will span: the importance to think with rivers, multispecies cinema and theory, several river-based sound and film projects, and end with a thorough review of the Rio Doce disaster and the methods behind my interactive film project *The River Runs Red*.

Before we begin: Aquans. No doubt, the category of “human” is fraught, representing a complex, differentiated sociopolitical and economic construction, not to mention the term does not acknowledge the pluriverse within each of our bodies—more accurately described as “holobionts,”⁵ or an assemblage of a host and the many organisms living in or around it. To take stock of the violence of colonial destruction that has resulted in oppressed, subaltern, less-than-human, and Otherized perspectives and persons, various terms have been used, such as “sacrificial people”⁶ or the “nobodies,”⁷ or even the sci-fi “Terrans.”⁸ In the spirit of this riverine chapter, I will use “Aquans,” meaning otherized persons from our mostly water planet. In turn, “more-than-human” is defined to include not only humans and Aquans, but also whole ecosystems, landscapes, mammals, amphibians, plants, water, viruses, stone like quartz, and even quarks (Figure 13.1).

On November 5, 2015, an iron-ore tailings dam on the *Rio Doce*, “the sweet river” in the Brazilian state of Minas Gerais, collapsed and released 60 million cubic meters of chemical-laden sludge. The toxic 10-foot tidal wave wiped away two towns, killed 19 people, and continued downstream for 800 km, reaching the Atlantic Ocean 17 days later. The mud tailings destroyed and remapped the entire Rio Doce watershed, and it is not only Brazil’s, but the world’s worst tailings disaster on record. The word “disaster” here is used to denote both a sudden event, like the Fundão Dam collapse on the Rio Doce, but also the slower, invisible harm which both precedes and follows the moment of the dam rupture. Rob Nixon describes this type of long-term, non-spectacular, far-reaching ecological harm as “slow violence.”⁹ *The River Runs Red* traces more-than-human histories following this disaster in the so-called Anthropocene. Though “Anthropocene” or the “Age of Man” has been proposed as a new epoch to describe today’s various global environmental crises, other scholars have proposed alternative names, including “Capitalocene”¹⁰ and “Chthulucene”¹¹ as correctives. The shift avoids the simplistic, universalizing discourse of “Anthropocene,” which assigns the culpability for global environmental crisis equally to all humans as an undifferentiated whole. Instead, “Capitalocene” allocates responsibility to capitalism, a complex socioeconomic, political system of power and profit which has been,



Figure 13.1 Isabelle Carbonell and Lucas Bonetti, *Drone of Bento Rodrigues with Map*, drone footage taken at the origin of the Rio Doce disaster in Bento Rodrigues, Minas Gerais, Brazil, overlaid with a cutout of the entire length of the Rio Doce, 2016

and continues to, affect global environmental change. “Chthulucene” pivots by acknowledging that the world is as yet unfinished, “made up of ongoing multispecies stories and practices of becoming-with in times that remain at stake.”¹² Multispecies cinema takes up this call to ongoingness, where “chthonic ones are not confined to a vanished past.”¹³ Rivers like the Rio Doce are fractal connectors, tying together entire continents, civilizations past and present, human with non-human, sediments with atoms. Rivers launch us into a different type of world-making practice, where the assemblage of a lotic ecosystem “generates not a singular knowledge of the world but a world multiple,”¹⁴ and as such, the Rio Doce is a prime site to investigate representations of slow violence in the Chthulucene.

In proposing world-making as a critical framework for exploring new potentials for documentary praxis, I draw from Donna Haraway, Marisol De la Cadena, Anna Tsing, and other scholars who argue for a pluriverse against a single universal reality, where instead “worlds are worlded—they are socially and materially crafted in multiple forms in everyday practices” where these “practices do not converge to a singular knowledge of the world, but generate a world multiple—a world that is more than one integrated whole, yet less than many fragmented parts.”¹⁵ If we take seriously that a landscape, or a waterscape, is an assemblage of more-than-human relations, an embodied historical accretion, then Heather Swanson argues that landscapes themselves are *multiple* because they emerge from multiple projects. Indeed, “can nonhumans make worlds?”¹⁶ If so, can we think “with” and not “about” rivers, as rivers lead us to multiple ways of knowing? Indeed, what if nonfiction film attempted to “think with, not about” more-than-humans through new investments in sensorial, embodied, and speculative practices?

As stated in the introduction, multispecies cinema is a non-linguistic attunement with more-than-human worlds which explores the interrelationships and entanglements of an ecosystem. This cinema comes in part out of experiments such as the early silent films of the innovative marine wildlife filmmaking team Jean Painlevé and Geneviève Hamon from 1928 to 1930, which featured a variety of marine species and their habitats. Just a few short years later came the invention of synchronized sound, and the shift from silent films to “talkies” featuring voiceovers and music produced a tendency towards anthropomorphism, much to the lament of Painlevé and Hamon.¹⁷ Of course, later advances in portable sound technology allowed for greater flexibility and experimentation in field recordings. For example, Chris Marker’s *Forest of Bliss* (1986) is an intimate, handheld film focusing on both life and death, human/Aquan/more-than-human activities around the Ganges river in India with no voiceover or dialogue. This kind of more-than-human cinematic exploration is at times called “sensory ethnography,” a mode of embodied, visceral filmmaking where meaning does not only emerge from language. This mode is exemplified in part by more recent films such as *Sweetgrass* (2009), *Single Stream* (2014), and *The Iron Ministry* (2014). However many of these works still operate within the salvage paradigm of capturing disappearing worlds,¹⁸ and the methods employed sometimes reprise earlier methodologies from observational films such as the aforementioned *Forest of Bliss*, or experimental cinema such as Stan Brakhage’s *Mothlight* (1963), Chris Welsby’s *Sky Light* (1988), or Andrej Zdravic’s *Riverglass* (1997) (Figure 13.2).

A turn towards embodied cinema—where bodies are both humans/Aquans and more-than-human—arrived with advancements in camera technology in the form of small, waterproof, inexpensive and portable cameras, often custom-made. Bill Easterson’s *Animal Cams* (1998–2008) is one such example, where he attempted to gather the “point of view” of many different more-than-humans: a bison, a duck, an alligator, a pitcher plant, and a tumbleweed, to name a few. Pooja Rangan calls his cinema a “practice of surrender,”¹⁹ as Easterson lets go of controlling the camera, the animal, or the frame. Though giving more-than-humans a “point of view” is anthropocentric in aim, the filmic results are not always immediately legible to a human/Aquan



Figure 13.2 Isabelle Carbonell, *Paracatu De Baixo*, photo taken on the top floor of Paracatu de Baixo's only school, the second town to be hit by the tidal mud wave from the Rio Doce disaster, 2016

subject, and this disorientation produces what Rangan argues is a Marksian haptic—or visually tactile—image. Haptic images play upon a type of synesthesia, and are an “immanent way of being in the world, whereby the subject comes into being not through abstraction from the world but compassionate involvement in it.”²⁰ This is taken to new heights in *Leviathan* (2012) with GoPro cameras, a film focusing on the ecosystem of a fishing trawler through several perspectives: the sea, the fish, the boat, and the fishermen.

Multispecies cinema builds on these prior sensorial, embodied techniques, yet also asks if the senses are *emplaced*²¹ in a larger ecology interrelated with intersecting worlds of humans, Aquans, and more-than-humans. One such example is Barbara Fluxa's *Testimonios Futuros* (2007), a sensorial and emplaced exploration of the waste of the river Nalón in Northern Spain, once deeply contaminated by coal mining. Fluxa refocuses agency within the river's currents by launching a camera and hydrophone in a waterproof container, suspended by two plastic bottles and a flotation device, to float down the Nalón river for eight kilometers over three days until it reached the ocean. The apparatus included materials that are both the object and material of the very waste she wanted to document: plastic. Sometimes the bottle-supported-camera faced up, sometimes sideways, sometimes down; it pitched, rolled, flowed, bobbed, flipped; its orientation, rhythm, and movement were not of a human/Aquan gaze. The camera saw and/or heard forests, rocks on the riverbed, tree roots, bubbles, fish, autumn leaves, the surface from below, sometimes half-below and half-above, a barge passing, train tracks, vegetation, seagulls, ducks, abandoned boats and port traffic, before it eventually opened up to the sea. The title of the piece suggests a prophecy: perhaps this bottle will still be floating along, or buried, as a piece of “future testimony” against the hubris of extractive capitalism and human exceptionalism.

In *Listening to the Mississippi* (2015/2019) Monica Haller, in collaboration with Sebastian Müllauer, recorded sounds while traveling down the Mississippi river. The project arises from a

previous work called *Can You Listen to the Same River Twice?* (2013) where a hydrophone was suspended underwater in the Mississippi, recording a live feed of river-produced sounds, which triggered pre-recorded samples then mixed live as a composition. Since then, the project has morphed in approach, content, and collaboration. I was fortunate to experience *Listening to the Mississippi* at the end of a paddling research trip called “The Anthropocene River Journey” on the Mississippi; after a few weeks on the river between Jackson to New Orleans, my own ears had already attuned themselves under and above-water. I sat down with Haller on the river banks to interview her about the project, and while we watched the river pass by she reminded me, “there are multiple listenings, and multiple rivers.” The composition has no clear beginning and end, a circular soundscape. It features train horns, barge engines, fish croaks, silt rushing by in a crackle. Sometimes it emerges above ground to listen to bullfrogs, cicadas, a splash, waves hitting shore. It combines nondiegetic elements at times such as radio transmissions, a female voice singing, whispers, sometimes over a bed of violin strings mimicking cicadas interrupted by a splash. This iteration of *Listening to the Mississippi* was composed by Michi Wiancko and Judd Greenstein, with the intention to take a listener on an “imaginative journey down the river.”²² The cyclic nature of the composition considers various temporalities, ecologies, and histories: one recording site was just north of Cape Girardeau, MO, where nearly 12,000 Cherokees were forced to cross in deadly winter conditions following the Indian Removal Act of 1830. The composition features localized sounds of the river but also silence, a gap; much like the oil leaking from an uncapped well in Bayou Barataria, the absence of sound is just as important in listening to the river. *Listening to the Mississippi*, as Haller describes, is a “perceptual adjustment” to the river, and creates a practice of emplaced attunement to histories and futures of both humans and Aquans, but also beyond-the-human (Figure 13.3).

My own critical practice during my fieldwork in Brazil builds on these and other precedents,²³ documenting the long aftermath of the Rio Doce disaster. *The River Runs Red* (2018) is an interactive documentary with an open-access interface making visible and audible the slow violence of the Rio Doce disaster through nonfiction film and sound. Attempting to center the river in the project is a step towards avoiding human exceptionalism, bringing to the fore



Figure 13.3 Isabelle Carbonell, *Walking into Mar Menor*, 2020

multispecies entanglements, and highlighting the interconnections within an ecosystem. Before discussing the project, I will begin with the history which led to the Rio Doce disaster.

The Brazilian state of Minas Gerais translates as “General Mines,” and though there are some different etymological interpretations, the name is an accurate indicator of the region’s extractive, colonial history. In 1693, gold was unfortunately discovered by Portuguese colonists, and a gold rush ensued.²⁴ Though more than a hundred indigenous groups inhabited the state of Minas Gerais at the time, a systematic regime of kidnapping and enslavement by bands of Portuguese enslavers drastically reduced their numbers.²⁵ Only five major groups remain today, and I stop to name them here as a small but important practice of recognition: the Xakriabá, the Krenak, the Maxakalis, the Pataxós, and the Pankararus. The Krenak inhabit a stretch of the Rio Doce, and were greatly affected by the disaster. I will return to them later on.

The Brazilian gold rush lasted two centuries, provoking massive immigration from Europe and a large slave trade, with at least half a million slaves imported from Africa to work in the mines. Just 40 km from the Fundão Dam lies the city of Ouro Preto or “black gold,” which was once the capital of Minas Gerais during a part of the gold rush. With new technological developments, mining activities expanded to a variety of ores such as platinum, diamonds, palladium, silver, lead, zinc, aluminum, and uranium. The region is so rich in iron that it is called the “Quadrilátero Ferrífero” or “Iron Quadrangle,” hosting one of the largest overall concentrations of iron-ore deposits in the world. Rio Doce’s rich iron reserves came into the spotlight in the twentieth century, and in 1942 the Brazilian government, with the backing of the United States and Great Britain, created the *Companhia Vale do Rio Doce* (Vale) to extract and export iron ore.²⁶ Vale is the largest producer of iron ore in the world besides running nine hydroelectric plants, and a large network of railroads, ships, and ports to transport its products (Figure 13.4).

The Rio Doce disaster stands on the pillars of this history. Samarco Mineracao S.A., the company responsible for the disaster, is co-owned by Vale and the Anglo-Australian BHP Billiton, the latter of which is the world’s largest mining company. The Fundão Dam which collapsed had been holding tailings from the Germano mine, an open-pit iron-ore operation. Raw iron ore



Figure 13.4 Isabelle Carbonell, *A Mule's POV*, an adapted POV GoPro mount left on a mule that drinks regularly from contaminated Rio Doce waters, Governador Valadares, Minas Gerais, Brazil, 2016

needs to be purified for use, and the resulting waste from this process is called “tailings,” which resembles a type of thick, chemical-laden sludge of fine particles which are highly toxic. Tailings are a permanent waste product, and tailings dams are meant to be the permanent “solution”: structures built to withstand “forever,”²⁷ provided there is constant monitoring and upkeep,²⁸ even after a mine or a mining company dissolves. Given the volatility of extractive capitalism, the only surely permanent part of that situation is the waste itself, not the mitigation of it.

A leaked memo shows that Samarco had been warned of a potential collapse of the Fundão Dam in 2013, two years before the disaster, but took no measures to address the problem, not even to create a basic sound alarm to warn local inhabitants in case of an emergency.²⁹ Samarco’s track record before the Rio Doce disaster reveals that, between the years of 1996 and 2015, they had been fined at least 18 times for environmental contamination.³⁰ Samarco denied most of them, and these fines went largely unpaid by delaying tactics through lawsuits, as after five years the statute of limitations expires and the lawsuit is shelved.³¹

The Fundão Dam was the newest of the three tailings dams for the Germano mine. The key aspect to understand about the Fundão Dam disaster is that every stage of its development from licensing to disaster is in direct relation to the fluctuation in commodity prices of iron ore extraction during the commodities’ boom of 2002–2011, and post-boom, since 2012.³² In 2007 the preliminary and installation licenses were granted; in 2008, Samarco was granted their operating license, the same year iron ore prices reached their peak. In 2013, with iron prices plummeting, Samarco sought to increase the area of tailings disposal and merge neighboring dams to reduce costs despite the operation being more destructive than building a new dam. Dams collapsing were a known issue, with six examples in the state of Minas Gerais alone since 1986,³³ never mind numerous other disasters around the world. This disregard to actual, and potential, risk matches the post-boom period of commodity prices dropping.

Samarco labels the Rio Doce disaster an “accident,”³⁴ while fewer than four years later, on January 25, 2019, a repeat disaster occurred less than 60 km in the town of Brumadinho.³⁵ This new disaster, while “only” releasing 12 million m³ of tailings, drowned nearly 300 people in the mud tidal wave, making it the world’s worst tailings tragedy in terms of human loss.³⁶ These are two grim world records, both of which irreversibly poisoned two entire watersheds. They both occurred because profits rein king; this could be called a “planned disaster,” while many have more plainly called it a crime.³⁷

Halfway down the Rio Doce is indigenous Krenak land. I met Lucia, and asked her whether Samarco was still delivering water like they promised. Lucia was silent a long time before speaking, then explained they bring some, but none for the cattle, and none for the land, so they cannot live as they used to. Then she sang a song in Krenakan, which she translated:

The song speaks of the good river, with fresh water, with good food, where we drink, where we bathe. The water never killed us. Nowadays, how are you going to sing that to your child? ... Lots of people say ‘these Indians just want money’ but no money can pay for what they took from us. No amount could pay for it... The river is our lives, our mother, our father. The day that dam burst they destroyed our lives.

The Krenak, an Aquan, have already gone through several massive brutal displacements in the long, and still ongoing, suppression of indigenous people in Brazil. However, the river has never been a death they’ve had to mourn, and yet now this is not just one but a “double death,” when “cascades of death ... curtail the future and unmake the living presence of the past.”³⁸ Put otherwise, a double death is when a damaged ecosystem loses its ability for resilience and renewal: when the fish are all gone, and the river has been buried under sediment and poisoned with

toxic tailings, preventing healthy regeneration. Lucia may have despaired the day I spoke to her, yet the Krenak have no choice but to invent new futures in the face of a double death.

The filmmaking team on the ground was made up of Lucas Bonetti, Antonio Peluso, Lucas Assis, and I, with Andres Camacho and Ramon Luz joining later for the website implementation. We were at times split in two, with Lucas taking the lead on more traditional documentary coverage, interviewing affected residents for their testimony, whereas I made experimental filmic or sonic interventions as I encountered new assemblages around the river of humans or Aquans, animals, landscapes, and other more-than-humans. For example, I made daily durational recordings of the river with a hydrophone, an underwater microphone. These recordings, made nine months after the disaster, revealed zones of complete silence that should have been teeming with fish, the silence being the loudest evidence of the far-reaching aftermath of the chemical-laden sediments.

Echoing Bill Easterson's *Animal Cams*, we used portable cameras to strap to a dog who wandered through Paracatu de Baixo, the second town buried in the mud tidal wave. She wanders through the ruins, wary of other dogs, searching for something we never discover. Though the destroyed buildings she trots by draw the eye, the dog pays attention to the ground, different smells, and what remaining life she notices (a man walking by, a lone cow, bees by a bush). She does not enter buildings and sticks to the road, perhaps an echo of previous lifeways; thirsty, she laps water at the edge of the river.

Just north of the small town of Bento Rodrigues, ground zero of the dam failure, sat several massive pools of water holding a concentrated amount of tailings. The town is often photographed for the story of disaster plainly written on its walls: a red line meeting white, ten feet high. This story is repeated on the light grey bark of the trees on the banks; and again in the color of these pools, a bright orange depth. Placing a camera under the water found only stillness, every rock or grass covered by a layer of orange silt at least an inch thick. Scraping at the silt with a stick created a suspension which lasted hours, making visible the temporal nature of the turbidity; the same silt suffocated all the fish at the onset of the disaster. In Regência, where the river connects with the Atlantic Ocean, we left a camera at the break. Waves crash into the device with a violent force, only to recede with the same suddenness, burying the camera in sand with each successive stroke. This sand turned black in patches, evidence of ongoing sediment deposition from the mouth of the river. Each of these examples is an attempt at Rangan's cinema of "surrender," where we purposefully let go of control over the frame, with only the barest amount of editing afterwards, as an attempt to deanthropocentrize the narratives of the river, a non-linguistic attunement with the more-than-human.

It took two years and many iterations for us to arrive at a working interface. *The River Runs Red* is a constellation of films arranged in a poetic multilinear dialectic. Methodologically, taking a multilinear narrative approach to documenting a disaster helps to undo the myth of one unifying story, and instead allows for a pluriverse of multiple ideas, narratives, perspectives to exist at the same time. To this end, instead of creating a single film, the project is made up of 43 short films. The interface presents three major paths to choose from, and each film proposes a dialectic between two opposing concepts, ideas, words or worlds. Each new film is the synthesis of this dialectic, and, at the end of the short film, a new set of word choices appear, further opening up the possible paths. There are many possible combinations of the material, and a viewer may never watch all 43 films/dialectics; but, each time they revisit, they will experience a new set of films, and gain something new from the previous journey. With these, and other methodologies employed, *The River Runs Red* tries to reveal other perspectives, ontologies, and temporalities, while attending to a multispecies multilinear narrative of the Rio Doce. In short, the project

attempts a non-conclusive portrait of an ecosystem and tries to trace how the river and Aquans are learning to live with one another in what futures are possible given the irreversible present.

How can we get beyond the end of Rio Doce? How can we “stay with the trouble”?³⁹ Joseph Masco argues that when the atomic bomb was invented, the possibility of instantaneous total death from nuclear war caused a systemic shift in thinking in America that changed our ability to define catastrophe and the apocalypse, such that we are no longer even able to configure or pay attention to a slower crisis, no matter the evidence at hand.⁴⁰ Rio Doce has this same quality: a spectacular sudden event of total death is seen as the ultimate crisis, versus the slower, long-term effects. To learn how to perceive slow violence, a new attunement is needed. This was the lodestar for *The River Runs Red*: using multispecies cinema, I centered the river in the approach, the questions, the filmmaking methods. What worlds existed underwater, aboveground and everything in between? How could these river-worlds survive their double death, and what futures could they imagine? Centering the river celebrates the possibility for ongoingness, to stay with the trouble of figuring out how Rio Doce, and other affected rivers, can survive beyond the end of the world.

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PART III

Sensing Climates

When we *sense* the climate, we *produce* the climate as an object of attention, research, and representation, all of which determine in part our *relation to* that knowledge, and, by extension, the subject *of* that knowledge. To sense—to feel, perceive, detect, apprehend, grasp with the senses—then, is not purely passive, or reflexive, but also active, involving agency, co-relation, and even co-production. Modes and sources of sensing, encompassing everything from the biological and psychological to the organic and mechanical, are themselves plural and shifting. They comprise human and more-than-human sensory capacities—from photography and remote sensing satellites to phytoplankton, stone, and moss—defined within and through divergent natural systems, cultural practices, Indigenous traditional ecological knowledge, scientific methodologies, and developing technologies. It follows that, owing to the multiple ways of sensing, climates as objects of discourse are equally multiple. Insofar as subjects are themselves dependent on climates, they too are co-produced in the very act of sensing.

A number of the essays in this section explore the human as it interfaces with climate change—in ways bodily, sensorially, mentally, emotionally, and socially. It's worthwhile to recall the original meaning of the word “aesthetics” (from the Greek, meaning to perceive by the senses or by the mind, and to feel), which is apt, for it flags the relevance of aesthetic practices in sensitizing us, or making us more sensitive, to the world around us (invoking the opposite too, of the anesthetic, or in medical terms, anesthesia: without sensation). The challenges of calibrating climate change's current and impending impacts with inherited tools of perception and processing come up repeatedly. Cognitive dissonance is pervasive, evident in the pronounced disconnect between peoples' increasing sense of the seriousness of climate disruption and their simultaneous failure to enact necessary measures to address it, whether in day-to-day actions, policymaking, or political organizing. Climate-related anxiety and grief are growing emotional phenomena that mark the difficulty of reconciling an emergent present with an arguably less volatile and precarious recent past (with the explicit understanding that experiences of both past and present are highly differentiated, anything but uniform or universal). This may include not only the challenging affects of future-loss (resulting from anticipated species extinction and environmental destruction), but also the emotional impact arising from the transformation of cultural traditions and habits.

Expanding our comprehension of what climate sensing means (including at its boundaries), the environmental humanities scholar Stephanie LeMenager has evocatively dubbed the term

“petromelancholia” to describe the feeling of hitting a limit and needing to move on from familiar routines, or, more specifically: “the grieving of conventional oil resources and the pleasures they sustained,” pleasures obviously afforded to some more than, or even at the expense of, others.¹ Dissonance also stems from rapidly changing landscapes and ecosystems, which are tricky or impossible to read, given ever-fewer stable reference points. In the 2010 Inuit-produced documentary film, *Inuit Knowledge and Climate Change*, for example, community members note the increasing difficulty, owing to intensifying climate transformation, of predicting incoming weather patterns in the form of snow drifts and seasonal temperatures, something they have done reliably since time immemorial.² Flora and fauna also exhibit signs of disorientation and stress (and, sometimes, ingenuity and resilience) relative to shifting ecological and climatic baselines; indeed, biologists often study “indicator species” as harbingers, approaching them as acute sensors of changes afoot.

framings of climate change, including their respective sensing paradigms, are clearly differentiated within and between the sciences and the humanities—the latter understood here to comprise a range of disciplines, including those actively questioning the “human” as a privileged or even defensible category owing to its multispecies biological reality or to historical and ongoing practices of social exclusion. Earth science commonly understands climate as referring to the averaging of weather (including but not limited to temperature, precipitation, and wind) over a period of time, ranging from months to thousands or millions of years.³ By contrast, refusing to bracket the natural from the cultural, the environmental humanities emphasizes that “the climate crisis is as much a social as a biophysical challenge,” owing to the fact that social relationships, cultural beliefs, and political modalities inform our collective approach to and understanding of climate in the first place.⁴ In fact, generations of scholars have stressed “that while nature is a distinct ontological domain, it has become inextricably hybridized with culture and technology and increasingly produced by our knowledge,” knowledge marked by an “epistemological claim that the environment”—and therefore also the climate—“is always already cultural since we can only know it through meaning-making practices that are inherently cultural.”⁵ This makes climate sensing all the more complex. In some ways bridging the biophysical with the sociopolitical, Anthropocene research defines the current geological epoch as one in which human and natural sciences have become irreducible, in part because the natural and the cultural can no longer be strictly opposed.⁶ Going still further, some social scientists argue that nature—and by extension its climate—is a self-differing site of divergence and becoming, the location of onto-epistemological divisions premised upon distinct, and multispecies, perspectival approaches, best understood as “multi-natural.”⁷ As such, the category of “climate” could not be more complicated and expansive, just as sensing modalities and their subjects are diverse and extensive; indeed each is understood and produced with and through the other.

Climate sensing has also increasingly become an advanced technological practice. With the development of computerization, satellite remote sensing, Big Data, and distributive global networks, ecology has mutated from a largely situated, field-based science to an informational one, wherein the Earth, according to Jennifer Gabrys (an essay by whom appears in the following section), has “materialized as an object of management and programmability.”⁸ Sensor-based monitoring systems define innovative “techno-geographies”—recalling what Félix Guattari once termed a new “age of planetary computerization,” comprised of a “polyphony of machine voices along with human voices, with databanks, artificial intelligence, etc.,” which is now part of our present.⁹ Linking natural, technological, and social systems, increasingly ubiquitous sensors—at once biological, inanimate, and cybernetic—gather massive amounts of data about animals, plants, people, inanimate objects, and ecosystems, as well as define new Earth-scaled objects of study by monitoring the planet’s magnetic field, radiation belt, and atmospheric

carbon levels. These sensors provide expanded ways to track environmental change, atmospheric transformation, and patterns of deforestation, landfill growth, and plastic accumulation.

As climate further blurs with the sociopolitical, especially in relation to cybernetic and algorithmic systems, social sensors become increasingly integral to security, consumer, and governance systems. Surveillance biopolitics and facial recognition software produce and analyze categories of demographic flows, linked to security protocols, border enforcement, and structural racism, but also generate and encode social biases in their pattern-recognition sensors and software.¹⁰ While it may seem a stretch to understand climate in relation to racial profiling, environmental justice advocates in fact emphasize the inseparability of these objects of interdisciplinary knowledge practices. They also criticize and duly reject the idea that the production of environment, atmospheric carbon, and toxicity—measurable by all manner of environmental sensors—is somehow separate from sociopolitical categories of difference and economic inequality. The layered links between racism and environment have become crystal clear, for instance, in the context of the current COVID-19 pandemic. The residents of frontline communities, those who live in closest proximity to sites of heavily polluting industries, incinerators, and toxic waste, are overwhelmingly low-income and majority-Black-and-Brown in their demographics, and they have proven disproportionately susceptible to its harms: “the same populations that are bearing the brunt of the health and economic effects of the coronavirus,” not surprisingly, “are the same populations that bear the brunt of fossil fuel pollution—which, in turn, makes them more vulnerable to serious complications.”¹¹

Climate breakdown and other environmental issues aren’t secondary to, or less urgent than, the kinds of racial violence exacted by the police (the central target of ongoing, international protests led by Black Lives Matter), but are, rather, part and parcel of the same socio-environmental system of vastly unequal power. The right to breathe extends to multiple, interrelated registers, just as social justice and climate justice are necessarily interconnected.¹² Indeed, Christina Sharpe remarks that “the weather is the totality of our environments; the weather is the total climate; and that climate is antiblack,” translating “the climate” into a meaningful metaphor for describing the socio-emotional atmospheres and institutional environments of long-term patterns of racialized violence in the U.S., even while not limiting the term to that sole meaning.¹³ Antiblack climates also directly reference how climate change, even as narrowly understood by the Earth sciences, cannot ultimately be extricated from its actual, differential impacts on disenfranchised and impoverished frontline communities, impacts that are aided and abetted by structural racism as practiced in housing codes, urbanism, land, water and waste (mis)management, and resource allocation, as we have learned from decades of environmental justice research and its practice of socio-environmental sensing.¹⁴

Sensing the climate thus helps us make our precarious present more tangible. It also contributes to forecasting the future, which is, again, as much political as it is scientific. Adam Bobbette writes that the forecasting of Earth futures “has allowed us to conceive of the ways in which particular futures are mobilized to govern people and space, to pit certain groups against others, to foreclose—and even extinguish—alternative political imaginaries.”¹⁵ The critical analysis of the process of forecasting “has allowed us to understand more broadly how there is never just one future on the social scene but a dense ecology of them vying for attention, coming into being and passing away.”¹⁶ (Our volume appropriately ends with a selection of polyvocal future imaginaries that resist being foreclosed.) In the present section, authors inquire more broadly into how multiple cultural and artistic sensing practices—bringing diverse climates into view in multiple ways—operationalize distinct affective, aesthetic, and political capacities. These include intimate inquiries into the body as the multivalent and often intimate site of climate sensing, where the sensible may cross into the sensual (as with eco-sexuality), as well as representational

practices that reveal experimental sensing that enables environmental justice perspectives on rift-zone geographies of climate breakdown. They also include those that draw climate into proximity with settler colonialism, as decolonial activist aesthetics help practice the critical sensing of historical climate knowledge. One lesson to draw is that if we are to enable movements of climate justice as effective levers of social transformation, we must first carefully consider which climates are sensed and how, as well as the formation of their sensing subjects and social formations.

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14

STAYING WITH THE TROUBLING, PERFORMING IN THE IMPASSE

Sarah Kanouse

“There is a fine line between acknowledging the extent and seriousness of the troubles and succumbing to abstract futurism, its affects of sublime despair and its politics of sublime indifference.”

—*Donna Haraway, 2017*¹

I speak to a friend from college over Skype. Her face flashes into focus from a pixelated blur, more chiseled than the last time I saw her, almost twenty years ago. We smile broadly and catch up on each other’s lives and work. We’re both parents now, as well as artists, working in ways far more aligned than we could have imagined back when we listened to Liz Phair on repeat in Vanderbilt Hall. We talk about our kids, which means to talk about the future, which means to talk about the climate. She says she knew the Prozac was working when she could watch news of the Paradise fire without thinking about suicide.²

My friend’s revelation points to another climate “tipping point,” one less measurable than dwindling polar ice but still worthy of marking. By 2018, a majority of Americans recognized both that climate change is occurring and that it is caused by human activities. Near-constant flooding, December tornados, weeks-long wildfires, and 70-degree Alaska winter days have turned the tide of denialism. Yet denial seems to have given way to the paralysis of grief. A few years ago, artists spoke of global warming primarily as a problem of representation—how to approach the “hyperobject” of climate change, how to make its “slow violence” perceptible. The emerging question seems to be less about perceiving and more about feeling and acting.³ Even the privileged sliver of humanity that represents the audience of most contemporary art is rapidly gaining first-hand knowledge of the climate crisis. However, the contours of daily life and attachments to conventional aspirations remain largely intact, leading to an impasse marked by melancholic attachments in both politics and affect.

Grassroots environmental movements have responded to the grief that many activists feel in the face of dire climate predictions by making time and space for these emotions in an organizing context.⁴ For those who are sympathetic but not yet politically active, creative practice can provide a space to move through an affective impasse around the climate crisis. Arguing that ecological grief encompasses both actual and anticipated losses and can function as a means of disavowing attachments to unsustainable practices, this essay draws on approaches to mourning that collectivize and politicize grief. By acknowledging complexity and complicity, a *critical*

ecological grief can become a point of departure from which to articulate enlarged relationships of mutual connection and obligation. Finally, using my own work as a case study, I argue that performance is a creative practice especially suited for improvising, rehearsing, and enacting such relationships in a world de-familiarized by climate change.

Troubled Grieving

Ecological grief is defined by social scientists Ashlee Cunsolo and Neville Ellis as “the grief felt in relation to experienced or anticipated ecological losses, including the loss of species, ecosystems and meaningful landscapes due to acute or chronic environmental change.”⁵ They use environmental philosopher Glenn Albrecht’s concept of “solastalgia”—or the loss that occurs when ecological change renders one’s home environment unfamiliar—to identify common expressions of climate grief between diverse communities with close ties to particular landscapes: Inuit groups in Nunatsiavut (Canada), Sami reindeer herders in Sweden, and settler-descended farmers in the Australian wheatbelt.⁶ Such qualitative research has identified, but not yet fully explored, a particular form of anxious or anticipatory grief that represents “mourning for an anticipated future that will likely cease to be.”⁷ Cunsolo and Ellis suggest that such anticipatory grief is likely to be ambiguous, difficult to communicate, and irresolvable.

Grief and mourning are increasingly the affective registers in which artists express ecological concerns. Such projects often provide platforms for the public acknowledgement and mourning of environmental loss. For example, Maya Lin’s ongoing, online project *What is Missing?* (2009–present) offers a “global memorial to the planet” that combines short, journalistic accounts of conservation efforts and environmental disasters, brief video essays about threatened species and environments, and user-submitted text vignettes of ecological loss.⁸ Amy Balkin’s physical and online work, *A People’s Archive of Sinking and Melting* (2012–present), is a collection of “what will have been” that gathers publicly contributed materials from places threatened by sea level rise.⁹ Allison Rowe’s installation *Emotional Labor Specialist, Climate Change Hotline* (2019) invites the audience to call a hotline to share their feelings about the climate emergency: some callers get through to the artist, while others attempt to articulate their eco-anxieties via voicemail (Figure 14.1)¹⁰ Nina Elder’s *Solastalgic Archive* (2018–present) collects sensory, physical, and intimate materials about making sense of life in the midst of a rapidly changing climate and facilitates conversations about the attachments and differences that emerge through the archive (Figure 14.2).¹¹

Although climate *action* is subordinated to climate *affect* in these works, these artists suggest that the shared experience of ecological grief will unite diverse and differently positioned individuals to find a common ground that can translate into collective action.

Tuning into love for particular trees, grieving the loss of meaningful landscapes, and feeling undone in light of the scale of ecological losses can establish and express relationships to the ecospheric world that resist Western tendencies to render “nature” a foil for human action or a resource for exploitation.¹² At their best, creative explorations of ecological grief explore complicity, ambivalence, and the vastly different responsibilities for and positions within climate loss. Indeed, there is a bitter irony in mourning the passing of the very set of practices that initiated the transformations that became runaway climate change. Kyle Powys Whyte has noted the cognitive dissonance among white environmentalists who embrace Indigenous ecological knowledge as a vestige of the Holocene that must be “preserved” for planetary survival, but who are deeply uncomfortable addressing how they have benefited from the ecological transformations wrought by colonization.¹³ Likewise, grieving emotionally significant species and landscapes can inadvertently replicate narcissistic approaches to the more-than-human world. A



Figure 14.1 Allison Rowe, *Emotional Labor Specialist, Climate Change Hotline*, installation-performance at NURTUREart Gallery, curated by Mariel Villeré, 2019



Figure 14.2 Nina Elder, *Solastalgic Archive*, installation view at the University of New Mexico, 2019

century of pragmatic conservation politics demonstrates that *caring about* isolated and charismatic examples of “nature” does not automatically scale up to *caring for* the ecosphere. Furthermore, grief over the anticipated loss of non-human nature risks overlooking the humans for whom climate change is the latest twist in a centuries-long legacy of colonial exploitation that has limited the resources available for adaptation. Such sentimental attachments easily obscure the material relationships in which settler descendents (like me) are embedded, enabling what critical race scholars Eve Tuck and K. Wayne Yang call a “move to innocence,” as if my ongoing complicity in unevenly disastrous planetary transformation might be forgivable insofar as I feel bad about it.¹⁴ Ultimately, focusing a generalized or anticipatory climate grief on a single object treats it as less a relation than a symbol. Is it the beloved object’s imminent loss that I mourn, or the version of myself I experience through its contemplation?

None of this is to say that the experiences of anxiety and grief that settler-descended people grapple with are not real, worthy of address or politically irredeemable. Rather, I call for those of “us”—privileged denizens of the Euro-American, consumer-capitalist world—to be much more honest about the full spectrum of what we are mourning. Our grief may encompass the extinctions of plants and animals and the transformation of significant environments but also—perhaps even primarily—an image of an idealized past and presumed future that was predicated on the invisibilized exploitation of human and more-than-human others.

Literary scholar Stephanie LeMenager calls this grief “petromelancholia,” defined as “the grieving of conventional oil resources and the pleasures they sustained.” Arguing that most of modernity was underwritten by fossil fuels, she refigures the last century as “petromodernity” and the aesthetics of high modernism “petro-aesthetics.” “Petromodernity has enveloped the Euro-American imagination to the extent that ‘oil’ has become implicitly synonymous with the world, in a large, Heideggerian sense of the human enframing and revealing of earth, thus the world we know.”¹⁵ For LeMenager, recognizing and naming the material foundation of the contemporary Western worldview is an important first step in reworking the world of oil, which occurs through a host of material practices that include care of the body, the construction of physical environments, cultural rituals and rites of passage, and the authoring and distribution of the very media representations that might articulate an “otherwise” to petromodern aesthetics. Petromodernity’s grip on the Euro-American cultural imagination has been so tight that counter-imaginaries are simply not available as resources to transform subjectivity or ground necessary collective action. The result is something akin to feminist literary scholar and queer theorist Lauren Berlant’s “cruel optimism,” a space of psychic impasse in which we continue to desire what is harmful to us, in which “attachments to what counts as life come to make sense or no longer make sense, yet remain powerful as they work against the flourishing of particular and collective bodies.”¹⁶

The Politics of Melancholy

In the classic text, “Mourning and Melancholia,” Sigmund Freud famously describes mourning as the psychically necessary process by which an individual detaches from one love object in order to form new attachments—perhaps, in the environmental case, to a world organized around something other than oil. He notes that grief is not confined to the loss of a significant individual but can extend “to the loss of some abstraction which has taken the place of one, such as fatherland, liberty, [or] an ideal....” Freud goes on to describe the state of confusion and uncertainty in which the individual “knows *whom* he has lost, but not *what* has been lost in him” (emphasis original).¹⁷ Such conditions are prone to melancholy, an ambient grief so intense and prolonged that it “leaves nothing over for other purposes or other interests” and turns into

self-loathing.¹⁸ In contrast to this withdrawal and lassitude, healthy or successful mourning resolves into a psychically normal state marked by a “deference to reality” in which “the ego becomes free and uninhibited again.”¹⁹ Yet, however dangerous the narcissistic self-loathing of runaway melancholy, the notion that losses must be accepted and the mourner must “return to normal” suggests a quiescence that sits uneasily with activist politics generally and seems absurdly wrongheaded in the face of runaway climate change driven precisely by “free and uninhibited” egos operating within “normal” forms of social organization. Refusing both the normalization represented by “successful” mourning and the social withdrawal of grief, militant activists often advocate directing psychic pain into concrete action: “Don’t Mourn—Organize.”²⁰

The sustained losses of the late twentieth and early twenty-first centuries—lives taken by state-sanctioned violence or disease, political imaginaries constricted by economic neoliberalism and resurgent authoritarianism—have provoked many thinkers to revise this activist antipathy to grief. Freud himself eventually revised his earlier position on “good” and “bad” grief, emphasizing that both mourning and melancholy closely proximate aspects of subject formation. Writing in 1989 during the AIDS crisis, art historian Douglas Crimp questioned the mutual suspicion between some members of ACT UP and the organizers of candlelight vigils and other collective rituals of mourning. Drawing on Freud’s text, Crimp notes that mourning is a “psychic process that must be honored” and that there is a political dimension to grieving a loved one whose life, due to stigma, would be widely considered ungrievable.²¹ Catriona Mortimer-Sandilands has brought an ecospheric dimension to Crimp’s queer reading of melancholy, arguing that, in a “society that cannot acknowledge nonhuman beings, natural environments, and ecological processes as appropriate objects for genuine grief” melancholia is “a potentially politicized way of preserving that object in the midst of a culture that fails to recognize its significance.”²² While Mortimer-Sandilands renders the more-than-human world “grievable,” Judith Butler warns of the danger of disavowing melancholic ambivalence, arguing that

our fears can give rise to the impulse to resolve it quickly, to banish it in the name of an action invested with the power to restore the loss or return the world to a former order, or to reinvigorate a fantasy that the world formerly was orderly.²³

Mourning must rather “be a point of departure for a new understanding if the narcissistic preoccupation of melancholia can be moved into a consideration of the vulnerability of others.”²⁴

However, the gap between the scale of global environmental challenges and individual psycho-social responses has so far been filled with “grief-stricken psychological forms,” according to geographers Wendy S. Shaw and Alastair Bonnett—a category which includes both the frenetic activity of climate activists and the much maligned and seemingly unecological narcissism of hyperconsumption and excess.²⁵ This apparent contradiction demands the adoption of less normative ideas about grief—and proper environmental behavior—but rather understands it as a mode of apprehending the radical reconfiguration of selfhood demanded by the ecological crisis. For those of us who enjoyed a world rendered bright and expansive by fossil fuels, petroleum may be a permanent part of our psyches, with our future selves shaped inevitably by its loss, even if they survive it. The ambivalent feelings and behaviors engendered by this recognition might look like what Nicole Seymour calls “bad environmentalism,” because feeling ecological is often less sublime than absurd, ironic, profane, abject, or anxious.²⁶ A reparative reading of petromelancholia might demonstrate how sentimental expressions of ecological grief, narcissistic anxiety over an unimaginable future, *and* such apparent disavowals as chanting “drill baby drill” are responses to the loss of petromodernity as a viable way to organize planetary life (which it never was).

In this context, how to affect Butler's "point of departure" in a way that will allow a heightened sense of shared but differentiated vulnerability to ground both political action and the re-organization of social life forced by climate chaos? Can grief enable active engagement with petromodernity's structural planetary violence, as well as the ways it allows new subjectivities and global solidarities to emerge? Refusing the hope/despair binary of conventional political action, how can grief ultimately re-imagine and invest in a future world that looks very different from the fixed, idealized, and ultimately inaccurate image of the past? In other words, how can we move from an ecological grief that is narcissistically preoccupied with personally beloved organisms and toward one that is critical and self-critical, bending both backwards and forwards to rework the assumptions underpinning its own sense of loss?

In the remainder of this essay, I posit performance as a tool for addressing the political and psychic impasse in which many residents of the modern, capitalist world find ourselves. Lauren Berlant defines the impasse as

a stretch of time in which one moves around with a sense that the world is at once intensely present and enigmatic, such that the activity of living demands both a wandering absorptive awareness and a hypervigilance that might help clarify things, maintain one's sea legs, and coordinate... those processes that have not yet found their genre of event.²⁷

Written in the wake of the 2008 financial crisis, Berlant's observations of the impasse as a space filled with "the urgencies of livelihood... without assurances of futurity" become sharpened when the ecospheric dimension is added to the list of conditions that make precarity a dominant affective and political experience of the twenty-first century.²⁸ Invoking the performed narratives of situation comedy, she further defines the impasse as a "situation, [a] question to be worked out." Understood in these terms, environmental grief might be seen as a shared situation, an eco-psycho-social experience that must be narrated and improvised. Informed by Brechtian dramatic theory, I use my one-person show to describe how performance can create spaces for collective experiences of a *critical* ecological grief that allows even the most troubling ecological attachments to open up new ways of living responsively within a threatened world.

Performing in the Impasse

At some point I realized that my grandfather would have been ninety-nine the year my daughter was born. They almost share an odd century, but not really. He, born ten years into it. She came nine years after its not-yet-apocalyptic end. I float two-thirds of the way between them: the Kanouse reproductive rhythm seemingly calibrated in precise, 33-year cycles. Like a brood of undiscovered cicadas.

(Sarah Kanouse, "*My Electric Genealogy*," 2020)

My Electric Genealogy is an evening-length solo performance that opens with a temporal impasse: how to describe the not-quite-century that separates the beginning of two lives, one whose work unknowingly accelerated climate change, the other shaped by its unfolding. My grandfather worked as an electrical engineer for the Los Angeles Department of Water and Power. Retiring in 1972 as the public utility's equivalent of chief executive officer, his career spanned the completion of the Hoover Dam hydroelectric project and the groundbreaking of the coal-fired Navajo Generating Station. Recognizing that the future both must and will look very different from the past, the performance is a self-reflexive working through of ecological grief over a particular version of the good life that was always based on settler colonialism and racial

capitalism. In this way, it seeks to model a *critical* ecological grief—one which does not disavow “troubling” attachments to petromodernity but, as philosopher of science Donna Haraway counsels, stays with them in order to allow new ways of knowing and relating to unfold.

The performance explores this impasse at several scales: the real-time duration and space of the performance, the temporality and geography of the episodes that form the narrative, and the conditions of the “long now” that envelope both the work and its audience. These scales are tightly interwoven in the performance script and its staging. In the space of seven minutes, the performance dramatizes the 1936 ceremony welcoming the Colorado River’s electricity to Los Angeles, then morphs into an increasingly frenetic convocation address peppered with references to queer theory and science and technology studies, then collapses into a confessional moment describing a family photograph. Later, the brutal beating of my grandparents is explored in relation to multi-dimensional forms of interpersonal and structural violence: a nineteenth-century Black rancher’s loss of his southern California farm; the disproportional burden of heavy infrastructure on poor Black and Brown communities; the beating of Rodney King; and the violent discipline meted out within the heteropatriarchal family. This braided structure allows scales, times, themes, and affects to rub against one another, echoing Kyle Powys Whyte’s description of the “spiraling temporality” characteristic of some Indigenous worldviews “in which it makes sense to consider ourselves as living alongside future and past relatives simultaneously.”²⁹ *My Electric Genealogy* suggests that what settler society experiences as an impasse is less a space of entrenched and immovable conflict than a whirlwind or gathering storm of impulses, constraints, and attachments that must be explored, released, or redirected (Figure 14.3).³⁰

If *My Electric Genealogy* quickly establishes that the present eco-psycho-social situation is at once intimate and planetary, historical and contemporary, philosophical, and material, it also insists that the audience exists within the predicament unfolding on stage. The situation is not a scene to be watched but instead a condition encompassing both performer and audience. Consisting almost entirely of direct address, the performance fully breaks the fourth wall several times by calling in the electricity always present in the space through guided meditation and the use of instruments that render ambient energy into sound. While the performance employs theatrical



Figure 14.3 Sarah Kanouse, *My Electric Genealogy*, work in progress; press image

modes of spectatorship, it also resists theatricality through neo-Brechtian gestures of defamiliarization.³¹ Rather than inhabiting fully articulated characters, I employ various speaking personas: professor, intimate confidante, and inquisitive adolescent. These speakers give way to composite personas that play with twentieth-century gendered typologies, from the young woman who summoned the electricity of the Colorado River to the technocratic, white masculinity embodied by my own grandfather. This strategy disrupts the audience's psychological investment in a single protagonist, centering the eco-social contexts that produce such personas and demonstrating that these roles can manifest in a single, living body. Rather than a protagonist eliciting empathy, the performer emerges as a constantly shifting assemblage of different socially available positions that shape what can be thought, felt, enacted, and resisted in terms of climate change.

Each persona is expressed primarily through posture and gesture. Changes in the carriage of the body, expansion or compression of the chest, and fluidity or fixity of the arms communicate information about the position inhabited by each persona as it manifests in the body. Such comportment roughly corresponds to Brecht's concept of *gestus*, or the "socially conditioned relation to time, space, and people of a thinking body" and informs a movement repertoire out of which short choreographic interludes are built.³² This repertoire draws on the architectures of electricity—turbines, transmission towers, distribution stations—as developed through improvisation. These gestures accrete into passages of choreographed movement that confound distinctions between human and infrastructural postures, underlining the productive role such technologies play in human development under petromodernity. For example, a proprietary, patriarchal embrace echoes the crossbars of a transmission tower. In performance, such gestural slippages reveal the reproduction of psycho-social investments in petromodernity at the level of the body, not only through language and imagery.

In the performance, my expressions of environmental grief are frank and raw. Spoken by the "confidante" persona, the confessions combine sadness over ecospheric loss, such as the imminent death of the Great Barrier Reef, and anxiety over my inability to prepare my child for an adulthood defined by the climate crisis. Within the impasse of the present eco-social moment, these feelings are irresolvable. Rather than leading to the catharsis and the release of dramatic tension, other voices or personas step in to interject material that de-centers the individual experience of anticipatory grief. These shifts emphasize the political context in which such feelings arise, yet which the immediacy of emotional response often obscures. For example, immediately after discussing my fears over the chaotic future that certainly awaits my child, my monologue pivots to a professorial mode that draws on Whyte's arguments that settler-descended environmentalists frequently disavow their ancestral investments in ecological transformation.³³

There's no doubt my vision of apocalypse is conditioned by dystopian science fiction and, before that, the Bible. Like it or not, these are my cultural texts. Of course, there are other ways of seeing, other visions. Instead of disaster being always imminent, try to see that it arrived long ago. That it arrived with "us." In this account, climate change isn't a technical issue of how many parts per million, but the latest shockwave of colonialism—the first to really hit the descendants of those who introduced it in the first place. My ancestors were frightened by wilderness and found their land claims threatened by Indigenous resistance. They believed material prosperity was a sign of God's blessing... The world that now exists—the one I so fear losing—the world my ancestors bequeathed my daughter—is someone else's apocalypse, survived.³⁴

These lines do not diminish my experiences of climate anxiety and anticipatory grief but trouble them. They examine petromelancholia's link to Western eschatology and eco-social violence

while allowing the love and vulnerability that give rise to grief to also foster a renewed sense of interconnection.

The structure of the performance extends the deferral of character identification and catharsis. Written in “chapters” rather than “acts,” the script braids together themes, phrases, images, and gestures. Rather than leading to the release of dramatic tension and the establishment of a new equilibrium, the performance circles back to earlier narrative moments. These passages are transformed through their adjacency to new bodies of thought, establishing a relationship with the past in line with Walter Benjamin’s: one that is critical, non-deterministic, and directed toward present and future action.³⁵ For example, the language and choreography surrounding the family photograph from the first chapter re-surfaces near the conclusion, reworked as a dream in which my grandfather and daughter meet, his stiff, infrastructural embrace dissolving through her gestures of restitution and repair.

I conjure an image with just my grandfather and daughter inside the same frame. She is five. She is six. She is twenty-one. She is thirty-nine. She walks through a wasteland to bring him a gift. He holds his arms wide, and he smiles.³⁶

Yet the redemption suggested by this passage is immediately reversed, revealed as a false ending and braided back into the narrative. The performance concludes with a visit to the Navajo Generating Station, an enormous, polluting, coal-fired power plant that my grandfather’s Department of Water and Power helped to build. The generating station produced both environmental vulnerability and financial dependency for the Navajo Nation. Its 2019 closure was an economic blow to the Navajo yet presents an opportunity to recast the transmission lines that connect Los Angeles and its sources of electricity as lines of obligation, indebtedness, and kinship. As I describe potential in this relationship, the gestures developed throughout the performance accelerate and break down. My voice and equilibrium falter as words and movement are reworked to articulate an ethics of relationality and obligation between those who inherited petromodernity, those whom it attempted to sacrifice, and the material infrastructures that both separate and connect us (Figure 14.4).



Figure 14.4 Sarah Kanouse, *My Electric Genealogy*, work in progress. video projection still

Conclusion: Of Contingency and Conspiracy

My Electric Genealogy attempts to make critical the anticipatory ecological grief arising in this moment of climate impasse when change is perceptible, but the question of how to live within it must still be worked out. Mourning both staggering ecospheric losses and the ways of organizing life that produced them, the performance engages complicity with and grief around the passing of petromodernity to widen the network of relationality and responsibility from which any form of just human survival must be devised. Many of the strategies described here could be employed in other artistic forms. However, I wish to make a case for live performance as a medium especially suited to clarifying the contours of the present moment and improvising the relations, connections, and obligations that can spur future-oriented action.

Performances represent action, but they are also themselves enactments. They are the product of improvisation and rehearsal, a process of trying one thing, and then another, evaluating the result, and then trying again. They are never solitary endeavors but are shaped at all stages by collaborators, specialists, technicians, and audiences. No matter how scripted and polished, no matter how many times performed, each presentation is a bit different. Maybe the tongue trips over familiar words. Maybe energy is especially high, or the chemistry just isn't there. Maybe the bulb in the projector blows out. In this way, each presentation is another attempt to work out the performative situation. The inescapable contingency of live performance reinforces, at the level of form and structure, the practices of experimentation, iteration, and improvisation necessary to move through the impasse of climate change.

A live performance only takes place when a small group of people have committed time to come together, attentively, in a single space. The Covid-19 pandemic, which delayed the presentation of *My Electric Genealogy*, has thrown into sharp relief the fragility and vulnerability inherent in such gatherings. Despite, or perhaps because of, the enforced proliferation of digital encounters, the assembly of bodies holds a seductive power whether in an art space, a stadium, or the streets. There is a reason that the powerful often fear, occasionally encourage, and sometimes orchestrate acts of assembly. They can serve as a first step to collaboration, a slide toward conspiracy. Conspiring, from the Latin *con-*, “together, with” + *spirare*, “breathe.”

Notes

- 1 Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press Books, 2016) 4.
- 2 Maya Gurantz is an artist and writer based in Los Angeles. Her observation about Prozac also appears in her forthcoming climate-themed performance, “Ritual for Mass Suicide.”
- 3 Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis: University of Minnesota Press, 2013); Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, MA: Harvard University Press, 2011).
- 4 Extinction Rebellion, in particular, has formalized mourning rituals in its organizational culture and as a form of protest. Many local groups offer regular “grief circles,” while demonstrations sometimes take the form of mass meditations.
- 5 Ashlee Cunsolo and Neville R. Ellis, “Ecological Grief as a Mental Health Response to Climate Change-Related Loss,” *Nature Climate Change* 8, no. 4 (2018): 275.
- 6 Glenn Albrecht et al., “Solastalgia: The Distress Caused by Environmental Change,” *Australasian Psychiatry* 15, no. 1_suppl (2007): S95–S98.
- 7 Cunsolo and Ellis, 278
- 8 Maya Lin, *What Is Missing?* 2009–present, <https://whatismissing.net/>
- 9 Amy Balkin, *A People's Archive of Sinking and Melting*, 2012–present, <https://sinkingandmelting.tumblr.com>

- 10 Allison Rowe, *Emotional Labor Specialist*, *Climate Change Hotline*, 2019, <https://allisonroweart.com/section/484301-Emotional-Labor-Specialist-Climate-Change-Hotline.html>.
- 11 Nina Elder, *Solastalgic Archive*, 2019–present, <http://ninaelder.com/solastalgic-archive>.
- 12 I am grateful to Una Chaudhuri for introducing me to the concept of the ecosphere, which encompasses the interrelationships of both living and non-living materials and systems on the earth—including the human.
- 13 Kyle Powys Whyte, “Indigenous Science (Fiction) for the Anthropocene: Ancestral Dystopias and Fantasies of Climate Change Crises,” *Environment and Planning E: Nature and Space* 1, no. 1–2 (March, 2018): 224–242.
- 14 Eve Tuck and K. Wayne Yang, “Decolonization Is Not a Metaphor” *Decolonization: Indigeneity, Education & Society*, accessed July 2, 2019, <https://jps.library.utoronto.ca/index.php/des/article/view/18630>. Their work draws heavily on Janet Mawhinney, “Giving up the ghost! Disrupting the (re)production of white privilege in anti-racist pedagogy and organizational change.” Master’s Thesis, University of Toronto, 1998: www.collectionscanada.gc.ca/obj/s4/f2/dsk2/tape15/PQDD_0008/MQ33991.pdf
- 15 Stephanie LeMenager, “The Aesthetics of Petroleum, after Oil,” *American Literary History* 24, no. 1 (January 2012): 61.
- 16 Lauren Berlant, *Cruel Optimism* (Durham: Duke University Press, 2011), 13.
- 17 Sigmund Freud, “Mourning and Melancholia,” in *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, trans. by James Strachey, Vol XIV (London: The Hogarth Press, 1948), 245.
- 18 Freud, “Mourning and Melancholia,” 244.
- 19 Freud, “Mourning and Melancholia,” 245.
- 20 Popular slogan based on a telegram sent from IWW leader to Bill Haywood from activist songwriter Joe Hill prior to his execution in 1915.
- 21 Douglas Crimp, “Mourning and Militancy,” *October* 51 (1989): 5.
- 22 Catriona Mortimer-Sandilands, “Melancholy Natures, Queer Ecologies,” in *Queer Ecologies: Sex, Nature, Politics, Desire*, edited by Catriona Mortimer-Sandilands and Bruce Erickson (Bloomington, IN: Indiana University Press, 2010), 333.
- 23 Judith Butler, *Precarious Life* (London: Verso, 2004), 29–30.
- 24 Butler, *Precarious Life*, 30.
- 25 Wendy S. Shaw and Alastair Bonnett, “Environmental Crisis, Narcissism and the Work of Grief,” *Cultural Geographies* 23, no. 4 (October 1, 2016): 566.
- 26 Nicole Seymour, *Bad Environmentalism* (Minneapolis: University of Minnesota Press, 2018).
- 27 Berlant, *Cruel Optimism*, 4.
- 28 Berlant, *Cruel Optimism*, 200.
- 29 Whyte, “Indigenous Science (Fiction) for the Anthropocene,” 228–229. Many of the aesthetic and narrative features of spiraling time identified by Whyte—including cyclicity, reversal, dream-like scenarios, counter-factuality, and parodies of linear pragmatism—were present in the performance script before I encountered his essay, which has been helpful in clarifying what first had been intuitive choices.
- 30 Berlant, *Cruel Optimism*, 195.
- 31 Brecht’s key theory of *Verfremdung* has been traditionally translated as “alienation.” Meg Mumford prefers “defamiliarization” because it “conveys more clearly the fact that Brecht regarded *Verfremdung* as political intervention into the (blindingly) familiar” (61). See Meg Mumford, *Bertolt Brecht* (Oxford: Routledge, 2009).
- 32 Mumford, *Bertolt Brecht*, 54.
- 33 Kyle Powys Whyte, “White Allies, Let’s Be Honest About Decolonization,” *Yes! Magazine* (April 3, 2018), www.yesmagazine.org/issues/decolonize/white-allies-lets-be-honest-about-decolonization-20180403.
- 34 Sarah Kanouse, “My Electric Genealogy,” unpublished performance script, 2020, 31.
- 35 Wendy Brown, “Resisting Left Melancholy,” *Boundary 2* 26, no. 3 (October 1, 1999): 19–27.
- 36 Kanouse, “My Electric Genealogy,” 41–42.

15

A CONVERSATION BETWEEN THREE ECOSEXUALS

Bo Zheng with Beth Stephens and Annie Sprinkle

Beginning in 2004, multimedia artists Beth Stephens and Annie Sprinkle (based in San Francisco, California) produced and performed a series of public wedding rituals. Over the course of seven years they married the Earth, the Appalachian Mountains, the Adriatic Sea in Venice, the coal in Gijon, Spain, Lake Kallavesi in Finland, as well as the moon, the sun and more. In 2011 they composed the Ecosex Manifesto. Their widely disseminated text launched an ecosex movement (Figure 15.1). Zheng Bo is an artist based on Lantau Island, Hong Kong. His ongoing film project *Pteridophilia* portrays sexual relationships between men and ferns in Taiwan (Figure 15.2).



Figure 15.1 *Water Makes Us Wet—An Ecosexual Adventure*, still, 2017, directed by Beth Stephens and Annie Sprinkle

BO: When I started making *Pteridophilia* in Taiwan in 2016, I had no idea that the term “eco-sexual” existed. Later I found your work online and read your book *The Explorer's Guide to Planet Orgasm* (2017).¹ It's great to finally have this chance to talk to you and connect with the ecosexual community!

BETH: It is always great to connect with other ecosexual artists!

ANNIE: We were completely blown away by your work. So it's our privilege to speak with you!

BO: How do you see the ecosexual movement now in your part of the world? Is it already a movement?

BETH: Definitely! On multiple continents. For many years now, the two of us have done a lot of work about ecosexuality. Many people have participated in our ecosex weddings, walking tours and workshops and many more have seen our films and other art projects. So, there are quite a lot of people who have picked up on what we created and who now identify as ecosexual. Some people don't know about our work directly, but have connected with people who have collaborated with us and consider themselves and their work to be ecosexual.

ANNIE: We didn't create the word ecosex. It was floating around as a peripheral cultural term. But we took the word and ran with it. We have a very multi-pronged approach to ecosex; we do it as art, theory, practice and activism.

BO: In your 2016 article “Ecosexuality” for *Gender: Nature* (Macmillan Interdisciplinary Handbooks) you estimated that “between 12,000 and 15,000 people around the world currently identify as ecosexual.”²

ANNIE: That number now has at least doubled, maybe even quadrupled.

BETH: We wrote that piece before we became *documenta* 14 artists. Our work got a lot of exposure in that exhibit, which over a million people attended. A lot more people are now relating to ecosexual concepts and artworks. Several professors are teaching various aspects of it. In fact, our colleague and editor of this book T. J. Demos sometimes teaches our ecosexual work at the University of California, Santa Cruz where I am also a professor. Many other professors are writing about ecosex in articles and books, and multiple Ph.D. dissertations have been written that explore the concept. There are also dozens of newspaper and magazine stories of all kinds on the topic, relationship related, travel related, activist related... Plus our book with University of Minnesota Press is about to come out, *Assuming the Ecosexual Position*. Some great sex educators are also teaching ecosexual practices, such as our beloved friend and confidant, sexologist Joseph Kramer. He approaches it as a visionary sex educator. Some people use ecosexual as a personal identity, meaning they simply find the natural world pleasurable, sensual and or erotic.

ANNIE: The term “ecosex” functions in so many different ways, and can be viewed from so many different perspectives. I love that.

BETH: For example, indigenous scholar Kim TallBear at the University of Alberta in Edmonton, Canada has been in conversation with us over the years, and also discusses these concepts with her students.³ Some scientist colleagues have pondered the scientific implications. Others have been exploring ecosex through art: for example, Australian performer Emma Maye Gibson, whose performance character; Betty Grumble, a “surreal show girl and sex clown” strongly identifies as ecosexual, and says so in her amazing one woman show.⁴ The artist collective Pony Express has created the Ecosexual Bathhouse project, which is a fantastic performative installation work.⁵ There are also a handful of environmental activists who identify as ecosexuals too, even though it is queer and is sometimes controversial.

Joseph Kramer would say that your work is much more erotic than ours. As a practice, it accomplishes something having to do with arousal that our work doesn't. What's nice is that all these approaches complement each other, like an ecosystem.

ANNIE: We really like to use humor in what we do. Our films are quite funny and yet explore serious environmental issues. Since I come from a background of making pornography, and have made a lot of different kinds of porn, these days I'm not so interested in putting out erotically charged media because I did that for so many years. I'm more interested in questioning notions of sex and sexuality by exploring ideas, experimental concepts, like pondering how our biome clouds are all having an ongoing massive orgy. The idea of expanding on what most people think sex is, excites me and thinking about if our bodies are bigger than the borders of our skin. I want to inspire people to include nature fetishes and fantasies in their sex lives. For example, lots of people use water to masturbate with. I'd like to encourage people to make love TO the water, and while they do, connect energetically with that hanging orchid at the same time. Of course, sex with humans is ecosex too, as humans are not separate from the Earth.

BETH: We see our work as conceptual art and an embodied art practice. Our weddings to the Earth were environmental actions as well as performance art. Our work is heavily influenced by the Fluxus movement.

We think your videos are super hot!

ANNIE: They are! And at the same time, they are also very smart and conceptually exciting! A rare combination.

BETH: You see the thing is—We think that really amazing intellectual work is hot and super sexy!

ANNIE: Would you please share with us something about how your film *Pteridophilia* was made? I'm dying to know more about it.

BO: Many of my projects are conceptual; plants come into political imaginaries on the discursive level. At the same time, I've always loved porn and found the idea of pornography fascinating. I made a work in 2005 titled *Watch Porn Learn English*. A female friend and I dubbed



Figure 15.2 Zheng Bo, *Pteridophilia*, still, 2016–ongoing

clips from 1970s American porn, including *Deep Throat*, and we switched the genders of the characters. I dubbed Linda Lovelace and my friend dubbed the male doctor.

ANNIE: We haven't met you but we love you already. You must come visit us. You have a place to stay with us in San Francisco. We'll take you to our magical, old growth redwood forests.

BO: In the ecosexual ecology, there are multiple strands. There is porn, there is naked body, but there is also wedding. It's about sexuality, but it's also about love, about identity. It's not something singular. I'm making eco-porn. When it comes to sexuality, I've been thinking more about the sexuality of plants than that of humans. For example, ferns have complex sexuality. A diploid sporophyte—the typical fern plant that we see—produces spores. A spore enters into soil and grows into a gametophyte. The gametophyte produces both eggs and sperms. A flagellate sperm fertilizes an egg, which then grows into a diploid sporophyte. Our concepts of maleness and femaleness, of masculinity and femininity, simply are not sufficient to understand ferns, whose sexuality is neither heterosexual nor homosexual. Scientists had to invent an expansive vocabulary to describe intricate and complex sexual anatomies and behaviors of ferns; they cannot resort to highly condensed terms like homosexuality or heterosexuality.

ANNIE: If we want to do another wedding event, we would like to marry the coral reef in Australia when its spawning. Spawning is sexy.

So how did you get the people in your film into such highly charged “erotic vibratory states?” To use a term coined by Joseph Kramer. How did you cast them? Were they porn actors?

BO: The reason that they could get into such a state is that the forest where we shot the film was just so beautiful, so dense, so sensual, so tactile. We were energized by the forest. The men in the film came from various backgrounds. Many are working in independent theater, but there are also designers and psychologists. No one has made porn before.

When I was looking for actors for the second chapter, I found out that there is a Taiwanese person who worked in the professional gay porn industry in Japan. He is a member of Hand Angels, an NGO that provides sexual service to handicapped people. A friend of mine works at Hand Angels. Through this friend I got in touch with the porn actor. He came to the casting session where I brought a bird's nest fern from the forest. The first thing he asked me was “Did you sanitize the fern?” I was shocked. Later I realized that perhaps in the Japanese porn industry, people are super clean and professional, and he's used to high expectations of hygiene. We film in the forest. We don't film in a studio. There is no way he could work with us.

ANNIE: The performers in your film are so great. I'm surprised that they were not porn actors because they were so completely uninhibited. But I'm also not surprised. Perhaps they are better than porn actors because they so clearly were not acting. They were completely authentic. How did you prepare them, mentally and physically to be so connected with the plants?

BO: There is no script. We always work together on the site, the same forest on the outskirts of Taipei. My interest has been getting to know the plants through making eco-porn. I want to become knowledgeable of the fern species through bodily entanglements not scientific experiments. When I did casting for the very first part of the film in 2016, I noticed that some people—especially those trained in commercial theater—treated the fern I brought to the casting session as a prop, not as a partner with subjecthood. It was important for me to see whether they can treat plants with respect, whether they can understand, or at least attempt to understand, what plants want. We always work on site. We experiment right there in the forest, with living plants.

I believe that all of us have the capacity to understand plants if we spend enough time with them. The cinematographer, who self-identifies as a heterosexual, became comfortable seeing naked male bodies pretty quickly. When we were working on the second chapter of the film in early 2018, he made a comment one day that “the fern we are working with today is more feminine than the one yesterday.” He started to anthropomorphize the plant, understanding it with human constructs. As Robin Wall Kimmerer argues in her book *Braiding Sweetgrass* (2013), anthropomorphizing is a useful first step for humans to approach other species, as long as we do not stop there.⁶

Has this come up in your work? You are transforming the metaphor “Earth as mother” to “Earth as lover.” Earth is no longer feminine. Its sexuality is more fluid or inclusive.

ANNIE: Yes, anthropomorphizing can be very helpful. For instance, we experience the Earth as transgender—as all genders, and as gender fluid.

BETH: Donna Haraway’s work has inspired me to engage in more complicated thinking than the usual binary thinking about any set of beings—human or non-human. As we get deeper into ecosexuality we see that the Earth is so much more than just male or female. Our planet is a kaleidoscope of genders and sexualities.

ANNIE: Beth and I created and have performed a series of *Ecosex Walking Tours* over the years. Our tour is an outdoor theater piece with nine different scenes in nine different locations, that we structure to be very experiential for the audience. In one scene, we invite people to cruise a stand of trees: to feel out which tree wants to be approached, which doesn’t; which one wants to be hugged; which one is hot and wants to be licked; which one is not really wanting to be touched, and we explain how to ask consent, or at least attempt to. By the end of the tour, people really have their ecosexual gaze on!

BETH: At *documenta 14* (2017), we did five *Ecosex Walking Tour* performances, each with about two hundred people in our audience. We had a cast of ten performance artists. People watched as we performed grassalingus, making love with a rock, doing ecosexercises which are like calisthenics that acknowledge entities such as the air or the sun as ecosexual partners. In other words, the sun is a sensual partner that warms us as we work out, and we have intercourse with the air we breathe. While it may seem like wordplay there really is a physical and sensual reality to this work if you allow it to be real.

BO: The weddings you have staged seem to be as much about presenting your own ideas as engaging other people to get on board with this way of thinking, that Earth is our lover.

BETH: Several thousand people have attended our eco-weddings. Everyone who attended could choose to join us in making vows to “love, honor and cherish” whatever nature entity we were marrying. The events were sweet, sometimes quite emotional, very celebratory, and people really bonded with each other through this shared ecosexual love experience and this created communities. We performed twenty-one large-scale wedding productions and many smaller ones in many different countries.

ANNIE: Then a few years ago, one day just after we married the Soil in Austria (2014), the wedding project just was over. We did it and we were done.

BETH: We have also hosted a series of ecosex symposiums. We like to work and think with others over time. We love to collaborate and this helps us explore and propagate larger and more diverse ideas than we might come up with by ourselves. Our community of collaborators is a really beautiful community. It’s never insular, because we are open to who, and how, someone can be ecosexual. We even made a chart, based on the Kinsey Scale, that graphs how much of an ecosexual you might be but we don’t have rules and regulations. “You are being good enough or not good enough.” Measuring value is what our society does all the

time. People don't want to be judged, and they appreciate it that we don't judge. Everyone can join in the fun. The weddings created space for people to express their love for Earth in whatever ways they were capable of expressing it. Participants found a great deal of freedom in that. We appreciated that people participated in the weddings, and they appreciated being able to participate in whatever way they wanted to, even as objectors to the weddings! Mutual appreciation is powerful.

ANNIE: We teach what we want to learn. So, we facilitate various kinds of ecosex workshops, which explore ecosexual practices in very real, physical ways. In Spain, we did two really powerful ecosex workshops over two weekends where went to the beach and each person did a performance-action for the whole group. The offerings were all fabulous. We are still quite curious about what ecosex can be, and become. Facilitating workshops is a great way to learn more about the physicality of ecosex.

Kim TallBear has stated that our idea of ecosex is akin to the Native American concept of "all my relations." We are always in relationship with everything around us, so in a way, no one is ever "single." Ecosex is acknowledging what is already there, but has been ignored, or repressed, and in many cases made taboo.

BO: It's really heartening to hear you talking about being inclusive. In making the third chapter of *Peridophilia*, I worked with three BDSM performers. There are different sexual communities in my part of the world, but they are still largely underground. Clearly you have thought a lot about the community building aspect of the ecosexual movement. It's inspiring.

ANNIE: We are inspired by your work. Nobody has done films quite like yours—so ecosexplicit! Is it dangerous to do your kind of work in China?

BO: I'm living in Hong Kong. My films are made in Taiwan. In terms of queer life, Taiwan is the most progressive in Asia. It is in the process of legalizing same-sex marriage, way ahead of other places in Asia. I was able to make the film in Taiwan, and to show it in Taiwan. I haven't been able to show it in Mainland China, where I grew up. Even representations of heterosexual sex are highly controlled by state censorship.

ANNIE: Is there a history in China of people doing erotic practices with the non-human, say with plants, or water or sky? We know that in some cultures people performed sex rituals with the Earth to make the land more fertile for farming.

BO: Although not explicitly ecosexual, we say mountains have spirit and waters are intelligent. China is vast. I will need to look into indigenous cultures, particularly in the western part of China, to see if ecosexual practices exist. In Japanese art, there is the famous print by Katsushika Hokusai, "The Dream of the Fisherman's Wife," of a woman and an octopus in a sexual entanglement (Figure 15.3).

ANNIE: I was once in a group exhibition in an art gallery in Belgium. Inspired by the Hokusai piece, Zoot en Genant, an artist couple from Europe, went to Japan and saved an octopus from certain death at the fish market. Then she did a sort of sex film with it. The octopus went crazy on the women's body, kind of attacking her, and it suctioned her body much harder than she had anticipated. She said it really hurt and it scared her. She had a lot of red marks on her body. She got the octopus off her with her boyfriend's help, then took it and threw it back in the ocean, saving its life. The video, *Meat Sexu Taco* (1996–2004), was quite controversial and ultimately it got censored from the show. But then so did my film *Sluts & Goddesses* (1990) for a little fist fucking scene. Interestingly an angry male pornographer called the police and had the show censored because he felt artists shouldn't be allowed to do and show things that pornographers aren't allowed to do. He did have a point.

BO: I've seen a lot of anime of tentacular porn, but haven't seen the film with real octopus.



Figure 15.3 Katsushika Hokusai, *The Dream of the Fisherman's Wife*, 1814

ANNIE: A film we love is *Balkan Erotic Epic* (2005) by Marina Abramović. Although she probably does not self-identity as an ecosexual, the film she made appeals to us as ecosexuals—it's a very ecosexy film.

BETH: We have learned that there are some indigenous people here in the United States that don't want anything to do with ecosexuality. They feel that juxtaposing sex with Mother Earth is disrespectful to the Mother, the Earth, as well as to indigenous people. We are also sometimes accused of being "new age" and we understand that a lot of new age people have appropriated indigenous rituals and practices. I can understand how that might feel insulting, even as we reserve the right to disagree. Mothers can be sexy too! I mean don't most mothers have sex in order to even become a mother?

BO: I recently learned that inter-species sex is not a human invention. Some orchids have evolved to imitate bees. They look like and smell like bees, so actual bees are attracted to copulate with these flowers. The phenomenon is called "pseudocopulation." We tend to understand non-human acts as biological, non-agentic (Figure 15.4).

I read that you once ran naked through a field of stinging nettles. How was the feeling?

BETH: That was really fun! We were facilitating a workshop near Colchester, England and we planned to end the workshop with an intimate wedding to the Earth, just with our group of twenty plus people. One of the workshop attendees was a wonderful sex worker, who was a world-famous fetish spanking expert from Australia. She proposed that we do a bachelorette party where we all run naked through a field of nettles. Our workshop venue had a big patch of nettles. No one would do it with her. I didn't have the heart to let her do it all by herself, so I volunteered to join in. We stripped down to our tennis shoes and sunglasses and then we ran through a huge expanse of stinging nettles. While we were running, I was thinking, "Well, I hope it doesn't give me a heart attack." It was intense, and yet so



Figure 15.4 Pseudocopulation performed between a scoliid wasp (*dasycolia ciliate*) and an orchid, 2010
Source: Photo Pietro Niolu

invigorating! Our whole bodies turned bright red. After a day our bodies were still hot pink and felt electric. It was like jumping into ice cold water and you don't know where the bottom will be. I really felt alive. Also, you know that stinging nettle is medicinal, and good for arthritis.

ANNIE: People assume that ecosex is all very soft and sensual, but it can be edgy as hell. Like tornado chasing, swimming with sharks, or doing fire play...

BO: We still tend to have narrow and romanticized ideas of nature. When making *Pteridophilia*, I didn't want to portray only vanilla sex. So Chapter 3 focuses on BDSM practice with ferns.

BETH: As a pro-domme once said, "Nature is a cruel mistress and there is no safe word."

ANNIE: The Earth, sky and sea are sweet and lovely. But they can also kill you, violently, and have absolutely no remorse.

BO: When making *Pteridophilia*, I was also thinking about the issue of subsistence, having fun and pleasure without creating huge apparatus. BDSM practitioners often need to accumulate a lot of tools and set up special spaces. A lot of work is involved. How about just go into nature and use what's available?

ANNIE: Lots of ecosex activities are definitely more environmentally friendly than using plastic sex toys, and killing animals for leather and fur. You don't really need all that stuff for great sex. I saw you illustrate that point in the second chapter of *Pteridophilia*. I'm sure that people will get more upset by the sex with plants, than the eating of plants. You showed that in a beautiful and provocative way. We viewers all fell in love with a plant in your film and then the guy eats the plant aggressively and violently. Most people won't care if a neighbor kills

a tree in their yard, but if that neighbor is seen hugging a tree, then that is viewed as sick by many people, at least in the US.

BO: Exactly. When I show this film, people always ask me about consent. My counter-question is: did you ask the plants when you ate them for lunch today? The plant the guy was eating is a bird's nest fern, a popular delicacy in Taiwan.

BETH: This part of the film also reminded me of the film *Caniba* (2017) made by anthropologists V  rena Paravel and Lucien Castaing-Taylor, of Issei Sagawa recalling the sexual fetish eating of a woman he had murdered. A true story. People rarely ever ask plants for consent. It doesn't even cross their minds, unless they are ecosexual. Yet when people ask us about our work it is as if they expect ecosexuals to ask for consent all the time. It is difficult and interesting territory to negotiate.

ANNIE: I love how we have all arrived at similar interests, questions, and answers, in spite of not knowing of each other and being on opposite sides of the planet.

Are you concerned about being controversial?

BO: Recently a museum in Switzerland rejected a curator's proposal to show *Pteridophilia*, saying that the museum is family-oriented. I have been able to present this work in many countries. It's shown recently in Kyoto. Japanese law prohibits showing genitals, so for scenes where genitals are visible, the screen goes black. It may have made the film even more erotic. I'm showing the work in Berlin right now and it's totally fine. I have not paid much attention to censorship and controversy. My energy is spent on developing ideas for the next part of the film. I am reading books on ferns, talking to fern experts and raising ferns in my garden. I have spent three years on this film, but ferns have been evolving on planet earth for 360 million years! I will never be able to fully understand them, but I have to try to know them a bit better.

BETH: There is still a lot of freedom in the arena of art. Some right-wingers in the United States have commented on websites that we are crazy, evil, and should be killed. I ignore it as much as I'm able. When we start to give Earth agency, online pundits come out of the woodwork to try to dismiss what we are doing. I guess our work troubles them deeply. People either love our work, or they get freaked out, hate it and make fun of it. There does not seem to be much middle ground.

ANNIE: Mostly we aim to connect people with the non-human world. We are yentas for the Earth. Of course, ecosex pushes against our sex negative culture. Sex is still narrowly defined and anything outside "the norm" is frowned upon and people try for it to be stopped.

BO: For me, it's still challenging to work with plants. There is so much to learn with other species, and I have no energy left to deal with human bigotry.

Notes

- 1 Annie Sprinkle and Beth Stephens, illustrated by YuDori, *The Explorer's Guide to Planet Orgasm: For Every Body* (Gardena, CA: Greenery Press, 2017).
- 2 Beth Stephens and Annie Sprinkle, "Ecosexuality," in *Gender: Nature*, ed. Iris van der Tuin (Farmington Hills, MI: Macmillan Reference, 2016), 313.
- 3 Please see Kim TallBear's website <http://kimtallbear.com/> and her essay "What's in Ecosexuality for an Indigenous Scholar of 'Nature'?" at <http://indigenousts.com/whats-in-ecosexuality-for-an-indigenous-scholar-of-nature/>.
- 4 Betty Grumble's website is <https://bettygrumble.com/>.
- 5 Please see <http://helloponyexpress.com/ecosexual-bathhouse-home>.
- 6 Robin Wall Kimmerer, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants* (Minneapolis: Milkweed, 2015).

16

CLIMATE JUSTICE, SATIRE, AND HOTHOUSE EARTH

Julie Sze

“Art is always a reflection, a testament, and a record of our human condition.”
—Favianna Rodriguez—*Culture Strike*¹

“Activism is the art of making my life matter.”
—Loretta Ross, *Reproductive Justice Activist*²

“A satirist, is an offended idealist.”
—Kurt Tucholsky, *writer of Weimar Republic*³

This chapter identifies and analyzes climate justice cultural production through humor and satire. Culture matters in a context where climate injustice grows more dangerous daily. Subversive humor/satire is a key component of visual production of a climate justice frame. It is significant for (at least) three reasons. First, humor/satire represent marked departures from mainstream representations of climate change based on fear/apocalypse and through which science and policy discourses predominate. Although humor has long been a part of climate change activism, what is less documented is the climate and environmental *justice* dimensions of such work.⁴ Climate justice cultural production refuses to maintain a “business-as-usual” approach to the storytelling around climate change. In this refusal lies a rejection of undifferentiated causes (“humans did this” to “the planet”) and affective mode of despair and hopelessness. As Elizabeth Yeampierre, a climate justice activist, said in an interview: “organizing has to reflect cultures we come from, connecting us to our ancestors, and in the ways that we talk, play, sing, dance, eat, and make art and community” (June 17, 2019). Second, humor/satire opens up avenues for expanded audiences for climate justice analytics to highlight the causes of the climate crisis and responses to it. Nicole Seymour calls “bad environmentalism” that which “employs dissident, often-denigrated affects and sensibilities” (6).⁵ Thus, humor/satire responds to the ethical, political, and cultural questions of “what is to be done” in the moments of crisis we currently inhabit. These expanded audiences include those from communities of color and Native nations on the frontlines of racial and environmental violence. A climate justice frame connects climate change with gentrification and police killings from Oakland and New York, to oil extraction on the Standing Rock Sioux Reservation (and other proposed and built pipelines on Native lands). Lastly, humor/satire rejects definitions and separations of genres and issues, between politics

cleaved from culture, art as distinct from music and life, and radical hope as separated from despair and death. Humor and satire are key components of how particularly impacted peoples imagine a future in dangerous times and may be part of how radical hope is created and lived in response to historical trauma and ongoing violence.

This chapter offers visual and aural cultural productions that constitute what I call elsewhere an “environmental justice structure of feeling” (9).⁶ Environmental justice activists and culture makers oppose venture capitalists, charter school proponents, real-estate developers, and the US nation-state writ large. Environmental justice movements and their culture makers are anti-capitalist and anti-racist, in their insistent critique of *marketization and consumerism* and *oil and gas cultures*. Environmental justice movements have long argued for making connections that exceed and defy binaries (social/environment) and the capitalist common sense. In a brutalizing era focused on death and natural resource extraction, and punctuated by a never-ending litany of apocalyptic scientific forecasts, environmental justice movements contribute their cultural imaginaries, share their histories, and worldviews—including dissident satire based on intersectional analyses that span historical time and geographic space. Radical hope is built upon art, love, creativity, restoration, relationships, and humor in the face of the calamity that is the present. This global present is built on colonialism and capitalism and in the US, dependent on stolen land and labor. How to survive the apocalyptic present has been a struggle for Native peoples and others for long periods of time. Here, Anishinaabe cultural theorist Gerald Vizenor’s notion of survivance points to possible purpose of humor and satire. He argues that struggle involves more than reaction to tragedy. It is “an active sense of presence,” continuation, and creativity (p. vii).⁷

Cultural productions create a visual landscape and soundscape of freedom, not as prescription or a road map for policy, but as an active presence in the face of socially sanctioned death. Environmental justice movements and their cultural producers work in communicative modes based on resistance, life-affirmation (against capital accumulation, economic growth and policy racism), and solidarities based on empathy, radical hope, grace and transformation. Abundance, life, and affirmation are counterposed against fear, deprivation, and chaos. Humor/satire are expressions of this climate justice structure of feeling. This structure of feeling is uncomfortable and necessary. As environmental historian Aaron Sachs writes on climate change humor:

Many people in the 21st century are worried about both old and new forms of apocalypse, and more and more of them are realizing that it helps to laugh at our precarity. Maybe you need to shake yourself out of your immobilization, or maybe you feel like shaking your fist at the universe, or maybe your goal is to take down the people who have been profiting from climate change. Comedy can help. Dark environmental humor is still rare, but like sea levels, it’s on the rise.⁸

Seymour identifies “bad environmentalism” which she defines through absurdities and ironies and affects of camp, dissidence, irreverence, playfulness and glee as purposeful and significant” (4). To make climate justice humor/satire is to draw connections to the past and the ongoing violent policing of climate justice activism in the present and future. Communities of color and native Nations have engaged in living life after socially and politically sanctioned structural death and violence.

Culture generated from people of color, particularly Native peoples and African Americans, show how spaces and stories of radical hope and humor thrive in defiance of death. Life through and after horror have been recurrent features in Native and black stories in the US since the “original sins” of genocide and slavery. Indigenous philosopher Kyle Powys Whyte argues that dominant discourses of the Anthropocene deny Indigenous realities, in that they ignore history

and the ongoing crises as a result of settler colonialism and ongoing processes of political domination.⁹ He cites April Anson who describes these discourses, of which the dominant Anthropocene narrative is a central component, as “settler apocalypticism.” Climate change narratives which are predominantly dystopian and post-apocalyptic erases Indigenous “histories, perspectives, and projects” (ibid, 225). Specifically, I look at CultureStrike and Movement Generation in the Bay Area and Indigenous activist Dallas Goldtooth (Indigenous Environmental Network and the 1491s, a comic group that centers Indigenous stories and perspectives, through absurdist humor). Environmental justice actors are not unique in that they draw upon a longer timeline of history, politics, and social movements to combat state, military, and capital interests. But *how* they do so may be instructive for others. Environmental justice movements and the organizers and communities that make them, write and re-write stories, make artwork, and sing of freedom and radical hope under conditions of relentless violence and death, including humor/satire.

Hothouse Earth and Life After Death

How do we live in the face of climate change? The world is facing hothouse earth, a chain of self-reinforcing change, leading to very large climate warming and sea-level rise. Those with the least culpability in producing emissions are hardest hit (e.g., global climate change refugees such as those from the Pacific Islands, coastal areas in the Global South and the Caribbean). Fast melting of the glaciers, intensifying conditions of drought, flooding, wildfires, water acidification, and the wide-scale death of ocean life, coral reefs, are on the rise as well—documented by scientists. The human and social impacts of climate change are massive, leading to global movement of populations, increased violence and war, and so on. Given the scale and scope of the disasters that we face, how can we, especially those in the global North, face the calamity of human induced disruptions in our present and future, in way that doesn’t immobilize but rather, takes responsibility? Denial/avoidance, refusal, grief and anger predominate as affective modes, for those who bother to know, if not to care.¹⁰

Climate activism is, thus, not (just) a political project of knowing, caring, and acting, but, as others have argued, also a *cultural* project of seeing/representing in a context of political disinformation (climate denialism) and personal immobilization.¹¹ More and different stories, in other words, seeing and representing is the explicit mission of CultureStrike, based in Oakland, in California. CultureStrike’s mission is to support and invest in: “*the power of art as a movement in and of itself ... art allows us to explore the root causes of problems and experiment with creative solutions without apology or baggage. We believe in the creative leadership of artists as agents of social change, creatives who think differently than advocates*” (How We Work). Artists *incite, invent, and redefine* through their cultural production. For long-term cultural change, they focus on proactive, creation of “new Narratives” by cultivating artists with a justice orientation. Their collaboration with the JustSeeds (a social justice artist collective) resulted in a “We Are the Storm” climate change portfolio.¹²

We Are the Storm visualizes a climate justice frame by focusing on socially vulnerable communities (migrants and people of color in particular) who are least culpable for, and most impacted by, climate change. The description of the portfolio reads that it:

draws inspiration from the powerful work of grassroots groups that are championing creative and community-based solutions to combat climate change. The artworks bring voices from frontline communities that are being the most impacted by climate change and destructive environmental practices, to the forefront of the climate change discussion.

(*ibid.*)

In T.V. Reed's study of the cultural dimensions of social movements, he writes that social movement cultures or subcultures are constituted by such things as rituals and symbolically charged actions; works of art and other expressive forms; unique ideologies and value systems ... and other special language forms; and material culture objects (buttons, t-shirts, etc.).

We Are the Storm show how the visual politics of environmental justice movements has evolved (from Reed's emphasis on the environmental justice novel), to expand to climate justice and to facilitate "movement solidarity, strengthen movement-bred identities and communicate movement ideas, values and goals inside and outside the movement."¹³ The art from Culture Strike and JustSeeds centralize the most vulnerable as the leaders of a climate justice and just transition (away from fossil fuels) movement. This "culture/narrative shift" around a climate justice frame is a sharp turn away from despair and into action by centralizing those most impacted and least responsible for carbon emissions as the leaders in the movement.

Climate Humor, Horror, and Satire

Culture Strike and JustSeeds focus their narrative and visual responses to climate injustice around people of color and Indigenous peoples as environmental rebels and leaders. Absent in their "new narrative response" is humor, focusing more squarely on the inherent dignity and nobility of those (i.e. climate refugees) most often represented through fearful language and images. Humor offers yet another pathway into action in climate change responses. Sachs suggests that humor might be precisely what we need now. In a moving piece, where he opens with how what used to give him sustenance in the past (walks in the woods) is no longer tenable as an affective response to griefs both personal and political. He writes: "But if we truly want to develop an ecological and cultural vision for a *tolerable future* ... we're also going to need a well-developed sense of humor" (he quotes from Thoreau, "what is the house if you haven't got a tolerable planet to put it on"). Sachs draws on a comedic tradition whereby we can "gain a little distance from our horrifying reality and then start pointing out fingers at the people most responsible for that reality." He suggests that:

If Black folks could joke about slavery on plantations and Jews could joke about the Holocaust in concentration camps, then surely we can joke about climate change while sorting our recyclables and watching commercials sponsored by the American Petroleum Institute.

Dominant modes of communication about climate change has gotten little broad public purchase in the US, and, some have argued, that apocalyptic/disaster discourse (combined with well-funded climate denialism) contributes to greater disengagement and hopelessness (the "too-late" approach). Sachs suggests that in a moment of failing climate communication models, humor may lead to more impactful forms of connection:

The comic mode is more unsettling; it also accepts reality, but then it turns to the audience and says, "Seriously? Can you believe this crap?" That can create a somewhat lighter, more determined kind of solidarity. So why not try comedy? Comedy revels in surprises, in new perspectives, in making the world topsy-turvy, carnivalesque.

Comedy can be transgressive, through the taboo and the sense that some topics are not possible to make light of in any manner. In *The Last Laugh*, a (2017) documentary about Holocaust humor, an interviewee calls humor a "weapon of the weak." This term is a nod (intentionally or

not) to political scientist James Scott's famous term for subaltern politics in South Asia, later taken up by historian Robin Kelley in the African American twentieth-century tradition, in which engagement with formal politics was extremely dangerous. The idea of humor as a "weapon of the weak" transcends time and place, but what unites them is a generally subordinate, even seemingly hopeless political situatedness.¹⁴ The notion of "weapon of the weak" is vulnerable to political critique, whether it is as a distraction from formal politics, and as a way to accommodate the status quo.¹⁵

Whether humor/satire is an "effective" weapon of the weak is impossible to evaluate.¹⁶ It exists within climate justice culture, itself a messy and contradictory movement with internalized racism/sexism, anti-Native sentiments, and complicated interpersonal engagements. Here, I turn to Dallas Goldtooth (Mdewakanton Dakota and Dine), a central figure in climate justice fights, as Keep it in the Ground Campaign Organizer (he is the son of Indigenous Environmental Network Founder, Tom Goldtooth).¹⁷ Goldtooth is a poet and sketch comedian that plays with and against stereotypes about Indians and explicitly against white supremacy, fragility, and privilege. In an interview, when asked about how humor is intertwined in his political work, he says, "humor is prevalent" in our cultures, in part as a response to trauma and deaths. In calling himself "a contrarian," he argues that humor doesn't make light of the seriousness at hand. Rather, "what we choose is how to respond." He acknowledges the various struggles in his communities, and that as traumatized peoples, humor is a way "not to fall down the well" (*ibid.*).

Elsewhere, he writes of his work with the 1491s, an all indigenous comedy sketch group that deals with these problems and limits of imagination: "The world is so lazy, society is so lazy, that it continuously tries to minimize the complexities of entire cultures and people in the simplest of terms. Our job is to push back, to make it complex. Don't be afraid to dirty that narrative."¹⁸

What does "dirtying the narrative" mean vis-à-vis climate justice? According to their website, the 1491s (a reference to 1492, when Columbus "discovered" America) are:

a sketch comedy group based in the wooded ghettos of Minnesota and buffalo grass of Oklahoma. They are a gaggle of Indians chock full of cynicism and splashed with a good dose of *indigenous satire*. They coined the term All My Relations, and are still waiting on the royalties. They were at Custer's Last Stand. They mooned Chris Columbus when he landed. They invented bubble gum. The 1491s teach young women to be strong. And teach young men how to seduce these strong women.

(*emphasis added*)¹⁹

Their Indigenous satire plays with audience expectations, of Native peoples as pure and romanticized, and with white allies and their casual (or not so casual) racism. Their video, "Pipeline Protest," is typical of their absurdist approach, playing with audience stereotypes of Indians as (near) naked, performative activist cultures (each of the individuals in the video representing a "specific type" and introducing themselves in excessive language or with visual jokes, i.e. the fat oil rig worker with a fake wig and beard). In "Pipeline Protest," they are protesting an amusement ride at a local fair which they (mistakenly) think is an oil rig "having unconsensual sex with Mother Earth" (Seymour, 182). Goldtooth was deeply enmeshed in various pipeline fights on indigenous lands, specifically the fight against the Dakota Access Pipeline. He plays with stereotypes of Native Americans as placed squarely in the past, as Romantic noble savages ("The Ecological Indian"), and of activist movements as clean and pure. The 1491s "dirty" the narrative, by poking fun at white expectations of Native activist identity, based on racist stereotypes, of Native peoples as "out of time," as well as of non-Native allies performing their solidarity for

extreme comic effect. Goldtooth calls his performance work an outlet “to process a lot of the batshit craziness” in his activist work.²⁰

The juxtaposition of climate change injustice and comedy is a central feature of “The North Pole,” a web series about gentrification and climate change, and in their short video “Fear of a Black Planet.” “The North Pole” was produced by Movement Generation, an organization that emerged out of Hurricane Katrina and founded by Bay Area community organizers of color.²¹ Movement Generation’s “Culture Shift” focuses on generating “Arts and Activism for Climate Justice.”

It brings together cutting-edge artists and activists to creatively build a loud, proud, and beautiful cultural front for climate justice. We use arts and culture together with grass-roots organizing to build our creative resistance and radical imagination for our peoples and the planet.²²

Movement Generation’s primary project is the “Green Collar Comedy” series, which combines “subversive humor and grassroots politics (through) online videos that break through the dominant narratives on issues of race, class, and ecology.” The series follows three friends who

struggle to stay afloat amidst a rapidly changing neighborhood. They fight, dream, and plot half-baked schemes to save the place they call home. They will have to combat evil landlords, crazy geoengineering plots, and ultimately each other if they want to stay grounded.²³

The first episode begins with the main characters, who, both in the film and in real life, are Bay Area-born and -bred people of color, who face a rent hike, and gently mock the “invasive species” of white hipsters who have come into their neighborhood and push rents up. The humor here is the inversion of the traditional protagonist and interpreter of a cultural scene as white and middle-class. Here, the main characters are black and brown, and working-class, and they mock the signs of “ecosystem” change (yoga classes, hipster cafés).

They drive around, on the search for what they call a “rare sighting,” the “majestic polar bear” who is a local-born and -bred resident, a person of color who has yet to be priced and pushed out of their home. Later chapters take the protagonists far out of the Oakland Bay Area to visit family pushed out of Oakland due to price hikes. Another finds one of the protagonists struggling with the realization that one of them is working for a company that is heavily involved in geoengineering. The gentle humor in this film is in the inversions: that the protagonists are the subjects, and not objects of fascination. It connects the dots between big issues: climate change, polar bears, geoengineering and drought, with the concerns of young people of color in the Bay. Big ideas and little visual jokes, like the literal polar bear that is glimpsed at the edge of the screen, share the stage. The structural links between climate justice, gentrification, and solidarities between communities that seem different from one another (urban/rural, African-American/Native) are made by climate justice activists who draw connections between issues that can appear divergent to those who are either outsiders or who see things in terms of single issues. According to filmmaker and Movement Generation member, Josh Healey, who created the series with Yvan Iturriaga and Darren Colston, climate change means both the world’s climate, and gentrification in Oakland. Healey writes:

We wanted to make “The North Pole” because there’s no place on earth like Oakland... (and) there’s no planet in the universe like earth. I call both these places home—and

both are suffering through their own kind of “climate change.” At a time when whole communities and environments are being displaced and disposed of, “The North Pole” is our creative picket line-turned-comedy roast.

(*ibid.*)

“The North Pole” addresses a fundamental problem, *what is home*, to which communities, and what can be done about it in the face of twinned problems of gentrification and climate change.²⁴ This problem of home is particularly intense in high-end cities like New York and San Francisco, facing gentrification along with sea-level rise.

This creation of an environmental justice structure of feeling is resonant in Movement Generation’s 2014 “Brother Earth: The Final Communiqué.” The video pairs well-known black revolutionary and Bay Area local Boots Riley with Healey. In it, Riley takes on the character of our planet—specifically, “a militant, trash-talking version known as Brother Earth.”²⁵ Riley, a well-known rapper with the Coup, is also the Director of *Sorry to Bother You*, a 2018 radical anti-capitalist film that gained much attention for its originality and (left) political critique. Healey plays The Sun in typical white guy in hip-hop attire (large disk/sun necklace à la Flavor Flav from Public Enemy), while Brother Earth starts off looking “super-fly.” The video explains in everyday terms what climate change is, and what will happen in the short and long term, and simultaneously funny and radical. Brother Earth says, “I’m here to talk to you about climate change, aka climate change, aka these money hungry fools literally trying to kill me.” Brother Earth says, “ever since some people” (the camera then cuts to men in suits with corporation logo masks) “started using all my fossil fuels, exploiting all your labor and exploiting all my muther-fucking resources, my atmosphere has gotten way thicker it’s like: *Boom*.”

Each Boom is then intercut with a problem – “fracking, mountaintop removal, golf courses in the desert, Wal-mart sweatshops, more war in Iraq.” Each “Boom” leads to Brother Earth slowing down, overburdened with more clothes over his “fly suit” and looking more ill. The video plays with visual and verbal puns, i.e. the problem of “glacial profiling” is one pun. An example of a visual pun is when Sun reaching to touch Brother Earth’s hair, to which he angrily responds, “Don’t touch a black planet’s hair.” At some point, Brother Earth says to an overeager Sun, gets excited and says: “wait, I thought hot was good, it’s like I’m hot cuz I’m fly.” Brother Earth interrupts, “this ain’t no damn rap song” (*ibid.*).

As lead singer for The Coup, Boots Riley’s radical politics was through “damn rap song(s).” The Coup is a politically conscious rap group, founded in 1992. Riley’s “Brother Earth” recalls Public Enemy’s 1990 album, *Fear of a Black Planet*. This album was a commercial and critical hit, known most famously for their track anthem, “Fight the Power.” Public Enemy followed in 1991 with *Apocalypse 91... The Enemy Strikes Back*. Public Enemy and The Coup centralize their black radical perspective and in its “in-your-face” rhythm and lyrics. In naming their follow up to *Fear of a Black Planet*, *Apocalypse 91... The Enemy Strikes Back*, Public Enemy takes up the white fear of “apocalypse,” and “the Enemy.” Although Public Enemy does not talk about climate change directly, Riley’s 2014 Black Planet is a subversive call-back to white fears transformed in a climate unjust satiric hellscape.

Two decades later, the climate apocalypse is here, and (white) fears remain remarkably consistent, as geographer Kathryn Yusoff argues, in *A Billion Black Anthropocenes or None*.²⁶ Riley’s Black Planet is angry, it is political, and the subversive visual power and satire in the Green Collar series is to put the righteous fear about climate change where it belongs. That “fear” is not against a Black Enemy, but the corporations that destroy life and community, for black peoples and Native peoples, and now for everyone and everywhere.

Conclusion

Climate justice cultures use humor/satire because at its root, there remains a sense of optimism and radical hope. This optimism is in the face of horrific exploitation of land and labor – from Native removal from their ancestral lands, and slavery and its afterlives. Satire can generate its own momentum that can possibly turn towards solidarity, community, and politics, rather than withdrawal, individualism, and nihilist despair. As Seymour writes, *Bad Environmentalism*, “has not allowed the horrors of climate change, environmental racism or factory farming to dampen their irony, their playfulness, their irreverence... those modes are *particularly suited* to addressing such horrors” (234). Climate justice cultural production address the horrors and the humors of climate change and environmental racism. Looking squarely from the perspective of Black and Native peoples, these works satirically poke through the cynicism and despair to generate an environmental justice structure of feeling that “Another world (was) and is possible.”

Notes

- 1 “How We Work.” CultureStrike. Accessed July 16, 2019. <https://culturestrike.org/how-we-work>.
- 2 Loretta Ross, June 9, 2016. Accessed July 16, 2019 “University of Washington School of Social Work Commencement Speech.” www.youtube.com/watch?v=NH52tMHwwQo&feature=youtu.be.
- 3 Corrina da Fonseca-Wolheim, 2019. “A Lauded Satirist of the Weimar Republic Who Anticipated the Brutality of the Third Reich,” *The New York Times*, July 5, 2019 .
- 4 Boykoff Maxwell and Beth Osnos, 2019. “A Laughing matter? Confronting climate change through humor.” *Political Geography*, Vol 68: 154–163.
- 5 Nicole Seymour, *Bad Environmentalism: Irony and Irreverence in the Ecological Age* (Minneapolis: University of Minnesota Press, 2018), 6.
- 6 Julie Sze, *Environmental Justice in a Moment of Danger* (Berkeley: University of California Press, 2020).
- 7 Gerald Vizenor, “Survivance is both a “renunciation of dominance, tragedy and victimry” and the continuance of native stories,” *Manifest Manners: Narratives on Postindian Survivance* (Lincoln: Nebraska University Press, 2020).
- 8 Aaron Sachs, “A Different Kind of Wildness: Environmental Humor and Cultural Resilience,” *Thoreau Society Bulletin* (2019) Number 104.
- 9 Kyle Whyte, “Indigenous Science (Fiction) for the Anthropocene: Ancestral Dystopias and Fantasies of Climate Change Crises,” *Environment and Planning E: Nature and Space* (2018) 1, nos. 1–2: 224–242.
- 10 Saray Jaquette Ray, *A Field Guide to Climate Anxiety: How to Keep your Cool on a Warming Planet* (Berkeley: University of California Press, 2020); Janet Fiskio, “Building Paradise in the Classroom,” in *Teaching Climate Change in the Humanities*, ed. Stephen Siperstein, Shane Hall, and Stephanie LeMenager (New York: Routledge, 2017), 101–109.
- 11 Rob Nixon, “The Great Acceleration and the Great Divergence: Vulnerability in the Anthropocene,” *Profession* (2014). Accessed July 16, 2019. <http://profession.commons.mla.org/2014/03/19/the-great-acceleration-and-the-great-divergence-vulnerability-in-the-anthropocene/>.
- 12 “We Are the Storm Climate Change Portfolio: CultureStrike and Justseeds Artists’ Cooperative present: “WE ARE THE STORM” Art print portfolio highlights the resistance and resilience of communities under threat by climate change.” Accessed July 16, 2019. <https://culturestrike.org/project/we-are-storm-climate-change-portfolio>.
- 13 Reed, T.V. “Social Movements and the Art of Protest.” Accessed July 16, 2019. http://culturalpolitics.net/index/social_movements.
- 14 Timothy Johns, “Laughing Off Apartheid: Comedy at the Twilight of White Minority Rule” *Journal of Narrative Theory*. Vol. 39, No. 2 (2009): 211–240. Comedian Trevor Noah similarly talks about humor as the mechanism for survival under Apartheid. More broadly, Lee Siegel’s 1987 masterwork, *Laughing Matters: Comic Tradition in India* (Chicago: University of Chicago Press), examines the “cosmic sense of life—a vision formed in the convergence of the bitter insight of satire and the sweet outlook of humor.” Siegel argues that the aesthetics of comedy and the psychology of laughter are interwoven.
- 15 Edwards, Robert and Ferne Pearlstein. 2017. “Why Holocaust Humor is Now Serious Business,” *The Forward*, May 29. Accessed July 16, 2019. <https://forward.com/opinion/373164/why-holocaust-humor-is-now-serious-business/>.

- 16 The film also describes its limits. Director Larry Charles argues that humor and satire are actually self-limiting. He argues “that a certain amount of dissent ± satire included—is built into the system, tolerated and even encouraged by the powers that be as a release valve to dissipate unrest and prevent it from gelling into genuine uprising.”
- 17 Dallas Goldtooth, *The Forgotten Ones*. January 29, 2018. Accessed November 30, 2019. www.stitcher.com/podcast/the-extraordinary-negroes/e/53075382.
- 18 William Yardley, “An environmental activist who uses comedy to help stop oil pipelines.” *Los Angeles Times*, September 13, 2016. Accessed July 16, 2019. www.latimes.com/nation/la-na-sej-dallas-goldtooth-activist-comedian-20160902-snap-story.html.
- 19 1491s Home, Accessed July 16, 2019, www.1491s.com/.
- 20 “Dallas Goldtooth puts pipeline center Stage.” 2019. Accessed July 16, 2019. *Grist*, <https://grist.org/grist-50/profile/dallas-goldtooth/>.
- 21 Movement Generation “Mission and History”. Accessed July 16, 2019. <https://movementgeneration.org/about/mission-and-history/>.
- 22 Movement Generation “Culture Shift.” Accessed July 16, 2019. <https://movementgeneration.org/our-work/advancing-a-new-narrative/cultureshift/>.
- 23 “Culture Shift,” Accessed July 16, 2019. <https://movementgeneration.org/our-work/advancing-a-new-narrative/cultureshift/>. Dry, Jude. ‘The North Pole’ Trailer: Oakland-Bred Climate Change Comedy Will Make You Laugh Until You Cry.” Accessed July 16, 2019. www.indiewire.com/2017/07/climate-change-north-pole-trailer-oakland-web-series-global-warming-gentrification-watch-1201854115/.
- 24 Hurricane Katrina was a catalyst for Movement Generation and in connecting gentrification and climate change As Healey says
“When you’re talking about displacement, when you’re talking about climate change and these disasters that are happening, [developers] use these crises as an opportunity to come in and reshape and privatize and take over. Just like what they did in New Orleans after Katrina when they tore down public housing and built up condos... the connection there is real”.
Ivette Feliciano, 2017. “Gentrification is awkward, painful and funny in this new web series on North Oakland.” Accessed July 16, 2019. www.pbs.org/newshour/arts/gentrification-awkward-painful-funny-new-web-series-north-oakland.
- 25 Brother Earth: New Comedic Video with Boots Riley. Accessed July 16, 2019. <https://movementgeneration.org/brother-earth-video/>.
- 26 She argues that geology is burdened by a “color line,” as examines how the grammar of geology is foundational to the extractive economies of subjective life and the earth under colonialism and slavery. Leah Kaplan, “A Billion Black Anthropocenes or None: A New Book about Race and Geology,” 2019. Accessed July 16, 2019. www.aaihs.org/a-billion-black-anthropocenes-or-none-a-new-book-about-race-and-geology/.

INDIGENOUS MEDIA

Dialogic Resistance to Climate Disruption

*Salma Monani, Renata Ryan Burchfield,
Danika Medak-Saltzman, and William Lempert*

This chapter is the collaboration between four Indigenous studies scholars all interested in illuminating the aesthetics, ethics, and politics of contemporary Indigenous art and visual culture with regard to climate disruption. When the editors approached one of us (Salma) to contribute to this collection, she could not see herself doing this work alone, for at least two important reasons. First, moving away from single-authored productions (specifically those by non-Indigenous scholars) toward models of collaboration that foreground Indigenous voices is imperative if we are, as we keep saying, hoping to decolonize academia. Second, and related, a single-authored response would barely do justice to the vibrant conversations currently occurring across the interdisciplinary terrain of Indigenous studies. While four co-authors don't necessarily get much closer to representing this rich intellectual terrain, guided by pioneering scholars within the interdisciplinary field of Indigenous Studies we seek to break down walls between institutionally segregated disciplines—in this case literary studies (Renata), anthropology (Willi), women's & gender studies (Danika), and environmental studies (Salma)—to demonstrate our shared interests.

Spotlighting Indigenous artists from geographies as far apart as the North American Arctic to Australia, and covering a variety of media from hip-hop and multimedia installations, to machinima, to two types of virtual reality (a room-scale visual installation, and a haptic experience created on a personal computer), the individual vignettes below nonetheless thread through a common theme. Each considers how contemporary Indigenous artists imaginatively help us rethink notions of climate disruption in specifically Indigenous terms, i.e., as scenarios that are all too familiar to peoples who have survived centuries of colonially induced violence to their environments and life-ways. Yet, importantly, despite overwhelming loss, as Kyle Powys Whyte (Potawatomi) has suggested, “instead of dread of an impending crisis, Indigenous approaches to climate change are motivated through dialogic narratives with their descendants and ancestors” and geared toward resilience.¹ Each of the following four vignettes demonstrate how Indigenous artists enact such dialogic narratives through referencing, adapting, and innovating traditional stories into contemporary mediated forms. They illuminate survivance—what Gerald Vizenor (Anishinaabe) described as not mere survival but a flourishing of Indigenous knowledge²—and, thus, resurgence as modes of Indigenous empowerment in the face of continued disruption to lives, lands, and ways of being in the world.

Nicholas Galanin's Multimedia as Cultural Continuum for Climate Change Survivance

Renata Ryan Burchfield (Cherokee Nation)

Nicholas Galanin's (Tlingit/Unangax̓) work resides along what he calls a "cultural continuum" and reflects what Dean Rader calls an "engaged resistance" by challenging the standard western notions of modern and contemporary versus primitive and traditional.³ In an artist statement Galanin says, "Culture cannot be contained as it unfolds. My art enters this stream at many different points, looking backwards, looking forwards, generating its own sound and motion... Through creating I assert my freedom."⁴ By breaking away from linear conceptions of history and time through his artwork, Nicholas Galanin disturbs static notions of what it is for Indigenous people to exist in the contemporary moment of climate change when they've often already faced many of the challenges of climate change through the apocalyptic consequences of colonialism.

Indigenous peoples have already, and continue to live, through our own apocalypses. And we've survived despite colonialism's attempts to eradicate us. As Kyle Powys Whyte says, "...Indigenous peoples have already endured harmful and rapid environmental transformations due to colonialism and other forms of domination."⁵ Indigenous ontologies upset notions of climate change as unprecedented. When you've been in crisis for generations then the crisis that is looming seems less urgent because there is a sense that we as Indigenous peoples have already lived through it. Complicating notions of settler climate change anxieties as inscribed in linear time without historical precedence, Whyte calls attention to Indigenous notions of "spiraling time," that have the potential to shift western perspectives towards intergenerational concepts of time. For Whyte:

Spiraling time... refers to the varied experiences of time that we have as participants within living narratives involving our ancestors and descendants. Experiences of spiraling time, then, may be lived through narratives of cyclicity, reversal, dream-like scenarios, simultaneity, counter-factuality, irregular rhythms, ironic un-cyclicity, slipstream, parodies of linear pragmatism, eternity, among many others.⁶

Indigenous visuality is primed to represent conceptions of spiraling time through its various modes of expression, which can collapse time while expanding it. Film and artistic works can, and invariably do push these limits and Galanin's work in particular communicates these disruptions.

In his video installation *Tsu Heidei Shugaxtutaan 1& 2*, Galanin pairs two videos that actively disrupt notions of settler time.⁷ In the first video David "Elsewhere" Bernal, a contemporary dancer who became well known due to a viral video in the early 2000s, is dancing in a blank industrial warehouse space to the beat of a drum. He is wearing contemporary clothes and tennis shoes. However, the name of the piece, *Tsu Heidei Shugaxtutaan*, relates to the traditional Tlingit song that is being sung, and which translates to, "We Will Again Open This Container of Wisdom That Has Been Left in Our Care." The second video features a traditional Tlingit dancer, Daniel Littlefield, against a traditional Tlingit style background carved by Galanin's uncle. However, Littlefield dances his traditional steps to an electronic dub step beat. While one video appears *visually* "modern" and the other "traditional," the accompanying music in each ruptures any suggestion of these categories as binary to assert instead that Indigenous culture is a continuum, not an either/or of allochronic linearity.

Juxtaposing allochronic assumptions of traditional versus modern, Galanin's work breaks down western chronologies of linear temporal progression. The videos' deliberate remixing of audio/visual expectations create what Indigenous studies scholar Mishuana Goeman calls a

“node” or a disruption of settler time.⁸ These juxtapositions concatenate time and space to create something innovative, even as they demonstrate Grace Dillon’s notion of Native slipstream, which she describes as, “pasts, presents, and futures that flow together like currents in a navigable stream.”⁹ Galanin says that, “This work embodies celebration of culture and the necessity of contribution over consumption.”¹⁰ Such understandings celebrate cultural practice taking varying forms. In turn, these forms are adapted to ensure community survivance—“contribution not consumption”—across time. They also succinctly encapsulate a common Indigenous belief that the practice of our cultures can fundamentally change our relationship with the world.

While the *Tsu Heidei Shugaxtutaan* videos may not overtly engage issues of climate change, through their attention to dynamic Indigenous relations with the world that refuse binaries of traditional versus modern, and linear regimes of temporality, they set the context for Galanin’s other works, such as *We Dreamt Deaf* (image accessible on the artist’s website at <https://galan.in>). This piece references a colonial nostalgic past of bear rugs and conquering the wild, while at the same time locating a present and future decimated by climate change. *We Dreamt Deaf* is a polar bear skin that appears to be melting, which gestures to the disappearing arctic ice that is driving polar bears into extinction and causing Indigenous peoples to have to move whole villages, such as Shishmaref, Alaska, because of the changing coastlines. Galanin says, “The polar bear is an iconic symbol of the struggle for survival of animals and cultures...” especially in relation to climate change.¹¹ The interconnectedness of humans and non-humans is demonstrated in the linked irony of a polar bear being dislocated and killed (by a *white* sport hunter)¹² within a village that will soon be dislocated itself due to climate change (a global phenomenon fueled primarily by white ideals of consumption).

Galanin’s *We Dreamt Deaf* represents an imperative that many Indigenous creative producers have to engage issues of climate change. In all, his art moves seamlessly along continuums of “spiraling time” to articulate an “engaged resistance” with current issues. It is through such artwork that Indigenous ontologies are made available to audiences, western frameworks through which the world is shaped are broken down, and current issues reimagined and re-contextualized to remind us that climate change is not unprecedented, and instead is long-lived colonial violence with which Indigenous peoples actively contend.

The Peacemaker Returns: Projecting the Great Law of Peace Beyond the Boundaries of Space-Time

Danika Medak-Saltzman (Turtle Mountain Chippewa)

At least a thousand years ago,¹³ during a dark time of ongoing war, mourning, and violence amongst the Seneca, Cayuga, Onondaga, Oneida and Mohawk peoples, the Peacemaker arrived in what is currently called Upstate New York. The Peacemaker brought the five nations¹⁴ together as the Haudenosaunee (Iroquois) Confederacy, governed by the Great Law of Peace. This Confederacy became the local model of participatory democracy that influenced the so-called “founding fathers” of the United States. Although, the vital elements of the powerful role of women in governance, the necessity of working to maintain peace, and the responsibility to make decisions with a “good mind,”¹⁵ all principles central to Haudenosaunee governance structures, were excluded in the U.S. case.

There are many ways of telling the Peacemaker story,¹⁶ and Mohawk multimedia artist Skawennati uses the online platform *Second Life* to create her latest machinima *The Peacemaker Returns* (2017) to retell this narrative in three scenarios—as it originally occurred to ensure the audience will know the story, and by projecting it into an alternative present and a distant future to portray the second and third arrivals of the Peacemaker. Key to understanding the significance

of Skawennati's retellings in *The Peacemaker's Return* is knowing the original Peacemaker story, which is firmly rooted in Haudenosaunee histories and belief systems where the charge of "extending the rafters" is paramount. In short, "extending the rafters" references the structure of the longhouse, and as Skawennati describes it in the machinima, "you can keep making the longhouse longer."¹⁷ "Extending the rafters" means to make room for and incorporate others into belief systems that privilege maintaining peace and engaging the world with a good mind, and/or to inviting and incorporating other peoples and nations to join the Confederacy.¹⁸

Even as Skawennati presents a keen commentary on the ongoing value of the Peacemaker story through space-time, the Second Life platform lends itself to amusing storytelling as most characters are rendered with idealized (and even gravity defying) physiques. For example, in this retelling the Peacemaker is portrayed as a handsome hunk in a levitating canoe, which provides viewers with a literal and figurative moment of levity as Skawennati illustrates key points of the original narrative. The audience is told that the Creator's message of peace is carried by the Peacemaker first to the Mohawk, then to the Cayuga, Oneida, and Seneca nations, respectively. Only once these nations agree to heed and abide by this message of respect, peace and unity did the Peacemaker approach the Onondaga, bringing representatives of these four formerly warring nations with him. This strategy was employed for good reason, because among the Onondaga lived Tadodaho, the most feared person of the five nations at that time. In a variety of portrayals, including Skawennati's, Tadodaho is consistently described as having a twisted body and snakes for hair, descriptors which are understood partly as metaphor for the troubled mind of one plagued by a death-drive and an unwavering commitment to ongoing war, and partly as a consequence of a never-ending cycle of hatred, killing, and revenge. As the story goes, once Tadodaho and the Onondaga take up the Peacemaker's message and join the rest of the nations as a member of the Confederacy, the Peacemaker leaves, saying, in Skawennati's version, that he will come back if he is ever needed by the people.

When the Peacemaker returns in Skawennati's machinimic alternative present that mirrors the challenges of our current 21st century moment, the same strategy is employed to "extend the rafters," this time across the peoples and nations of Earth. The Peacemaker, this time portrayed as a woman, briefly mentions the leader and nation that must be approached last, and proceeds accordingly. Only after all other nations of Earth have signed on and agreed to help convince the holdout to choose peace and governance according to the Great Law, is the U.S. approached. In so doing Skawennati begins to indicate that it is the violence, inequity and animus in the U.S., which have only increased under the leadership of a president addicted to Twitter, that marks the U.S. as evocative of the Onondaga during the dark times so long ago.

In this scenario, the US and the violence that has remained ongoing since the nation's inception is represented by a president who bears a striking resemblance to Donald Trump (although never named as such), replete with a peculiar hairstyle marking him an allegorical Snakes-for-Hair Tadodaho. In this moment, and using the allure of sharing her Twitter followers in exchange for signing on to the Great Law of Peace, Skawennati's representation elicits laughs even as it reminds us that like the time preceding the original Peacemaker's arrival, our world is marked by ongoing war: against the planet, the poor, those marked as different, and so on. By equating Trump with the Snakes-for-Hair Tadodaho, the US's commitment to maintaining the world's largest military and making itself the most fearsome of nations is spotlighted, as are the violence, misogyny, racism, and environmental destruction that have marked Trump's presidency. The audience is thus provided the opportunity to reflect on how, before the arrival of the original Peacemaker, no one would have believed changing Tadodaho from a seeker of death to a keeper of peace was possible; in turn suggesting that Snakes-for-Hair Trump, too, might yet be transformed (or replaced) in the name of peace and powered by the good mind (Figure 17.1).



Figure 17.1 Skawennati, *Kahentéhshon Meets You-Know-Who*, still from *The Peacemaker Returns*, 2017

When the Peacemaker returns the third time to extend of the Great Law of Peace across the galaxy, and present the possibility of longstanding and far-reaching peace, she is once again portrayed as a woman. The significance of this choice cannot be overstated. Not only is Skawennati intervening in heteropatriarchal and Eurowestern colonial conventions that demand the erasure of women, and how these, in turn, configure men as the presumptive heroes and saviors. But also, and in contrast to these conventions, Skawennati invites the audience to consider how *The Peacemaker Returns* equates women with the power of peacemaking. Peacemaking, as we see in both the alternative present and distant future returns of the Peacemaker, requires its protagonist to cultivate deep inner strength, and to see peace as more powerful and valuable than war (Figure 17.2).



Figure 17.2 Skawennati, *Becoming the Peacemaker* (Iotetshèn:’en), still from *The Peacemaker Returns*, 2017

In this way the reproductive capacity and value of women is extended to the other-than-biological realm in a manner of rematriation that stands in contradistinction to what settler colonial heteropatriarchy structures as a normative convention.¹⁹

While nations like the U.S. employ logics of supremacy and colonialism as the viable way forward, Skawennati refuses such pathways. Instead of privileging the promotion of war, violence, stratification, hierarchies, and systems of bestowing and denying rights to some at the expense of others that are central to settler and US exceptionalist modes of being in the world, Skawennati imagines otherwise. By centering Indigenous knowledge, narratives, humor, and the power of women and peace, Skawennati presents a means of escape from the current apocalypse that colonialist and extractive logics have ushered forth. She imaginatively portrays three scenarios of the return to right relationships as forwarded in the principles of the Haudenosaunee Great Law of Peace. Now more than ever, we need the wisdom and power of the good mind to guide us, before it is too late. Our current path can only lead to continued exploitation, destruction, and eventual extinction of humanity, as well as to the eradication of so many other beings in the process. We need to act collectively to enact immediate change, or there will be few possibilities for the kinds of national, planetary (or even galactic!) futures Skawennati offers.

Virtual Metaphors for Being Re[a]lationally Present: Lisa Jackson's VR *Biidaaban: First Light*

Salma Monani

The virtual reality (VR) project *Biidaaban: First Light* is created by Lisa Jackson (Anishinaabe) in collaboration with Mathew Borrett, Jam3, and the National Film Board of Canada (NFB). At its Canadian premier, audiences experienced its room-scale immersive environment in booths set up on Nathan Phillips Square in downtown Toronto. This choice was deliberate as *Biidaaban's* virtual environment is an alternative vision of downtown Toronto. On her website, Jackson blurbs the project:

The town square is flooded. The city's infrastructure has merged with local flora. In this radically different future, people have found a connection to the past. *Biidaaban: First Light* illuminates how the original languages of this land can provide a framework for understanding our place in a reconciled version of Canada's largest urban environment.²⁰

Jackson highlights both the project's focus on a familiar urban environment, and a broader vision of apocalyptic environmental change. This futuristic location is further negotiated through Indigenous frameworks that reject environmental doom in favor of "connection," "understanding," and "reconcil[iation]." The narration, along with virtual reality, thus asserts Indigenous futurisms—what Grace Dillon describes as the capacity of speculative fiction to "envision Native futures, Indigenous hopes and dreams recovered by rethinking the past in a new framework" (Figure 17.3).

I experienced *Biidaaban* at the imagineNATIVE Film & Media Arts Festival in 2018. The headsets transported me to its world of vivid color, ambient natural sounds, and calm voices, which subtly directed me to turn and move so I might see, hear, and "bear witness" to this altered world. Not required to engage haptically (i.e., through hand controls), I became intensely aware of the audiovisual sensory details of *Biidaaban's* Toronto.²¹ I journeyed through a shadowy, derelict subway stop (Toronto's Osgoode station), where the train lines served as waterways for canoes to the open expanse of Nathan Phillips Square, where plants proliferated amongst the broken infrastructure, a turtle plodded by while ravens talked, and day turned to dusk with a luminous moon. I arrived on a rooftop, where golden motes converged with the night sky and became words from the languages of Toronto's original peoples (Wendat, Anishinaabemowin, and Mohawk/ Kanyen'keha).



Figure 17.3 Lisa Jackson, Futurist Toronto in *Biidaaban: First Light*, still, 2018

The experience of being encircled by these languages in conversation with a shimmering, brightening world has stayed with me. The languages don't just inspire a profound relational humility (for example, through evocation of the Thanksgiving Address), but are also a presence deliberately *of* the world—words form from sparkling dust and merge into the light of day (Figure 17.4). Situated in 360-degrees of breathtaking realism and vibrant animacy, I found myself speechless as *Biidaaban* ended with three sentences:

The central prayer of the Haudenosaunee is “The Thanksgiving Address.” They are the words that come before all else.

Biidaaban is an Anishinaabe word. It refers to the past and the future collapsing in on the present. It is the moment of first light before dawn.



Figure 17.4 Lisa Jackson, Language & Light in *Biidaaban: First Light*, still, 2018

The languages of Wendat, Anishinaabemowin and Kanyen'keha have been here for thousands of years. They have things to tell us about this place—and our future.

Biidaaban speaks for ecologically focused place-based relations, and does so with *affective* intent. Jackson describes her exploration of VR as an immersive, “*embodied* space where intellectual understandings exist alongside or secondary to *felt experience*.”²² Accolades such as the Canadian Screen Awards’ *Best Immersive Experience Fiction* 2019 award and the imagineNATIVE’s *Best Interactive Work* award spotlight *Biidaaban*’s success in this venture. My own experience made me consider what Dian Million (Tanana Athascanan) describes as *felt theory*—articulations that put “affect and emotion” back into how we navigate our ethical and political stances towards the world.²³ Million uses two metaphors pertinent to *Biidaaban*—the Rosetta stone and the hologram:

The term Rosetta stone alludes to a linguistic keystone containing more than one language, the possibility of translation, if one language is known, to unlock others present that are necessary for meaning. . . . A hologram is a trick of illumination, a capturing of light that contains many facets of an image, each containing a whole picture, depending on scale recognizable or unrecognizable.²⁴

In essence, affect and emotion function as alternative modes to solely “rational” discourses of settler colonial governance, helping us hear, see and *experience* more holistically entangled ways of being.

Biidaaban uses VR’s capabilities to animate these two metaphors through its deliberate focus on languages and light. In doing so, it draws responsibly from real Indigenous contexts²⁵ and invites us to “feel/think”²⁶ *real* relations in the face of environmental catastrophes. Whether one is Indigenous or settler, *Biidaaban* invites us to live time as dialogic (in attentive conversation with past and future) and to recognize modes of communication that emerge from, and engage humbly with, a larger responsive world.²⁷ As histories of climate disruption to which Indigenous peoples have long been subjected become realities for other (White) populations, *Biidaaban* illuminates ethically framed relational imaginaries and realities.

Disrupting Climate Discourse in *Thalu: Dreamtime is Now*

William Lempert

Through an immersive 17-minute virtual reality (VR) experience, *Thalu: Dreamtime is Now* provokes audiences to reimagine the relationship between climate change discourse and the destruction of Indigenous sacred sites. Directed by Tyson Mowarin (Ngarluma) with Art Direction and visuals by interactive designer Stuart “Sutu” Campbell, Mowarin describes *Thalu* as:

the world’s first fully immersive, first-person experience of an original Indigenous Australian Dreamtime story . . . in which you visit individual thalu (or sacred sites) for flora, fauna and the elements before continuing on to the world of Mingkala the Creator . . . Sheldon’s guide, Jirri Jirri, shows him the spirits and custodians of the land, including the ancient faunal and floral spirits of Ngarluma country, and he learns about how these spirits and environments are connected to humankind.²⁸

Thalu is highly interactive via handheld controllers with sensors and haptic feedback, which spatially map onto the participants’ hands within the VR world (Figure 17.4). Shortly after

Sheldon—an Indigenous mine worker—enters the spirit world, he receives two boomerangs, which are used throughout to interact with the spirit world. The level of detail in this virtual world is stunning, with the participant being able to crouch down and examine the spinifex grasses, and even run their virtual fingers through them. Mowarin notes the importance of “teaching people about the spirit world [and] having people see it as a living, breathing thing.” Indeed, he emphasizes the power of VR as an *experience*, during which “people all around the world could be transported to my Country,” which he hopes that participants will then be inspired to visit and care about.

Thalu is a creative extension of Mowarin’s previous media work. In particular, his 2017 documentary *Connecting to Country* highlights the Murujuga area in the Pilbara region of Western Australia, which has some of the highest concentrations of sacred rock art—or thalu—in the world. He traces the de-listing of thousands of Aboriginal sacred sites through past legislation, as well as the current fight to protect them from destruction by mining companies. Mowarin also created the iPhone app “Welcome to Country,” which provides specific cultural protocols to encourage respectful engagement by outsiders. This app is part of his broad multimedia interest that includes card games and music recording.

In *Thalu*, Mowarin critically challenges the notion that Indigenous sacred sites and ecological systems can be separated within climate change discourse. It is bookended by the voice of Mingkala the creator, who initiates the experience by asserting that

For thousands of years our people have nurtured and been nurtured by this land—the animals and the weather. Our culture survived throughout the ages, and we recorded all of our lessons onto the rocks, to guide us into the future. But today a new threat faces our country.

Participants are subsequently transported between various places—via thalu petroglyphs—where they actively aid the spirit world in sending animals and weather events into the human realm. This process serves as an affective kinetic pedagogy in which participants engage the relationship between humans, sacred sites, and the environment. As *Thalu* concludes, Mingkala’s voice booms the following message from his personification within red-hued clouds:

I welcome you all to our spirit world. It’s the place where the spirits of our people, our animals, our knowledge live until it is needed in your world. When you call to the spirits of the land, we hear you. When you ask us for safe passage, we hear you. When you visit the thalu, we hear you. We send to you what you need for your family. We send the rain. We do it all for you. But our lands, our sites, our thalu are being destroyed. If our thalu up in your lands are destroyed, then we can’t send the spirits to you. If you don’t protect our thalu, the animals on top will die out, and we cannot send you rain. Our beautiful world will be lost.

By actively engaging the relationship between rock art and the environment, sacred sites are centered as critical to ecological balance.

The extended title of *Thalu*, “The Dreamtime is Now,” self-consciously emphasizes the present. As Mowarin notes, “People see Dreamtime as a thing of the ancient past but it’s not... It’s the same in the spirit world today, not only in the past.” Thus, *Thalu* articulates with current assertions of *Indigenous futurisms*—a term developed by Grace Dillon (2014)—in media, scholarship, and activism.²⁹ By temporally positioning Ngarluma Dreaming and sacred sites as essential to future ecological wellbeing, Mowarin implicitly challenges the deprioritization of protecting

Indigenous sacred sites within environmental activist movements and policy discourses.³⁰ Indeed, when the US government destroyed Lakota sacred sites during the NoDAPL water protector movement at Standing Rock, this was not only an indefensible settler colonial act of cultural destruction, but also an act of ecological violence.³¹

Mowarin demonstrates the interwoven relationship between sacred sites and ecological sustainability not by presenting an argument—which could simply be opposed—but through an immersive experience that fosters embodied understanding. Ultimately, *Thalu's* most notable achievement stands in contrast to virtual reality's tendency toward escapism; it is in the transportation of participants to Mowarin's Country through a digital portal, so that their care and advocacy might—like *Thalu's* animal spirits—emerge and thrive in our shared world.

Indigenous Visual Culture: Inter- and Intragenerational Dialogues of Material Consequence

Each of the examples we showcase above utilize visual technologies (such as video, animation, and virtual reality) available in our current contemporary moment. The four artists discussed each meld the digital tools of the present with long-standing cultural knowledge and arts that, as media scholars like Joanna Hearne remind us, “help humans negotiate their interdependent place within the natural world.”³² These artists thus resist colonial capitalism that refuses to dialogue respectfully and reciprocally with other beings—human and non-human alike.

In utilizing digital tools, Indigenous artists, also actively make use of the internet, and in doing so, they also often acknowledge its common metaphors—of rhizome, web, river etc.—as powerfully based in land relations.³³ Equally importantly, many recognize such digital tools as more than metaphorically connected to land. Thus, individual artists, such as Lisa Jackson, are self-reflexive of the environmental footprints of their work.³⁴ Others, like Inuit artist Zacharias Kunuk in collaboration with Isuma TV, collectively model media practices that counter mainstream industry's high and unequal impact on cultural and climate disruption.³⁵ Such self-reflective work radiates outwards through conversations occurring across a thriving and vibrant global network. Thus, for example, Canada just launched its first ever Indigenous Screen Office, which, along with giving Indigenous artists crucial say in their productions, also works in collaboration with organizations such as the internationally acclaimed ImagineNATIVE Film + Media film festival to establish protocols and principles grounded in reciprocity, respect, and responsibility toward, and consent from Indigenous communities in which such visual culture is situated.³⁶ Even as Indigenous scholars such as Kyle Powys Whyte, Grace Dillon, Zoe Todd (Métis/otipe-misiw), and others³⁷ remind us that climate change is not unprecedented for Indigenous peoples' who have lived through colonially induced apocalypses, Indigenous artists actively and collectively engage multiple forms of media to make visible Indigenous survivance and resilience against past/present/future disruptions.

Notes

- 1 Kyle P. Whyte, “Indigenous Science (Fiction) for the Anthropocene: Ancestral Dystopias and Fantasies of Climate Change Crises,” *Environment and Planning E: Nature and Space* 1, no.1–2 (March 2018): 224–242.
- 2 Gerald Vizenor. *Manifest Manners: Narratives of PostIndian Survivance* (University of Nebraska Press, 1999).
- 3 Dean Rader. *Engaged Resistance: American Indian Art, Literature and Film* (University of Texas Press, 2011).
- 4 Indian Country Today, “Exploring the Artistic Worlds of Nicholas Galanin,” *Indian Country Today*, August 25, 2017, https://newsmaven.io/indiancountrytoday/archive/exploring-the-artistic-worlds-of-nicholas-galanin-lzyMeU6Iy06T4ftVR_fcCg/.

- 5 Whyte, "Indigenous Science (Fiction)," 227.
- 6 Ibid., 229.
- 7 Nicholas Galanin, *Tsu Heidei Shugaxtutaan 1& 2*, November 2006. www.youtube.com/channel/UCk6qmKf8711ubprCEA9aThg
- 8 Mishuana Goeman, *Mark My Words: Native Women Mapping Our Nations* (University of Minnesota, 2013).
- 9 Grace Dillon, *Walking the Clouds: An Anthology of Indigenous Science Fiction* (Tucson: University of Arizona Press, 2012), 3.
- 10 Galanin, *Tsu Heidei Shugaxtutaan 1& 2*.
- 11 Quoted in Kathleen Wong, "Nicholas Galanin: The Polar Bear Is an Iconic Symbol of the Struggle for Survival of Animals and Cultures," *Honolulu Museum of Art Blog*, March, 2019. <http://blog.honoluluacademy.org/nicholas-galanin-the-polar-bear-is-an-iconic-symbol-of-the-struggle-for-survival-of-animals-and-cultures/>.
- 12 Wong, "Nicholas Galanin."
- 13 Some Haudenosaunee say this date is closer to 2000 years ago.
- 14 Later six nations, with the incorporation of the Tuscarora in the 1700s.
- 15 To do things with the principles of a good mind means in this sense to engage in the world with respect unity and peace, and without succumbing to the influence of fear, mourning, revenge, or hatred.
- 16 Penelope Myrtle Kelsey, *Reading the Wampum: Essays on Hodinöhsö:Ni' Visual Code and Epistemological Recovery* (New York: Syracuse University Press, 2014).
- 17 Skawenatti, *The Peacemaker Returns* (2017). I want to express my deep appreciation to Skawennati for taking the time to speak with me at length, grant access to the film for research purposes, and provide permissions for the images used herein. I am humbled by her generosity of mind, spirit and artistic vision. I live and work on Onondaga traditional territories, but I am not Haudenosaunee. Any errors are my own.
- 18 For example see, Michael K. Foster, Jack Campisi and Mariaan Mithun (editors), *Extending the Rafters: Interdisciplinary Approaches to Iroquoian Studies* (State University of New York Press, 1984).
- 19 The term rematriate (sometimes also appearing as reMatriate) has emerged as a significant term and theoretical frame for many Indigenous peoples of Native North America. For examples see the ReMatriate Collective (https://en.wikipedia.org/wiki/ReMatriate_Collective), and Rematriation Magazine (<https://rematriation.com>), both accessed October 28, 2020.
- 20 Lisa Jackson, "Biidaaban: First Light VR" (2018), <http://lisajackson.ca/Biidaaban-First-Light-VR>
- 21 I am immensely grateful to Lisa Jackson who shared her Masters of Fine Arts thesis manuscript *Biidaaban: First Light* (Toronto: University of York) with me. The details presented in the thesis fine-tuned my descriptions here (especially of the written sentences from the end of the VR), which are otherwise based on my memory.
- 22 Lisa Jackson, *Biidaaban: First Light* (Toronto: University of York MFA Thesis, 2019), 4, emphasis added by this author.
- 23 Dian Million, *Therapeutic Nations: Healing in an Age of Indigenous Human Rights* (University of Arizona Press, 2013), 2.
- 24 Million, *Therapeutic Nations*.
- 25 Jackson's thesis—see specifically "Abstract" and "Ethics" sections (ii and 45–46 respectively).
- 26 Million uses this "feel/think" notion to emphasize "felt intuitive knowledge" in contrast to "solely rationalized logic." See, for example, her chapter "There is a River in Me: Theory for Life." in *Theorizing Native Studies*, eds Audra Simpson and Andrea Smith (Durham: Duke University Press, 2014), 41.
- 27 In her thesis Jackson cites, amongst other elders, Indigenous intellectuals such as Leanne Betasamosake Simpson (Mississauga Nishnaabeg) as inspiring her own thinking on temporalities and Robin Wall Kimmerer (Potawatomi) on the grammars of language (see 4 and 12). I also draw on Kyle P. Whyte's (Potawatomi) terminology of "dialogic" time (2018).
- 28 This and all proceeding quotes by Mowarin are from the *Thalu* press kit, which includes an extensive interview conducted by Josh Harle. 2018 *Thalu*. www.sutueatsflies.com/art/thalu
- 29 Dillon, *Walking the Clouds*.
- 30 Pickerill, Jenny Pickerill (2018) Black and green: the future of Indigenous–environmentalist relations in Australia. *Environmental Politics* 27(6): 1122–1145.
- 31 Estes, Nick. *Our History is the Future: Standing Rock Versus the Dakota Access Pipeline, and the Long Tradition of Indigenous Resistance* (New York: Verso, 2019).

- 32 Joanna Hearne. "Native to the Device: Thoughts on Digital Indigenous Studies," *Studies in American Indian Literature*, 29, no. 1 (2017), 8.
- 33 Steven Loft, "Introduction: Decolonizing the Web" in *Coded Territories: Tracing Indigenous Pathways in New Media Art*, eds Steven Loft and Kerry Swanson (University of Calgary Press, 2014), xv–xvii.
- 34 Monani, Salma and Miranda Brady. "ImagineNATIVE 2012: Ecocinema and the Indigenous Film Festival," *Reconstruction* 13.3/4 (2013). <https://cupola.gettysburg.edu/esfac/64/>
- 35 See Nadia Bozak's *The Cinematic Footprint: Lights, Camera, Natural Resources* (New Brunswick, NJ: Rutgers University Press, 2011).
- 36 Marcia Nickelson. *On-Screen Protocols and Pathways: A Media Production Guide to Working with First Nations, Métis and Inuit Communities, Cultures, Concepts and Stories* (Toronto, Canada: ImagineNATIVE Institute, 2019).
- 37 Heather Davis and Zoe Todd, "The Importance of a Date, or Decolonizing the Anthropocene." *ACME: An International Journal of Critical Geographers*, 16, no. 4 (2017) 761–780. <https://acme-journal.org/index.php/acme/article/view/1539>

AT MEMORY'S EDGE

Climate Trauma in the Arctic through Film

Lisa E. Bloom

“Native survivance is an active sense of presence over historical absence, deracination and oblivion.”

—Gerald Vizenor, *Survivance: Narratives of Native Presence*
(Omaha: University of Nebraska Press, 2008)

This article addresses a critical polar visual culture and film not just as an illustration of planetary demise and a call for action, but as a challenge to our imagination. Much of this work brings into being new forms of seeing, feeling, and knowing that are connected to the crisis of visualization in the Arctic’s fast-changing landscapes. Critical polar aesthetics here engages with not only the altered perceptual habits and the complex temporal and historical disjunction introduced by climate change, but also the serious psychological consequences.¹ In a moment when the Anthropocene and the climate crisis should now be considered as important as gender, race, class, and nationalism, this article presents an intersectional feminist approach to research in this area. Here I broaden the work done on memory and its aesthetics to address what it means to ethically witness the accelerating social and psychic impact of a warming Arctic through a cultural inquiry into these issues without sentimentalizing or spectacularizing suffering.

This work builds on research from my first book *Gender on Ice: American Ideologies of Polar Expeditions* (1993), and more recent articles and my current book project tentatively titled *Critical Polar Aesthetics: Reimagining the Arctic and Antarctic at a Time of Climate Crisis* (forthcoming, Duke University Press, 2021).² *Gender on Ice* was one of the first critical visual cultural books on the Arctic and Antarctic written from a feminist and postcolonial perspective. It first raised the issue of how the polar regions were represented as an imperial frontier to plunder, “a tabula rasa where people, history, and culture vanish.”³ As such, they were once seen as ideal blank sites for the strategic development of distinctive forms of white manhood, technology, colonialism and nationalism during the late-nineteenth and early twentieth century during the so-called heroic age of polar exploration from 1870 to 1930. Little did I know that over two decades later after the writing of *Gender on Ice*, the impending catastrophe of the climate crisis would force me to return to the topic with a new set of questions and sense of urgency in the current moment in which nonetheless older themes of imperialism, nationalisms, economic exploitation, and Indigenous survival persist but in radically transformed local, national as well as planetary contexts.

The article is written as a contribution to the work in Arctic visual culture and film studies, growing fields that have yet to address climatically concerned aesthetic practices, especially from intersectional feminist perspectives.⁴ It introduces two innovative short films on the Arctic by women filmmakers that call forth new forms of representation produced in a world beset by uncertainty. Both focus on affect and push the viewer to imagine a different way of seeing, feeling, knowing, and “weathering even unsurvivable circumstances,” in Dianne Chisholm’s words.⁵ Both put into focus what Anishinaabe cultural theorist Gerald Vizenor calls “an aesthetics of survivance.” Survivance as a critical term in Native American studies refers to an insistence on the ongoing nature of active survival in which Native American peoples go beyond merely subsisting in the ruins of tribal culture after ethnic genocide to actively refashion memory for the contemporary era. Though the term “aesthetics of survivance” was not first defined to respond to the climate crisis, it can be used to articulate the central place of creative storytelling in visual form in Indigenous knowledge to address climate trauma that like ethnic genocide also involves mobilizing images in order to transform and resist dominant structures to prevent a kind of forgetting.

The films addressed in this article are made by women in collaboration with members of Indigenous communities who have taken up film and television to give voice and form to unfolding climatic issues about the precarious world they inhabit. Each explores the mix of shared private and public histories and memories of its subjects who include women and children in order to keep alive the memory of a people that are no longer “at home” in the Arctic in the way they once were. Traumatic experiences here are represented in a range of forms, as the first film is a more accessible interview-based documentary, while the second is science-fictional, experimental and non-narrative. Each are chosen to spark cross-cultural conversations in an international context in order to imagine the future for memory in an increasingly precarious world.

Attutauniujuk Nunami/Lament for the Land (2013) by Ashlee Cunsolo Willox in collaboration with the Inuit communities of Nunatsiavut, Labrador, Canada provides a striking example of how recognizing suffering from global warming in the Arctic can serve as a necessary first step towards the amelioration of that suffering by breaking the isolation imposed on both individuals and communities around the world in local and regional contexts. The second by Kimi Takesue, *That Which Once Was* (2011), makes us imagine a future defined by a warming planet through its focus on how two characters from the Canadian Arctic and the Caribbean adjust to their new conditions. It is a fictional experimental film set in the future, in 2032, when millions of people will be driven from their homes due to the effects of climate breakdown. Broadening the conversation on “climate trauma,” a term first used by E. Ann Kaplan in her book *Climate Trauma: Foreseeing the Future in Dystopian Film and Fiction* (2016), both films encompass Indigenous and minority peoples’ perspectives, using a range of media in order to create a sense of possibilities for themselves amidst the ongoing destruction of their environment by anthropogenic climate change.⁶

Changing Indigenous Physical and Psychological Realities of the Arctic: *Attutauniujuk Nunami/Lament for the Land* (2013), by Ashlee Cunsolo Willox and the Communities of Nunatsiavut

Attutauniujuk Nunami/Lament for the Land (2013) is a documentary that includes short clips from a set of interviews conducted with 24 Inuit residents in the five communities of the Inuit Land Claim Settlement Region of Nunatsiavut, Labrador, Canada formed in 2005.⁷ These are remote coastal communities that are inaccessible except by plane or boat since there are no paved roads in or out. In all of these areas, the Inuit of Nunatsiavut, Labrador continue to rely on the land

and the sea for their livelihood and culture and remain active hunters, fishermen and trappers (Figure 18.1).

The film documents the overwhelming sense of loss and distress that the residents are experiencing from accelerated global heating as air temperatures are already over two or three degrees above normal. It is an English-language film made by a Settler woman academic from Southern Canada, in collaboration with many Inuit and health professionals from the region. The film documents the psychological effects of ecological loss amongst the Inuit and is available on the internet for anyone with a connection (www.lamentfortheland.ca). Ashlee Cunsolo Willox writes: "It was meant to share Inuit voices as far and wide as possible, and it was made with Inuit,

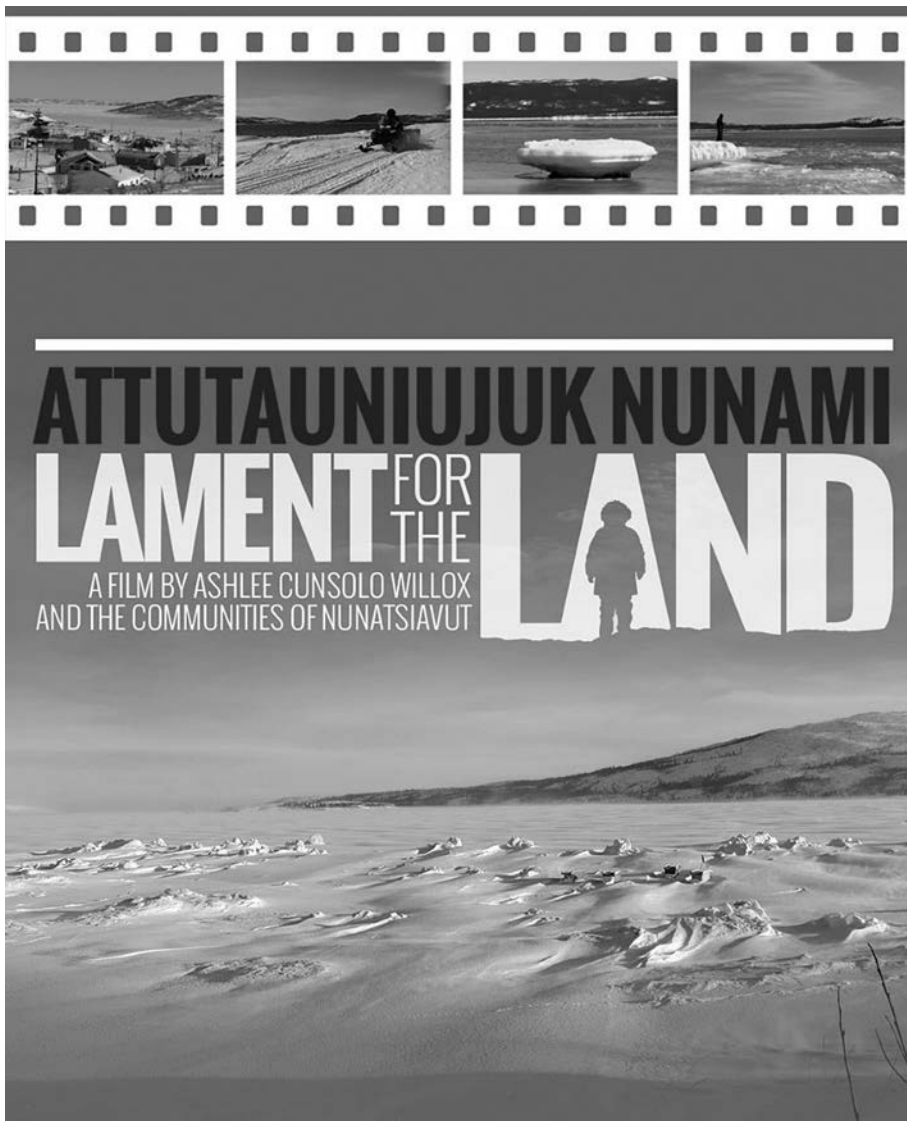


Figure 18.1 Ashlee Cunsolo Willox, *Attutauniujuk Nunami / Lament for the Land*, still, 2013
Source: Courtesy of the Filmmaker

to tell Inuit stories, and to connect with other Northern Indigenous peoples.”⁸ The film presents a portrait of a community that is still strong and vibrant, but as the climate crisis worsens the community has to process losses, human distress, and feeling associated with depending on essential ecosystems that are degrading over time. In the context of the film, the people interviewed are experiencing intense feelings of grief as people suffer climate-related losses to valued species, ecosystems, and land. All rely on the ice, the cold and the snow for part of their livelihood and the strong connection to the land connects family, kin and the community.

The film poses the problem of memory, particularly for her audience of Indigenous viewers who have to process enormous losses, human distress, and feelings associated with depending on essential ecosystems that are degrading over time.

In the first half of the film, the expansive landscape of sea, snow, and ice surrounding their communities is presented at length with voiceovers expressing how the ecological spirit of the land is central to their philosophy and practice of life. Life for the older interviewees, they tell us is an extension of living off the land. Myrtle Groves explains that “hunting, fishing and picking berries is our identity. It is just our way of life. It is how we grew up... We are [now] worried that we are losing it.” For her and her community, the land is both a home and a resource, where the human species is seen as merely one aspect of a vibrant ecology.

As the climate crisis worsens, it is unthinkable in this context for them to imagine being severed from the environment. The visuals shift from sweeping shots of the outdoors to indoor settings where many people are being interviewed as they talk about how the change to the landscape is now more rapid and noticeable. “The snow melts so fast... It is more difficult to go out on snowmobiles as the ice now is really dangerous.” Their concern about not being able to predict the weather anymore is connected with a sense of serious loss and grief. They have trouble reconciling their past relationship to the land and the present and do not know how they or their children and grandchildren will cope in the future. Consequently, they have doubts about whether they can change with the times and live without their former relationship to the environment: “Knowing how to survive on the land, gave me a sense of confidence and self-awareness... [Now] we are not who we were anymore and are losing control over our life.”

Since the focus is on everyday life, the film supplies images of the community members at work on the land and at home. But what is different from *That Which Once Was*, the film I discuss last, is not so much the imagery but the portrayal of “ecological grief” experienced by these communities when its member’s bodies and minds lose their close relation to nature and to the land itself. The film includes the Inuit sharing that “dependence on alcohol has gone through the roof... There are more addictions, both alcohol and drugs.” It makes visible the network of Inuit researchers, community members, and mental health professionals that have joined forces to confront climate change and support Inuit wellbeing and flourishing. Previous research conducted in Nunatsiavut, Labrador by the filmmaker and other colleagues indicate that changes in climate amplify previous traumas and lead to increased incidences and prevalence of alcohol use, drug addiction, suicide, and domestic violence.⁹ Given the legacy of colonialism in the Inuit territories, the film presents a system of health care that departs from an earlier regime that dates back to the colonial past that includes forced resettlements in response to the tuberculosis epidemic of the 1950s, and the evacuation of Inuit to Southern sanitariums and residential schools. Anthropologist Lisa Stevenson, in her 2014 book *Life Beside Itself: Imagining Care in the Canadian Arctic* on this topic, explains that care up until the early 1980s didn’t consider who the patient was, or their quality of life, just that that the patient would be kept alive.¹⁰ This has changed once the growing legal recognition in Canada of the rights of Indigenous peoples in 1982 brought to the fore new public organizations that enabled the Inuit to be responsible for administering their own health services and municipal organizations.¹¹ *Attutauniujuk Nunami/Lament for the Land*

represents the significant changes in mental health care policy instituted by the mostly Inuit mental health workers who are grappling in nuanced ways with the identity and culture of the community as they face the current challenges from climate trauma.

For Cunsolo Willox, the climate emergency has altered the Inuit idea of themselves and diminished their sense of a future that has similar environmental conditions as the past. She turns to filmmaking in an attempt to grasp the psychological life of the Inuit and communicate the grief she sees as a natural response to ecological loss, and one that may become more common worldwide as climate impacts worsen. The film leaves the future of memory in doubt and while it presents the community as adrift, the mental health professionals she interviewed recognize the need for community, empathy, and caring in these precarious times.¹²

Dystopian Futures and the Reconstruction of Memory: Kimi Takesue's *That Which Once Was* (2011)

Whereas the first documentary represents the accelerated violence of climate change that is happening in our time, the science-fictional world created in Kimi Takesue's film *That Which Once Was* (2011) suggests the next stage of catastrophe.¹³ It is in this film that the complex relationship between the collapse of the natural world and the disintegration of the social contract is completed and memory now has to be constituted from absence. "That Which Once Was" (2011), by filmmaker-scholar Kimi Takesue, is an experimental dystopian film made for a US public television series titled *Futureshocks*. She is an award-winning filmmaker working in documentary, narrative, and experimental genres. Her films have screened at more than two hundred film festivals and museum internationally, including Sundance, Locarno, New Directors/New Films, London's ICA, Shanghai Museum of Contemporary Art and the Museum of Modern Art (NYC) and have aired on PBS, IFC, Comcast, and the Sundance Channel. Though this film was made for television, it embodies the ambition of a more experimental cinema willing to take up some of the more challenging questions about memory and loss in the context of the climate crisis.

That Which Once Was explores the ethics of an intimate style of filmmaking and is a meditation on the emotional experience of dislocation. It brings together two protagonists from the Arctic and the Caribbean, who are now climate migrants literally displaced from their countries of origin to live in an institutional context supervised by social workers located in a US urban center. Set in 2032, the film raises interesting questions about human memory at a time when she imagines that many of the world's most vulnerable people will be displaced.

In the first half of the film, there is little sense of positive, secure human possibilities. The film begins with a hazy out-of-focus image of ocean waves crashing on a beach somewhere in the Caribbean. This is followed by a soothing song in Spanish in the background, as children from the Caribbean are calmly playing with large balloons in an urban classroom in the US (Figure 18.2).

Up till now, the scene appears almost idyllic but the sad isolated faces of the children belie that fact and then the camera shifts and we notice a close-up of the numbers on the arms of each child that resemble inmate identification numbers tattooed onto prisoners interned at German concentration camps in Europe in the 1940s. These tattoos remind us of the tremendous scale of the prisoner population then and now. This is reinforced when we hear on the radio news that "a hurricane swept over Bangladesh killing tens of thousands and leaving many more homeless," and we see an eight-year-old boy sitting alone absorbing this disturbing news as he plays nervously with an old fish decoy that resembles a real fish that is one of his few remaining possessions from home.



Figure 18.2 Kimi Takesue, *That Which Once Was*, still, 2011

The boy, however, becomes increasingly agitated and seems to be reliving some prior traumatic event triggered by both the distressing news report and the strong breeze from a large dirty fan nearby that the camera presents in a detailed close-up. When the boy is calmer, one of the female mental health practitioners sits beside him and gently asks: “What do you remember? He replies: ‘Nothing.’ She then asks: ‘Tell us about home. What was it like?’ He responds: ‘I don’t remember.’”

Memory in this film first functions as a disabling force because of the huge contrast between what was and what is now, and because traumatic loss overwhelms the boy. The eight-year-old is an almost ghost-like human being who is at first diminished as he has lost all cultural moorings. As the film evolves, the child takes more of an interest in his life when he eventually befriends an older Indigenous man who is a climate refugee himself displaced from Nunavut, Canada. But unlike the young boy, who has lost all memory, the older man sculpts in ice and has retrieved what he has lost through making his art. His ice sculptures capture one of the subtle points of the experimental film: for most ordinary people caught up in large public climate disasters, their presence is constituted from the importance of the fragments of memory they can find and hold on to. In this case, the older Indigenous refugee takes up the traditional work of oral storytelling in visual form and uses the dynamic potential of ice sculpture to create a sense of lively presence from what is absent. This is what Indigenous literary theorist Gerald Vizenor calls “survance.” Vizenor uses the term to explain how Native literary and linguistic traditions continue to flourish in contemporary media despite and in response to colonialism’s systemic suppression of oral culture. For Vizenor, “Native survance is an active sense of presence over historical absence... Native survance is a continuance of stories.”¹⁴ The ice sculpture would be in his terms “an aesthetics of survance” that enables him to revive oral traditions and preserve the collective stories and memories of his past in his art (Figure 18.3).

The boy is only able to establish trust and share a form of his own memories with the older man in turn once he understands the importance of his own ice sculptures. This is established when he posts above his bed a gift of a photograph of an iceberg given to him by the Inuk man which he places next to the old fish decoy, one of the only possessions given to him from his deceased father. It is only near the end of the film that the past and present are brought together



Figure 18.3 Kimi Takesue, *That Which Once Was*, still, 2011

through these lost objects. At that point the boy twists free from his depression by re-establishing his connection to both the natural and human world and begins recovering his lost memories to move toward renewal. Throughout the film, art and recognizing the need for intergenerational and cross-cultural friendships continue to be shown as critical to native survivance in a future defined in an increasingly precarious warming world.

The climate devastation to come will impact everyone, but far from equally. Women, children, and minorities will be affected first and suffer the most. Indeed, as exemplified in both films discussed, such groups are already undergoing loss in both their environment and in terms of their sense of self. But they are addressing how to mitigate against future tragedies through working within their own communities. In *Attutauniujuk Nunami/Lament for the Land*, grief is a natural response to ecological loss, and one that may become more common worldwide as climate impacts worsen. In *That Which Once Was* “survivance” and resilience is stressed. The characters in the second film are also dealing with an experience of extreme alienation, confined within an institutional space after being displaced entirely from home. The film ends with the insistence that the community will adapt and this resonates with the first film about the importance of the need for community and empathy.

Both films reveal new perspectives from filmmakers and their partners who are making connections between Indigenous histories, representational practices, and the growing environmental threats in the modern Arctic. In doing so these films create an alternative visual archive and cinematic language formed by women filmmakers representing Inuit aesthetics and traditions that are being disrupted as their life is rapidly changing as a result of accelerated global warming. Through eyewitness testimony, *Attutauniujuk Nunami/Lament for the Land* demonstrates how the Indigenous people of the Arctic are experiencing the violence of climate breakdown and the way it diminishes their way of life and can ultimately lead to these communities’ relocation that is the subject of *That Which Once Was*. Both films are attuned to the actual changing physical, cultural, and psychic reality of the Arctic. Social media is seen in *Attutauniujuk Nunami/Lament for the Land* as an essential form for networking and transmitting vital knowledge between different knowledge systems and across languages, and thus instrumental in helping the Inuit community’s capacity to maintain itself amidst an impossible, but still livable situation through

resiliency and adaptation. *That Which Once Was* raises important questions about the future for Indigenous memory in a situation where people living in some of the more vulnerable parts of the world are negatively impacted from sea-level rise. The film makes a distinction between the construction of an eternal image of the past, “that which once was,” and how the experience of the past can produce something unique through the conditions of the present that could create “an active sense of native presence over absence” in Gerald Vizenor’s terms.¹⁵ Kimi Takesue follows Gerald Vizenor and what E. Ann Kaplan calls a kind of “memory of the future,” that is what future there is for memory as these fictional humans find themselves in a social world in an increasing state of deterioration

Justifiable Fears and Sensible Hopes: Living with an Uncertain Future and an Unreliable Natural Environment

“False hopes and groundless fears can be of dreadful deadly consequences. And yet justified fears when combined with sensible hopes can open new possibilities and thereby help mobilize change for the better.”

—Matthew Sparke, quoted in
Climate Terror: A Critical Geopolitics of Climate Change

In September 2016 the Earth passed the threshold of 400 ppm of CO₂ in the atmosphere permanently (the safe level of carbon dioxide in the atmosphere is 350 parts per million).¹⁶ This much-publicized climate event announcing the arrival of a new atmosphere that we have to contend with coincided with the Science and Security Board moving the “doomsday clock” of the *Bulletin of the Atomic Scientists* to two and a half minutes to midnight in January of 2017, to caution “that the probability of global catastrophe is very high, and the actions needed to reduce the risks of disaster must be taken very seriously.”¹⁷ Since 2017, the clock was reset 30 seconds ahead in January of 2018 to two minutes to midnight and it has remained there in 2019.¹⁸ Climate breakdown here joins the other two alarmist categories, of “nuclear” and “biosecurity” according to the Indian writer Sanjay Chaturvedi and his co-writer Timothy Doyle. Matthew Sparke is quoted above in their book *Climate Terror* to argue that geographical grounds of fear and hope need to be critically reexamined.

This article, and my forthcoming book, *Critical Polar Aesthetics: Reimagining the Arctic and Antarctic at a Time of Climate Crisis* (Duke University Press, 2021) that it draws from, argues that art and film is important to counter the discourse of “climate terror” to break with the paralyzing effects of fear alone that can hinder any renewal of human and non-human life through a change in private and public behavior or through a radical environmental social movement on the climate emergency that is building internationally. The films that I just discussed provide examples of ways we can deepen our imaginations to engage with our anxieties and work towards more constructive outcomes that take seriously the irreparable damage to our world.

The polar regions are scarcely the only sites where we can document the unraveling of planetary systems, but they are important since they bring into relief how social and ecological systems function within large global networks, and “produce a sense of place intrinsically linked to other places.”¹⁹ As such, art, film, and activist art work that embodies a different, more personal and local relation to these sites takes into account what Ursula Heise calls a form of “eco-cosmopolitanism,” which is “an attempt to envision individuals and groups as part of planetary “imagined communities” of both human and nonhuman kind.”²⁰ This is akin to the making of collective identities from the “imagined communities” of nationalism studied by Benedict Anderson. But it deliberately emphasizes a less abstract “we” that is different from

“global humanity;” referencing local communities that are the most vulnerable and highlighting other kinds of counter-responses besides technological ones to productively engage with climate emergencies.

But this form of eco-cosmopolitan response has suffered some serious setbacks. Even though the latest warnings on global warming continue to be dire, they have not been dire enough. With the rise of right-wing nationalism in tandem with an ideological masculinity that drives violence against women and Indigenous people around the world, one nation after another refuses to respond and even worse seems to be moving in the wrong direction as the doomsday clock indicates. The United States, which has the world’s largest economy and is the second-largest emitter of carbon dioxide, has taken the lead in turning its back on the fight and instead of lowering emissions is promoting fossil fuels.²¹ And by choosing cabinet appointments of climate deniers and captains of oil, Donald Trump has emboldened other countries to do the same. A case in point is the president of Brazil, Jair Bolsonaro, who opened up the Amazon to deforestation, mining, and agribusinesses and is putting the Ecuadorian rainforest as well as the Indigenous populations living there at heightened risk.²² Both Bolsonaro’s scramble to further exploit the Amazon combined with his administration’s level of abandonment and total lack of care for the Indigenous Amazonians during a pandemic can be compared to Trump’s war on the Indigenous in Alaska and his relentless assault on Alaska’s Arctic land and seas.²³

At the same moment the planet is at growing risk, older far right-wing nationalist and imperialist populist narratives are also rising up from the nineteenth- and twentieth-century soil of colonialism like ghosts, and once again have clear genocidal implications for both the planet, and the Indigenous communities who call it home. In dark times, *Lament of the Land* and *That Which Once Was* conjure both the hope and difficulty of how art and film can be used for thinking about climate breakdown and its impact on cultural memory can contribute to cross-cultural solidarity and to the creation of new forms of community.

Notes

- 1 A special thanks to Diane Chisolm for providing insightful feedback on my book manuscript at an early stage and for introducing me to *Attutauniujuk Nunami/Lament for the Land* by Ashlee Cunsolo Willox, and to Subhankar Banerjee for his encouragement and support during a critical stage in both my book project and article and for recommending *That Which Once Was* by Kimi Takesue.
- 2 See Lisa Bloom, Elena Glasberg and Laura Kay, eds., “New Poles: Old Imperialism?” Issue 7.1. Fall, 2008. The special issue is in the online journal, *The Scholar and the Feminist Online* 71, a web journal published by the Barnard Center for Research on Women. See: http://sfonline.barnard.edu/ice/intro_01.htm It was the starting point for some of my current research. Also see Lisa Bloom and Elena Glasberg, “Disappearing Ice and Missing Data: Visual Culture of the Polar Regions and Global Warming,” in *Far Fields: Digital Culture, Climate Change, and the Poles*, eds., Andrea Polli and Jane Marsching (London: Intellect Press, 2012), 117–142.
- 3 Lisa Bloom, *Gender on Ice: American Ideologies of Polar Expeditions* (Minneapolis: University of Minnesota Press, 1993), 2.
- 4 Also see Zacharias Kunuk and Ian Mauro’s 2010 documentary film “Qapirangajug: Inuit Knowledge and Climate Change,” discussed in my forthcoming Duke University Press book titled *Critical Polar Aesthetics: Reimagining the Arctic and Antarctic at a Time of Climate Crisis*.
The film was made with a similar structure as *Lament for the Land*—interviews with a set of residents of Nunavut but is an invaluable document that is more activist oriented. It is the first Inuktitut language film on the topic. Produced for Isuma TV, it is available online at: www.isuma.tv/inuit-knowledge-and-climate-change/movie
- 5 Diane Chisholm, “The Enduring Afterlife of ‘Before Tomorrow’: Inuit Survivance and the Spectral Cinema of Arnait Video Productions,” *Études/Inuit/Studies* 40 (1) 2016, 214.

- 6 E. Ann Kaplan responds to scholarship such as Rob Nixon's "slow violence," in his book *Slow Violence and the Environmentalism of the Poor* (Cambridge, MA: Harvard University Press, 2013), and theorizes that such violence is accompanied by its own psychological condition, what she terms "Pretraumatic Stress Disorder." See Kaplan, *Climate Trauma: Forseeing the Future in Dystopian Film and Fiction* (New Brunswick: Rutgers University Press, 2015), 1–22.
- 7 *Attutaniujuk Nunami/Lament for the Land* (2013), by Ashlee Cunsolo Willox for the communities of Nunatsiavut is 25 minutes long and available to view online at www.youtube.com/watch?v=yi7QTyHERjY; Accessed: June 8, 2019.
- 8 Ashlee Cunsolo Willox, private correspondence, December 9, 2019.
- 9 Cunsolo Willox, et al., "Climate Change and Mental Health: an exploratory case study from Rigolet, Nunuatsiavut, Canada," *Climatic Change*, November 2013, Volume 121, Issue 2, 255.
- 10 See Lisa Stevenson, *Life Beside Itself: Imagining Care in the Canadian Arctic* (Berkeley: University of California Press, 2014), 92.
- 11 For more on the shifting culture of care in Arctic Canada, see Stevenson, *Life Beside Itself*, pp. 21–48.
- 12 On mental health issues in the Alaskan Arctic see: Rosemary Ahtuanguaruk, "Arctic Oil is Destroying our Health and Culture" in Subhankar Banerjee, ed., *Arctic Voices: Resistance at the Tipping Point* (Seven Stories Press, 2013), 311–319.
- 13 *That Which Once Was* (2011) is available to view online at: www.pbs.org/video/futurestates-that-which-once-was/.
- 14 Gerald Vizenor, *Survivance: Narratives of Native Presence* (Lincoln: University of Nebraska Press, 2008), 1.
- 15 Vizenor, *Survivance*.
- 16 The 410 parts per million threshold was reached a little more than a year later with much less fanfare than breaching the 400 PPM threshold. See Kahn, 2017.
- 17 On January 25, 2018, the atomic clock was moved again to two minutes to midnight, the closest since 1953 during the height of the Cold War. See Bulletin of the Atomic Scientists, 2018.
- 18 J. Mecklin, "A New Abnormal: It is still 2 minutes to midnight," 2019 Doomsday Clock Statement, Science and Security Board, *Bulletin of the Atomic Scientists*: <https://thebulletin.org/doomsday-clock/>
- 19 Ursula Heise, *Sense of Place and Sense of Planet: The Environmental Imagination of the Global* (Oxford: Oxford University Press, 2008), 56.
- 20 Heise, *Sense of Place and Sense of Planet*, 61.
- 21 For a history of how high-level scientists with extensive political connections ran effective campaigns to mislead the public and deny well-established scientific knowledge over four decades in the United States, see: Naomi Oreskes and Erik M. Conway. *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (London: Bloomsbury Press, 2010)
- 22 Sue Branford, "NGOs charge Brazil's Bolsonaro with risk of Indigenous 'genocide' at UN": <https://news.mongabay.com/2020/03/ngos-charge-brazils-bolsonaro-with-indigenous-genocide-at-un/>
- 23 Subhankar Banerjee and Lois Epstein, "The Fight For Alaska's Arctic Has Just Begun," in *Technosphere Magazine*, November 6, 2018. <https://technosphere-magazine.hkw.de/p/The-Fight-for-Alaskas-Arctic-Has-Just-Begun-sY912LkjkUnQGKKn7QkyHt>

19

THE BREATHING LAND

On Questions of Climate Change and Settler Colonialism

Heather Davis

When we think of colonialism, especially settler colonialism—which in the Americas simultaneously employed the twinned processes of Indigenous dispossession and genocide as well as chattel slavery—we often reduce this to a violent political formation centered on humans alone. There are very good reasons for focusing analyses in this way, but doing so sidesteps one of the most important aspects of settler colonialism, which is that dispossession took place not only by way of genocide, slavery, and occupation, but also by transforming, beyond recognition, the land itself. This served to disrupt relations and governance systems between Indigenous people and the land while also transplanting enslaved Africans onto unrecognizable lands. By taking the relations with land, water, plants, and animals into account, we can think of climate change not as an incidental event, as Kyle Whyte has importantly argued, but as *fundamental* to settler colonialism.¹ For settler colonialism proceeded by way of changing the climate, transforming the land into a vision of a displaced Europe. As such, climate change is not new, but is an extended and deepened set of power relations that includes humans, animals, plants, water, and the air, as a failure of kin-making.² If “we look at climate change from the point of view of the history of colonialism, we no longer simply see it as a collateral effect of modernity, but rather as its *very target and aim*,” as Eyal Weizman argues in a project conceived with and based on the photographic research of Fazal Sheikh.³ In the space afforded to me here, I want to think through two artworks that implicitly and explicitly deal with these entangled relations of settler colonialism, climate change, and larger systems of wasting and wastelanding.⁴

Breath to Land to Air: Waste in Israel

In the middle of Israel, in a place that the American artist Mierle Laderman Ukeles describes as the “belly button” of the country, there is a landfill named Hiriya. Hiriya sits at one of the most visible intersections of the whole country, crisscrossing between two highways that go from Tel Aviv to Jerusalem and from Haifa to Ashkelon. This landfill is located on a site that was formerly the Palestinian village of al-Khayriyya, and before that was called Ibn Ibraq. The residents fled in 1948 during the war that greatly enlarged the newly established state of Israel and permanently displaced over 700,000 Palestinians. In 1952, the site became the place of a monumental dump, one that in appearance resembled Cape Town’s Table Mountain, which has steep sides and a flat top, and, likewise, Masada, the location of one of the first Jewish–Roman wars and an important



Figure 19.1 Mierle Laderman Ukeles, *Evapotranspiration: This Land Lives & Breathes*, 1988–present

symbol of Jewish resistance and survival. In the intervening 36 years that the landfill was actively created and used, the dump grew to be more than half a mile long and over 80m above sea level. The volume of waste was estimated at 16 million cubic meters. In an innovative curatorial gesture, Martin Weyl decided to organize an international exhibition at the Tel Aviv Museum of Art that was also, in part, a design competition for reimagining this landfill. *Hiriya in the Museum: Artists' and Architects' Proposals for Rehabilitation of the Site* (1999–2000) included 19 individual artists and collectives, including Mierle Laderman Ukeles, who were invited to propose models for realizable rehabilitation projects.⁵ Weyl's initiative fits within a longer history of artists employing land reclamation techniques, including Robert Smithson and Robert Morris, Lillian Ball, Aviva Rahmani, Mel Chin, and, prominently, Ukeles herself, as she has worked with landfills, specifically Fresh Kills in New York City, since 1989.

For those familiar with Ukeles' work, it is unsurprising that she was invited. As a pioneer of environmental art, she takes a very specific stance in relation to questions of waste. Starting as a feminist performance artist, she is perhaps best known for her *Maintenance Art Manifesto* (1969), and the subsequent project *Touch Sanitation* (1979–1980), which involved shaking hands with every single New York City sanitation worker. In these powerful pieces, she invites her audience to think of the relations between labor and the environment, the daily and mundane tasks of maintenance that are required to cultivate good relations to the non-human world, and to the work of housekeeping, child rearing, and other fundamental activities of human existence. She invites her audience to think through these connections by seeing sanitation workers within the framework of a feminist environmental lens.⁶ Through her work, she proposes understanding the construction of landfills as a kind of social sculpture, something that we all, whether we like it or not, contribute to and participate in as a form of land art. As curator Patricia C. Phillips writes, "Ukeles thinks of [landfills'] artificial, often ungainly topography as variously created 'public landscapes' or 'social sculptures,' referring to the work of the German artist Joseph Beuys, who aggressively opened art as an inclusive social process."⁷

For *Hiriya in the Museum*, Ukeles proposed a wild re-imagining of the place of waste, land, and collective responsibility. Envisaged as a total work of art, *Evapotranspiration—This Land Lives and Breathes* (1999–2000), involved an elaborate activation of the site that responded to the seasons, to the rest of the country, and to the passage from day into night (Figures 19.1 and 19.2).

The title references the scientific explanation for the way that plants (and, by extension, the land itself) breathe, by intaking and then evaporating water through their leaves. The work then poetically and literally speaks to the fact that the land is alive. The assertion of the breathing land is used both for practical purposes, as a mechanism for the land to clean itself through metabolizing pollutants via processes of bioremediation, as well as metaphorically, to understand the intimate connections of land with breath, with the cycle of chemicals through the atmosphere, implying the ways in which the land can be understood not as inert material, but as a living system, where breath, in our biological conception, is central. There is something profound in acknowledging the land through breath, as breathing is so intimately connected to our very understandings of what life is. Breath, indeed, is often the synecdoche of life itself.

Evapotranspiration asks us to consider climate change as an intimate system of carbon circulation, expressed through breath, and climate breakdown within larger systems of wasting. In *Plastic Capitalism: Contemporary Art and the Drive to Waste*, Amanda Boetzkes argues that climate change, landfills, and other markers of what has come to be known as the Anthropocene, can be seen as reflecting an underlying condition of what she calls wasting. As Boetzkes writes, “The crisis is not waste tout court, but rather the operation of systemic *wasting*.”⁸ That is, that waste in and of itself is part of the condition of excess that is marked into the Earth through the sun, following philosopher Georges Bataille, but that within the matrix of colonial capitalism, this excess is used as a weapon that exacerbates and subtends racial injustice and ecocide. Wasting, in other words, underlies not only our relationship to material waste, but also to the chemical industrial waste of the carbon cycle that has resulted in climate breakdown.

I believe it can be generative to think through climate change not only in the abstract systems of atmospheric science and modelling, but also through the intimacy of the breath, as artist Terike Haapoja has suggested.⁹ Ukeles’ implicit proposition, that we understand the land as breathing, helps to reconfigure our ideas of climate change. For what would it mean if we understood climate change not just as a global condition of ecological breakdown, but also as the intimate reorganization of what we are breathing in and out? And what would shift if we were to take this metabolic conversion and extend that to the land? How might we reorganize our relations to the non-human world if we understood the land itself to be breathing, to be entangled in processes of chemical exchange? Ukeles’ proposal asks us to take seriously these questions—to, in fact, place them as central within the unbreathable atmospheres of settler colonialism.

To illustrate the aspect of breath, the importance of connecting the body and body politic to atmospheric relations, Ukeles imagined a complex system of visualization techniques and forms of engagement. During the day, the proposed site would become an interactive and sprawling space for meeting strangers, for the visualization of pollution throughout the country, and for environmental education. At the top of the landfill, Ukeles imagined four fantastic mist geysers—corresponding to earth, air, water, and plant and animal life—that would periodically emit sudden, very high eruptions of color-coded water. In essence, Ukeles’ proposal instituted a new kind of color semantics, built upon the lines of security codes, but here speaking to questions of environmental health. Each of the colored waters would tell passers-by the health of these various ecosystems and their correspondence to different areas of the country. Additionally, these mists would provide a kind of refuge for the Great Table of Dialogue, which would be placed on the flat plain of Hiriya. The table would be as long as the landfill is high: 240 feet. It was

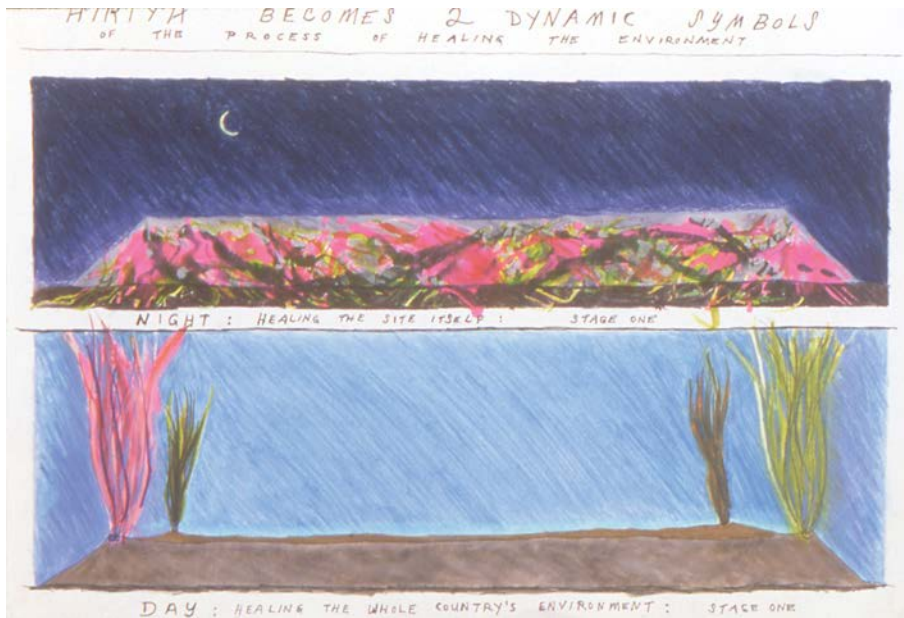


Figure 19.2 Mierle Laderman Ukeles, *Evapotranspiration: This Land Lives & Breathes*, 1988–present

pictured as a place for chance encounters between people and as a space of dialogue. During the day, through these features, Hiriya becomes the lens through which to see, in one place, at that moment, the existential state of the country's environment.

At night, the atmosphere would be lit up by various families of colored light which each symbolized one of the forms of leachate, methane, and other gases that the landfill emits. Instead of hiding the toxicity of the landfill—which is one of the methods that was, in the end, taken up as a form of remediation¹⁰—the toxins are amplified through these colors at night. Ukeles takes the position that we need to face the environmental damage that we are creating, that the ethical position in relation to waste is to amplify and acknowledge it. Only then will we begin to re-think our relations to consumer capitalism, a position echoed by theorists of waste, including Myra Hird. Hird argues that landfills “make their appearance on and in the landscape as a material enactment of forgetting.”¹¹ In the process of creating landfills, we participate in many forms of forgetting, from the deliberate acts of wasting, to the labor of sanitation workers. Landfills are a memorial to this act of forgetting. Both Ukeles and Hird argue that an adequate or ethical response to the culture of wasting that produces landfills is the amplification of their visibility; to not let waste be forgotten or pushed out of sight. As Hird writes, “Concentrating on bioremediation, and waste management technologies more generally, may actually foster our current relentless forgetting, or worse, inexperience with waste beyond feel-good practices of recycling, composting, and curbside disposal.”¹² Waste, in other words, should be brought into public discourse through practices such as those that Ukeles has been cultivating for decades. The hypervisibility of pollution in her proposal, and in her broader oeuvre, forces a political and ethical reckoning with how we produce and dispose of materials and to the complex relations of waste and systems of wasting.

Ukeles' *Evapotranspiration* confronts the fundamental hypocrisy of Western relationships to waste, but, more specifically, the particularity of waste and environmental degradation within the

context of Israel. She points out that “for a country with little actual land, that is, moreover, stuffed to the gills with huge ideologies about the Meaningfulness of Land, why the reluctance to deal with the degradation of the environment over these 50 years?”¹³ For science and technology studies scholars and activists Max Liboiron and Tabor Wordelman, the answer to this question is embedded in the country itself: pollution is a form of colonialism.¹⁴ Pollution is not simply the inevitable by-product of late-stage petrocapi-talism, but is one of the mechanisms through which settler colonialism proceeds. This can involve a number of uses and means of extraction, but it can also “mean using land as a resource, which may generate pollution through pipelines, landfills, and recycling plants.”¹⁵ Although the landfill appeared after the displacement of Palestinians, it continues to operate as a way to assert Israeli control, to mark it as a particular kind of property. The landfill literally occupies the land to be used for colonial goals and this waste will continue to exist into the indefinite future. It is a marker of the transformation of the land, the biosphere through the mechanisms of settler colonialism, a severing of relations between Palestinians and the land, even if a return were possible. As *Evapotranspiration* makes clear, this is also not confined to the square footage of the landfill, but extends into the atmosphere, blowing in all directions, and essentially colonizing the air through the mechanisms of wasting.

As Alon Tal writes in the catalogue for *Hiriya in the Museum*, “The present wave of green-awareness should not be perceived as a post-Zionist period in Israel. Rather it is a symptom’s [sic] of Zionism’s remarkable success.”¹⁶ Tal inadvertently points here to one of the central mechanisms colonial ideology: that is, that the land was conceived of as “unused” or “fallow” before the arrival of Zionism, and that it is the right then of settlers to claim the land. This unused land, that was conveniently apprehended as available for appropriation, also links to questions of waste. In old and middle English, waste referred to uninhabitable land. As Hird writes, “Wilderness, in short, was wasted land: a wasteland.”¹⁷ Understanding wilderness as wasteland appears in Israel in the form of the desert as what needed to be modified, controlled, and transformed under the colonial gaze.

The colonization of the Negev was not only concerned with territorial expansion, but also with transforming the climate. The agrarian imaginary of Zionism saw the settlement of the Negev as a part of a “natural force” able to “make the desert bloom.”¹⁸

Weizman and Sheikh point to the ways in which “making the desert bloom” has become one of the central mechanisms of dispossession – that is, the radical transformation of land erases the connections that people have to a particular land, effectively removing them from the land as that land no longer exists. In the example of the landfill, a similar logic is at work, but one that instead of transformation through afforestation is transformation through degradation, making the connections between Palestinians and the land irrecoverable because the land itself is so fundamentally changed. Traci Brynne Voyles has importantly argued that wastelanding is the process through which wastelands “are constituted through racial and spatial politics that render certain bodies and landscapes pollutable.”¹⁹ In other words, the landfill can be understood within this larger project that renders the land pollutable, the wastelanding of the country as a means of control.

For Ukeles, *Evapotranspiration*’s location in Israel was incidental rather than necessary to the artwork. She was interested in the way in which Hiriya was situated directly in the middle of the country, and how obvious it was as a garbage dump. It became, for her, “a loving symbol of focused vision and courage to will a healing change.”²⁰ The question that remains in my mind is whether it is possible to truly heal the land, to advocate lovingly and courageously for a will

to healing change, without also addressing the fundamental dispossession of Palestinians from their homeland. In other words, what kind of leachate might be seeping out of the ground in the wake of settler colonialism? Might the Boycott, Divestment, Sanctions (BDS) movement be conceived as a fight for climate justice in addition to an anti-apartheid movement? How might *Evapotranspiration* respond not only to the contemporary conditions of waste, but also to the underlying conditions of settler colonialism that make possible this vast *wastelanding* to begin with?

Anticolonial Breathing

The Anishinaabe artist Rebecca Belmore's 2017 work, *Wave Sound*, also confronts the question of the living land under conditions of settler colonialism. The work was, ironically, commissioned as part of *Land Marks*, a series of works installed in different national parks across Canada in 2017, marking the 150th Anniversary of the colonial nation-state. Curated by Kathleen Ritter, *Wave Sound* consisted of four sculptures that were situated in Banff National Park (AB), Pukaskwa National Park (ON), Chimnissing Island in Georgian Bay Islands National Park (ON), and Gros Morne National Park (NL). Varying in shape, and responding and conforming to its particular site, each sculpture amplifies the living sounds that are specific to its location (Figure 19.3).

Belmore took several silicon molds of the rock faces and imprinted them onto conical sculptures, referencing and reiterating the surrounds. Each sculpture, then, uncannily blends into the environment, picking up the geologic legacies of the Earth, the glaciers that scraped through the granite, the layered rocks that were formed at the bottom of the ocean 500 million years ago, as the surface of the sculptures replicates the same marks as the surrounding rock face. The sculptures themselves are giant ear trumpets, devices used to amplify sound for the hearing impaired



Figure 19.3 Rebecca Belmore, *Wave Sound*, Banff National Park, 2017

that date back to the seventeenth century. Equipped with an ear shape at one end, the works invite passers-by to get close to the ground and listen. For, as Belmore reminds us, the land has more to say to us than we do to it.

The piece responds to a decades-earlier work by Belmore entitled *Ayum-ee-aawach Oomama-mowan: Speaking to Their Mother* (1991, 1992, 1996). *Ayum-ee-aawach Oomama-mowan* consisted of an intricately constructed, hand-made megaphone that was two meters wide. Belmore conceived of the work in relationship to the 1990 uprising on the Mohawk Nation “(Kanien’kéha:ka)” of Kanesatake, where the people of the community were fighting to save a sacred grove of trees and burial ground from a golf course expansion.²¹ The megaphone, which toured to many people’s traditional territories, was a way for Indigenous people to speak directly to the land, superseding the supposed authority of the Canadian nation-state. As Belmore writes about *Ayum-ee-aawach Oomama-mowan*, “Asking people to address the land directly was a way to hear political protest as poetic action.”²²

Wave Sound speaks to a similar set of concerns about recognizing the inherent authority of Indigenous legal systems and knowledge structures, but asks its audience to listen. As many of the sculptures are placed on the lands of national parks, which themselves have contested histories in relation to the territories that they now occupy, many of the audience members will be settlers, rather than Indigenous peoples. In this context, *Wave Sound* calls on those of us who are settlers to listen, to observe, and to, implicitly, think through the ways in which the parks themselves often acted as a means of Indigenous dispossession. It is also important to note that these works were installed in a context where the Truth and Reconciliation Commission (TRC) had recently ended, a process that asked settler Canadians to listen to the violence wrought through settler colonialism on Indigenous bodies.²³ It is impossible to “hear” these works outside of the contexts of the TRC, the contested 150th anniversary celebrations of Canada, and its mirroring of *Ayum-ee-aawach Oomama-mowan*.

Each of the sculptures is installed next to a large body of water, and when a visitor puts her head to the ear piece, she hears the sounds of the waves and the wind, the wind that causes the water to become waves. But the title also draws attention to the materiality of sound, as it moves as a wave through the air. It is a reminder of how we cannot shut our ears, how sound moves through the body whether we like it or not, how it reverberates, affecting organs, movements, breath. There is an implicit argument that Indigenous sovereignty operates with a similar persistence through the Canadian nation-state, that try as the government might to shut its ears, the waves of Indigenous resistance will persist.

To pause to listen seems a gentle reminder to let sound through, to be affected, to let the reverberations do their work, to become inhabited by the Earth, and because of the context of the work within Belmore’s larger oeuvre, to think about these qualities not only in a straightforward phenomenological way, but also as an integral part of Indigenous governance. As Kathleen Ritter writes, “The audience for Belmore’s work is not viewers as much as [...] listeners. Her works are provocations to action on the part of the listener.”²⁴ These “auditory provocations” are an implicit call to think through the legacies of settler colonialism that have supplanted the land and water as primary authorities, that have resulted in the devastating and ongoing effects of cultural genocide and climate change. The piece responds to the deep embodied knowledge of the land, passed down through the generations of Belmore’s Anishinaabeg relatives. It invites people to think of themselves not as separate from the land, but as continuous with it, to hear the sound of one’s own breathing as it reverberates back through the refraction of soil, plants, bacteria, water. To recognize that breath comes from those plants and rocks and bacteria and water, which then circulates through each of these beings before being inhaled again. We are called to listen to the variegations of breath and movement of the land and the water, as they

both mirror and are differentiated from our own bodies, to rhythms and dissonances of the subtle communications of the world. Ritter describes the experience of listening to *Wave Sound* as the felt bodily reality of two time periods simultaneously. She writes,

Its shape captured sound from the opposite shoreline, eliminating any extraneous noise. I could hear movement of water that sounded at once close and far away. As I listened, this oscillation between near and far sounds seemed to parallel how I imagined sound across time. Perhaps I was listening to the water in the present and in the distant past in the same moment.²⁵

The work quietly, but persistently, insists upon the land as both before and after the effects of settler colonization. In listening to the land, we are asked to listen to the deep time of the land, to its changes and the innumerable bodies and lives of humans and other-than-humans that have sought refuge along these shores. It sidesteps the nation-state to privilege the land itself. The land, in this work, is the authority. It is the land to which we must answer. In this imagining, the relatively short existence of the nation-state of Canada begins to appear as a historical blip, one that almost disappears, that hovers and clings at the edge of existence. The work invites re-imaginings of this place through the authority of the land and the water. It refuses the imposed authority of settler-colonialism by repositioning the deep histories of the land, and implicitly, the governance structures of Anishinaabe and other Indigenous ways of knowing that were created in and through relations with the land.²⁶ Given the context of these histories, the piece shifts the emphasis of settler calls to “listen to nature” to a provocation to act differently, to reconsider the legal structures and governance systems that we settlers have built and imposed on the Indigenous peoples of this land. However, the placement of the works within the national parks on the bicentennial anniversary works to erase some of the more radical understandings of how the work might reverberate. It may not be apparent enough, through the subtle and ambiguous calls to listen to the water, that this work resonates within the larger calls to listen to the authority of Indigenous peoples, to listen to the ways that the land and water are desperately trying to articulate the violence being done to them. The subtlety of the work, and the curatorial context, results in a dampening of the work’s political effects, especially in comparison to the amplification that was central to *Ayum-ee-aawach Oomama-mowan*.

Regardless of these flaws, the work resonates with the call, recently articulated by Kyle Whyte, to pause, stop, slow down.²⁷ Despite the urgency of climate change, and the desire to “fix” the problems associated with it, if we don’t stop, or at least pause, we will not have the capacity to properly re-imagine and reenact our relations, to begin to do the long and complicated work of decolonization. And if we do not do this work, we are doomed to repeat the problems that subtend climate change in the first place. For colonialism’s aim was to destroy the multiple systems of governance that understood the fundamental entwinement, the necessity for good relations, between humans and other-than-humans. *Wave Sound* offers the possibilities of listening to the reverberating effects of climate change, seen in the record highs and lows of the water tables in the Great Lakes by which many of the works resided, and to reconsider our options.

Conclusion

In both of these works, Ukeles and Belmore use artistic strategies to amplify the voice of the land, to ask us to pay attention to what it is trying to tell us in these times of climate catastrophe. In privileging the land itself, a complex set of questions arises within the context of these two settler colonial nations. For settler colonialism has always been about land, about the radical

transformation of land so as to render it unrecognizable as a strategy of dispossession. What is compelling about both of these works is that they amplify and extend the land *as it is*, asking us to be present and to listen to the state of the land, even when that means degraded land. In other words, thinking of these two pieces together helps bring forward the fact that landfills and national parks have both worked as strategies of dispossession in the matrix of what Peter Galison calls “waste-wilderness,” and each artwork calls, in subtle ways, for a radical reconsideration of the interrelationship between breath and settler colonialism.²⁸

Notes

- 1 Kyle Whyte, “Is It Colonial Deja Vu? Indigenous Peoples and Climate Injustice,” in *Humanities for the Environment: Integrating Knowledges, Forging New Constellations of Practice*, ed. J. Adamson, M. Davis, and H. Huang (London: Earthscan Publications, 2017), 88–104.
- 2 Kim Tallbear, “Failed Settler Kinship, Truth and Reconciliation, and Science,” Indigenous Science Technology Society, accessed February 15, 2020, <https://indigenousts.com/failed-settler-kinship-truth-and-reconciliation-and-science/>.
- 3 Eyal Weizman and Fazal Sheikh, *The Conflict Shoreline: Colonization as Climate Change in the Negev Desert* (Göttingen: Steidl, 2015), 36 (my emphasis).
- 4 Traci Brynne Voyles, *Wastelanding: Legacies of Uranium Mining in Navajo Country* (Minneapolis: University of Minnesota Press, 2015).
- 5 Patricia Phillips, “Making Necessity Art: Collisions of Maintenance and Freedom,” in *Mierle Laderman Ukeles: Maintenance Art*, ed. Patricia Phillips (New York: Prestel and Queens Museum, 2016), 176.
- 6 Although almost every sanitation worker was male, I argue that this work is fundamentally feminist in its orientation as it seeks to connect labor and maintenance practices with household work.
- 7 Phillips, “Making Necessity Art,” 170.
- 8 Amanda Boetzkes, *Plastic Capitalism: Contemporary Art and the Drive to Waste* (Cambridge, MA: MIT Press, 2019), 77, italics in original.
- 9 “It is not enough,” Haapoja says, “to show the workings of carbon in the ecosystem: we need to try to see what does CO₂ mean to us, how does it work its way in our own inner reality, the reality of love, and bodily being, and death.” Terike Haapoja, *Closed Circuit—Open Duration in 55. Venice Biennale* accessed February 15, 2020, www.terikehaapoja.net/closed-circuit-open-duration-exhibition-venice-biennale-nordic-pavilion/. I have written more extensively about this question elsewhere; see Heather Davis, “Molecular Intimacy,” in *Climates: Architecture and the Planetary Imaginary*, eds James Graham, Caitlin Blanchfield, Alissa Anderson, Jordan Carver, and Jacob Moore (New York and Zurich: Columbia Books on Architecture and the City and Lars Müller Publishers, 2016), 205–211.
- 10 The final iteration of the Hiriya landfill was designed by Latz + Partner (www.latzundpartner.de/en/projekte/postindustrielle-landschaften/hiriya-tel-aviv-il/). Renamed Park Ariel Sharon, it uses innovative and well-considered bioremediation and recycling techniques to reclaim the land as a park. However, the radical implications of Laderman’s proposal are lost in this park as the pollution is hidden, and the landfill itself naturalized.
- 11 Myra Hird, “Waste, Landfills, and an Environmental Ethic of Vulnerability,” *Ethics and the Environment* 18, no. 1 (Spring 2013): 106.
- 12 Hird, “Waste,” 116.
- 13 Mierle Laderman Ukeles, “Evapotranspiration – This Land Lives and Breathes,” in *Hiriya in the Museum: Artists’ and Architects’ Proposals for Rehabilitation of the Site*, ed. Martin Weyl (Tel Aviv: Tel Aviv Museum of Art, 1999), 91.
- 14 Max Liboiron and Tabor Wordelman “How Plastic is a Function of Colonialism,” *Teen Vogue*, December 21, 2018, www.teenvogue.com/story/how-plastic-is-a-function-of-colonialism/?amp?verso=true&__twitter_impression=true&fbclid=IwAR1ptA3lEow4F0dnxwqvg03YNkiYWhw2evPQuROTGoyUjKKtqiPDnoJrIIQ.
- 15 Liboiron and Wordelman “How Plastic is a Function of Colonialism.”
- 16 Alon Tal, “A Brief Environmental History of Israel” in *Hiriya in the Museum*, ed. Martin Weyl (Tel Aviv: Tel Aviv Museum of Art, 1999), 133.
- 17 Myra Hird, “The DEW Line and Canada’s Arctic Waste: Legacy and Futurity,” *The Northern Review* 42 (2016), 24.
- 18 Weizman, *Conflict Shoreline*, 10.

- 19 Voyles, *Wastelanding*, 10.
- 20 Mierle Laderman Ukeles, "Evapotranspiration," 97.
- 21 Within settler Canada this uprising is known as the "Oka Crisis." It lasted 78 days and resulted in two fatalities. When the Mohawks and their supporters set up a camp to halt the golf course expansion, the government of Canada first sent in the Quebec provincial police, and later the army to confront the Mohawk warriors.
- 22 www.rebeccabelmore.com/exhibit/Speaking-to-Their-Mother.html.
- 23 The Truth and Reconciliation Commission was a contested process in Canada that spanned 2008–2015, which aimed to bring to light the grave injustices committed by the Canadian nation-state against Indigenous peoples through the residential school system. The TRC recommended ninety-four actions to be adopted across the country and has led to increased discussion and acknowledgement of the harms of settler colonialism. However, there was widespread criticism of the language of 'reconciliation', a term that implies that there once had been a conciliatory state. For more information, see the TRC recommendations on their website: www.trc.ca and for a discussion of unsettling reconciliation see Gabrielle L'Hirondelle Hill and Sophie McCall, eds. *The Land We Are* (Winnipeg: Arp Books, 2015).
- 24 Kathleen Ritter, "Wave Sound," in *Facing the Monumental*, ed. Wanda Nanibush (Toronto: Art Gallery of Ontario, 2018)
- 25 Ritter, "Wave Sound."
- 26 See, for example, Robin Wall Kimmerer, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants* (Minneapolis: Milkweed Editions, 2013); Vanessa Watts, "Indigenous Place-thought & Agency amongst Humans and Non-humans (First Woman and Sky Woman Go on a European World Tour!)," *Decolonization: Indigeneity, Education & Society* 2, no. 1 (2013): 20–34; and Kyle Whyte "Indigenous Science (Fiction) for the Anthropocene: Ancestral Dystopias and Fantasies of Climate Change Crises" *Environment & Planning E: Nature and Space* 1 nos. 1–2 (2018): 224–242.
- 27 Kyle Whyte Panel Discussion. After Oil School 2: Solarity, Montreal, May 24, 2019.
- 28 Peter Galison "Waste-Wilderness: A Conversation with Peter L. Galison," Friends of the Pleistocene, accessed February 15, 2020, <https://fopnews.wordpress.com/2011/03/31/galison/>.



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PART IV

In/Visibilities

Climate change references an entanglement of processes so expansive, it largely exceeds and eludes picturability. It thus poses deep and thorny representational problems.¹ As the historian of science Paul Edwards has noted, the climate (and, by extension, climate change) is an abstraction produced by a complex, multi-faceted, and “vast machinery” of information, requiring large-scale cybernetic data infrastructure to process countless observations, calculations, and projections.² While we can experience the weather on a day-to-day basis, the climate, measurable over extended periods of time, is beyond easy sensible grasp. As such, the climate, and climate change, have certain built-in invisibilities. This obviously makes them no less real, however. Climate change expresses itself in all sorts of ways, even if some are more immediately sensible and imageable than others. It is chartable, for instance, by the parts per million of greenhouse gasses (GHG) accumulating in the Earth’s atmosphere and, as a consequence, materially transforming human and non-human environments in undeniably concrete ways and at alarmingly accelerated speeds. The timescale of Earth sciences—as with geology, the key science among proponents of the Anthropocene thesis—tends to run long, however, with enormous, often multi-decade inputs required before scientists are willing to claim “proof” of this or that transformation. The inherent challenges of producing quick, simple, and media-ready evidence of climate transformation, including visual evidence—despite the fact that a scientific consensus on its existence was reached already years ago—have been strategically exploited by those with political and economic interests to keep capitalism churning at full steam. This is especially so in the United States, where climate change denialists, particularly individuals and corporations directly linked to the fossil fuel industry, have deliberately obfuscated the irrefutable evidence that does exist, producing a regime of the sensible (and the non-sensible) that molds doubt into a smokescreen to maintain and extend profits.³

At times, corporate obfuscation has involved the manufacture of invisibility. The historian of science Peter Galison and art historian Caroline A. Jones (a contributor to this section) have parsed the role of various media images, part and parcel of a broader corporate media ecology, generated by the 2010 Deepwater Horizon disaster off the Gulf Coast, the largest petrochemical spill in history. Moving from the spectacular and widely circulated documentation of the burning oil rig on which nearly a dozen workers died during the accident, they analyze a number of other types and aspects of imagery, including the grainy, livestream footage from the underwater “spillcam” at the submarine site of rupture. Following considerable legal challenge, the spillcam

imagery's public release allowed the world to see what was happening on the ocean floor, even while viewers lacked the power to stop the toxic flow for many torturous months. British Petroleum's use of chemical dispersants sought to sink and thereby disappear vast quantities of leaked petroleum from the water's surface, consigning the glistening and—perversely—gorgeous visual evidence of the catastrophe into transparent underwater plumes beyond the camera's reach: “no longer visible, [...], unimaged and thence largely unimagined.”⁴ This active concealment of proof speaks to the larger choreography of in/visibility at play in environmental crises. A former affiliate with the ongoing research project Forensic Architecture, which has contributed much to our understanding of the political aesthetics of genocide, ecocide, and environmental violence more broadly, the architect and theorist Adrian Lahoud has similarly investigated regimes of climate in/visibility. Specifically, he has analyzed the ways that carbon dioxide molecules (unlike some other GHGs), once released into the atmosphere, mix with others and thus elude trackability to their points of origin, enabling abstract data to inform climate governance that consequently overlooks the differentiated production and regionally specific effects of global warming.⁵ A number of artists and experimental researchers—including Paulo Tavares, Nabil Ahmed, and Susan Schuppli—have relatedly developed sophisticated visual practices with a forensic orientation, aimed to produce counter-knowledge to further juridico-political accountability for the various environmental violences of states and corporations.⁶ In the case of Jennifer Gabrys and her work with the Citizen Sense, this has involved training community members to map particulate matter, especially in vulnerable areas, thereby acknowledging the value of “non-expert” observation and, more broadly, calling for more inclusive and expansive notions of atmospheric sensing.⁷ Meanwhile, the San-Francisco-based artist Amy Balkin's practice has long mined the language of climate laws and policies to performatively intervene in what she terms “atmospheric politics.” Like Balkin, many other practitioners, as emphasized by Suzaan Boettger and Birgit Schneider in this section, expressly resist sublime and spectacular modes to highlight the embodied dimensions of climate change.

Climate change is often invisible, or rather *invisibilized*, so as to reinforce its apparent separateness from social and political realms. In contesting this tendency, our overarching aim in this volume is to suggest the profound connectedness of climate breakdown to capitalism and colonialism, as examined in media-based and other social and environmental-justice practices, as well as in the arts and humanities more broadly. While clearly part of the larger story of fossil fuel capitalism and the climate breakdown resulting from it, the BP oil spill has, however, seldom been depicted within this larger sociopolitical entanglement. Instead, like countless other examples, it's been misrepresented as a discrete event, as opposed to multi-scalar, pluri-temporal, and enmeshed in expansive economic, sociopolitical, and multispecies formations. Most often absent from dominant accounts is its obvious relation to Hurricane Katrina, which hit the same region only five years prior, likewise exacerbating preexisting and differential vulnerabilities and exacting its racialized toll then and to this day.⁸ As such writers as Robert D. Bullard, Neil Smith, and Naomi Klein have argued, structural inequalities intersect with, and are intensified by, disaster, leading to the predations of disaster capitalism, even while the consequent and amplified inequalities are often—almost by definition—rendered invisible, naturalized as “part of the scenery.”⁹

One role of critical aesthetics, then, is to de-naturalize the structural conditions that underpin and refract environmental violence, including climate violence, such as the racist redlining practices that have shaped many American cities, forcing some to the frontlines of harm while protecting others. More generally, the kinds of critical practices and voices highlighted in this section help to see climate change as it hides in plain sight, urging more nuanced and creative forms of perception and representational framings that capture intricate interrelations. They help

us to recognize, for example, the role drought played in spurring both the Syrian civil war (2011–present) and the Central American migrant caravans, which began to arrive on the US southern border in 2018 only to be met with the violent use of tear gas by border patrol agents, producing inhospitable environments that effectively weaponized local atmospheres.¹⁰ Climate-justice framings also bring into view the swift and largely silent climate gentrification underway in a city like Miami, where predatory real estate practices are quickly displacing Black and Brown communities from higher ground as the wealthy retreat from rising sea levels.¹¹ They train our eyes upon geographies and perspectives that have typically been marginalized within dominant narratives of climate transformation, whether those issued from the Maldives, a Pacific nation-state increasingly inundated by rising waters, and whose inhabitants are frequently reduced to politically passive “climate refugees”; the Arctic, where global warming has been far more visible than in most places, but where its impacts on Indigenous lifeways are often downplayed while images of melting glaciers and polar bears have become iconic (suggesting that it is primarily a problem for “nature”); or South Africa, where the ecological violence of colonialism and Apartheid (including extractive industries, toxic waste dumping, neo-colonial dispossession) often remains masked within sanitized “representations of territory, property, and nativism in the guise of neutral ‘natural’ scenery,” as Nomusa Makhubu puts it in her essay in this section.

While the future’s climates—and their entanglements with the social and political—are not fully visible to us, we can access what’s likely to come through scientific predictions and creative imagination. The latter, making visible past and present socio-environmental inequities and injustices, is capable, moreover, of signaling and inspiring new forms of solidarity that may emerge from the ruins of climate breakdown.¹² Beginning with this hypothesis, this section asks: How are artists, filmmakers, and media practitioners visualizing (and rethinking the conventions of visibility in considering) climate breakdown in its multiple dimensions, including climatological causalities, symptoms, and far-flung effects? How are they generating and complimenting emergent practices of resistance? How do these enter into, or escape, visibility in the first place? Finally, what happens to visibility when artistic practice involves experimental performative situations, body-based experience, and non-visual forms of expression?

Notes

- 1 See Rebecca Solnit, “Are We Missing the Big Picture on Climate Change?,” *New York Times* (Dec. 2, 2014): www.nytimes.com/2014/12/07/magazine/are-we-missing-the-big-picture-on-climate-change.html?_r=0 (accessed by the author Dec. 2, 2014); Jodi Dean, “The Anamorphic Politics of Climate Change,” *e-flux journal* 69 (Jan. 2016): www.e-flux.com/journal/the-anamorphic-politics-of-climate-change/ (accessed by the author Jan. 15, 2016); and Emily Eliza Scott, “Archives of the Present-Future: Climate Change and Representational Breakdown,” *The Avery Review: Critical Essays on Architecture* 16 (May 2016): <http://averyreview.com/issues/16/archives-of-the-present-future>.
- 2 Paul Edwards, *A Vast Machine: Computer Models, Climate Data, and the Politics of Global Warming* (Cambridge: MIT Press, 2010). The Canadian scholar Chris Russill has also done interesting work on the scientific apprehension and framing of climate change.
- 3 Naomi Oreskes and Erik M. Conway famously made this case in their book, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (London: Bloomsbury, 2010), which was made into a documentary film in 2014.
- 4 Peter Galison and Caroline Jones, “Unknown Quantities,” *Artforum* Vol. 49, No. 3 (Nov. 2010): 51. Also pertinent to the aesthetics of climate change imagery is Michael Benson’s visual essay, “Gorgeous Glimpses of Calamity,” *New York Times* opinion pages (Aug. 13, 2013): www.nytimes.com/2013/08/18/opinion/sunday/gorgeous-glimpses-of-calamity.html?pagewanted=all (accessed by the author Sept. 12, 2013).
- 5 Adrian Lahoud, “Nomos and Cosmos,” *e-flux journal* #65: *SUPERCOMMUNITY* (May 30, 2015): <http://supercommunity.e-flux.com/texts/nomos-and-cosmos/> (accessed by the authors May 30, 2015).

- 6 See Susan Schuppli, "Slick Images: The Photogenic Politics of Oil," *Allegory of the Cave Painting*, ed. Mihnea Mirca and Vincent WJ van Gerven Oei (Milan: Mousse, 2015), 425–447, susanschuppli.com/wp-content/uploads/Slick-Images-Schuppli.pdf; and the contributions of Tavares and Ahmed in this volume.
- 7 Also see Thom Davies and Alice Mah, eds., *Toxic Truths: Environmental Justice and Citizen Science in a Post-Truth Age* (Manchester: Manchester University Press, 2020).
- 8 There have been countless writings, artworks, and films on Hurricane Katrina. Particularly illuminating and affecting is the 2008 documentary, *Trouble the Water*, directed by Tia Lessin and Carl Deal, which includes extensive firsthand footage by Ninth Ward resident Kimberly River Roberts and foregrounds the ongoing environmental injustices of Katrina (expressed succinctly by one community member, who angrily insists that Katrina is still happening).
- 9 See: Robert D. Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Boulder: Westview Press, 1990); Neil Smith, "There's No Such Thing As a Natural Disaster," (June 11, 2006), <https://items.ssrc.org/understanding-katrina/theres-no-such-thing-as-a-natural-disaster/>; and Naomi Klein, "Disaster Capitalism," *Harper's Magazine* (Oct. 2007): 47–58.
- 10 On the climate-related dimensions of Syria's still-ongoing civil war, see the comic: "Syria's Climate Conflict," by Audrey Quinn and illustrator Jackie Roche (4 Sept. 2015): <http://yearsoflivingdangerously.tumblr.com/post/128340659028/yearsoflivingdangerously-this>. On the weaponized atmospherics of tear gas, see: T. J. Demos, "Climate Control: From Emergency to Emergence," *eflux Journal* #104 (November 2019), www.e-flux.com/journal/104/299286/climate-control-from-emergency-to-emergence/.
- 11 See Ashley Dawson, *Extreme City: The Peril and Promise of Urban Life in the Age of Climate Change* (London: Verso, 2016), which focuses in part on Miami. The artist Eddie Arroyo has also created paintings documenting the gentrification of his own Miami neighborhood, Little Haiti, as well as activist-led resistance to it. There has been extensive local reportage on this issue in Miami, even if the subject of climate gentrification remains grossly underreported more generally.
- 12 See Lisa Bloom's discussion in this volume of Kimi Takesue's *That Which Once Was* (2011), a film that glimpses future solidarity among people from distant geographies displaced by climate breakdown.

SENSING PARTICULATE MATTER AND PRACTICING ENVIRONMENTAL JUSTICE

Jennifer Gabrys

Pollution is accumulating in planetary atmospheres. Carbon dioxide, along with ozone, nitrogen oxides, and particulate matter are amassing in airspaces as residual substances from the burning of fossil fuels. These pollutants variously lead to a more constricting and less breathable world.

In this essay, I consider one shape-shifting air pollutant, particulate matter, as it transforms environments, bodies, and politics in the ongoing process of planetary incineration. Particles are on the rise due to increasing traffic, combustion engines, industrial activity, building heating and cooling, large-scale agriculture, wildfires, and more. While particles might seem to be an elemental material due to their microscopic size, they are changeable entities formed through multiple substances and pollutants, from carbon to volatile organic compounds, and are never singular in their composition. Particles take shape through different environmental processes, where heat, humidity, and sunlight can differently affect their ability to form and dissipate. Heatwaves can lead to elevated levels of air pollutants, dry conditions can cause the buildup of particulate matter, and warmer weather can generate higher pollen counts.¹ Climate change is likely to lead to more polluted air in warmer regions, which also tend to be locations that will suffer more severely from a warming planet. At the same time, black carbon, a distinct type of particulate matter, circulates through global atmospheres and settles in locations such as the Greenlandic ice sheet. The ice sheet, in turn, transforms into a sooty black surface that attracts sunlight and hastens along the melting of ice sheets.

Particles are differentially distributed material-chemical traces that accumulate in areas of extensive manufacturing and production. Yet they can also drift and amass in locations distant from sites of production. Depending upon their size, particles can enter the human body by passing into the respiratory system, blood and brain, thereby affecting health and contributing to increased morbidity and mortality. The intensity of air pollution from particulate matter can signal conditions of environmental injustice, as environments are churned over and humans and more-than-humans are exposed to toxic residues.

As a material that is always in process, particles inform and are informed by environments, bodies, politics, and infrastructures. Yet as a relatively invisible substance, particulate matter typically circulates and accumulates below thresholds of detection. In this discussion of particulate matter, I first consider how this pollutant becomes perceptible through different sensing practices that involve techniques of citizen monitoring, annotated observations, data-oriented narrations, and other aesthetic encounters that redistribute and differently problematize the problem

of changing environments. In this way, citizen-sensing practices might be understood less as a project of becoming “aware” of particles, and more as a matter of tuning in to transforming ecologies and to the demands for justice that particulate pollution instigates.²

Following on from this exposition of sensing particulate matter, I describe how the Citizen Sense research group that I lead has worked with communities to set up air pollution monitoring networks with low-cost air quality sensors. Citizen Sense is an European Research Council (ERC)-funded project that I set up in 2013, which has involved working in the US and UK to monitor pollution from fracking, from urban processes, and in relation to possibilities for mitigation through air pollution gardens.³ This ongoing, practice-based research project has involved collaboration with multiple communities to test digital sensors, to sense particulate matter pollution, and to create proposals for mitigating the effects of pollution. In this essay, I specifically discuss a project of working with residents in southeast London to monitor air pollution within a diverse and changing urban landscape.

In the process of building a network for sensing particulate matter, the Citizen Sense project engaged with multiple thresholds for detecting pollution, and in the process developed practices for sensing and being sensitized to pollution. By focusing on particles as evidence of environmental transformation, the project sought to create ways of sensing pollution that might generate more expansive responses to changing environments. This was a process of creating practices for sensing and documenting pollution and environmental change not merely as problems for experts working in the realms of science and policy, but also as cultural, aesthetic, social and political practices that might be developed for more democratic environmental engagement.

How might practices for sensing particulate matter make pollution evident less as a visual representation, and more as a multiply experienced register of environmental processes? How might these processes, in turn, be reworked and remade through struggles for environmental justice, which span practices of housing activism and pollution abatement to cultivating green spaces and experimenting with transportation? Working at the juncture of digital social research, feminist technoscience, environmental studies, and practice-based research, this essay investigates how environmental injustice becomes embodied in particulate matter as a transformative earthly matter. It further documents how practices of sensing particulate matter activate distinct citizen-based monitoring practices and environmental actions.

Sensing the Matter in Particulate Matter

How is it possible to sense and act upon environmental crises, whether climate change, pollution, or biodiversity collapse? Rather than suggest that practices of sensing environments involve making the invisible visible, my discussion takes a less representational approach to environmental events such as air pollution and climate change to instead investigate how perceptual practices involve the instigation and formation of alternative worlds. Sensing occurs across entities, bodies and environments of detection that are more or less affected by problems of changing environments. In this way, different practices for sensing environmental change also organize and set these problems in motion. Ways of sensing environments generate practices for attending to environmental crises, while proposing strategies for sensing and living otherwise.⁴

The citizen-sensing practices discussed here are specific to the problem of particulate matter and air pollution. And yet they might also give cause to consider how different practices for making pollution sensible variously inform approaches for addressing environmental change. More broadly, how does attending to particulate matter as a problem of pollution concentration in relation to regulatory guidelines differ from an approach that documents the sites and bodies

most affected by polluting activities?⁵ Citizen practices for monitoring and capturing pollutants can make evident the social, political, economic, and governmental processes that undergird environmental destruction, and that also make such destruction difficult, if not impossible to address. Citizen-sensing practices can further bring into consideration these different forces that contribute to the ongoing problem of environmental pollution and destruction.

Particulate matter is one of many pollutants that contribute to the global problem of air pollution, with the World Health Organization (WHO) estimating that 9 out of 10 people worldwide breathe polluted air.⁶ At the same time, exposure to outdoor air pollution kills 4.2 million people per year worldwide.⁷ Deaths are linked to pulmonary, cardiac, and respiratory disease, including strokes, heart disease, and lung cancer. A microscopic substance that forms primarily through the burning of fossil fuels, as well as through atmospheric gases that turn into particles under distinct weather conditions, particulate matter is nevertheless very differently distributed across the world, with the highest levels of particulate pollution in India, China and Pakistan.⁸ Most deaths related to particulate matter and other air pollutants occur in low- and middle-income countries, but also transpire in places like the UK, where approximately 40,000 people per year die from causes related to air pollution.⁹ Air pollution in some instances has been exacerbated because of attempts to act on climate change, as with the subsidizing of diesel fuel in the EU, which has led to an increase in nitrogen oxides and particulate matter. As noted in the introduction to this essay, air pollution is becoming worse in various locations worldwide due to climate change, which is leading to rising temperatures, increased wildfires, altered atmospheric circulation patterns, and more.¹⁰

As an indicator of environmental change and social processes, particulate matter is a compound that assembles through a fluctuating array of materials and weather events. Particulate matter is a pollutant formed from multiple emission sources and processes—from traffic, the combustion of fossil fuels, heating, industry, power generation, construction, wildfires, and agriculture—and so, as *matter*, it is often indeterminate and shape-shifting in quality. It is a pollutant of varying toxicity, since it can be composed of silica and soot, sea salt and congealed volatile organic compounds (VOCs), dust and soil, carbon and pollen. These primary particles are emitted at source, and also combine with secondary particles that can form, deform, and form again depending upon the presence of atmospheric gases (including greenhouse gases) such as sulfates, ammonia, methane, and other nitrogen compounds, as well as changing atmospheric and weather conditions.¹¹ Because particulate matter is often made of sticky carbon, it is difficult to know what is stuck to it, where toxic compounds such as heavy metals and persistent organic pollutants (POPs) could be attached to particles.¹² However, these qualities of particulate pollution are not monitored or measured in sensor systems, which focus primarily on particle mass, and to some extent, particle number. In this way, rather than registering as an element located on the periodic table, particulate matter further challenges elemental thinking with its mutable and compound material qualities.

Particles are, on the one hand, specific to the places where they are generated and form in combination with local emissions sources and weather conditions; and, on the other hand, they also travel hundreds of miles to settle in far-flung places. Particles in London, where this study took place, consist of diesel emissions from automobiles, sea salt and sand, black carbon, construction debris, and industrial and agricultural fallout from near and distant sites of production. Particulate pollution especially affects people living by roadsides and adjacent to industry and construction sites, but it is also produced through regional pollution levels and events that can cover entire urban areas. Both regional and local episodes of air pollution then become an important part of the story of how particles travel and differentially affect bodies and environments.

Particles, in this way, cannot be understood in isolation from the changeable, transforming and transformative concrescences of air, emissions, bodies, environments, and weather events.¹³ Particles also form as social-material registers of inequality, bodily harm, and environmental transformations that are not fully captured merely through pollution levels as understood in regulatory spaces. It is exactly these transformative qualities of particulate matter that would be sensed in order to tune in not just to pollution as a numerical level but also as a register of environmental conditions that make and sustain these distinct material relations and dynamics.

The ways in which particulate matter are usually sensed, however, do not typically capture the broader processes and specific conditions that could be contributing to pollution levels and environmental change. Within London, the London Air Quality Network (LAQN) hosts approximately 100 monitoring stations at sites distributed across different boroughs in the city, and these are set to ensure compliance with EU Air Quality Objectives.¹⁴ Even with these monitors, particulate matter 2.5 (PM_{2.5}) is sparsely measured across these sites as the EU Air Quality Objective for PM_{2.5} has only recently been introduced, with limit values put in place from 2015 onwards.¹⁵ At the same time, there are other types of particulate matter, including ultrafine particles, which are even smaller than PM_{2.5} and for which no emissions standards exist, and for which little to no monitoring infrastructure is in place. Within the area of this Citizen Sense monitoring study, there was one official or regulatory monitor for PM_{2.5} in place at New Cross Gate, and this was itself exceptional, since nearby Goldsmiths, University of London: had installed a biomass boiler in an attempt to become more sustainable and meet zero carbon climate change targets. Yet biomass boilers burn woodchips, and so produce more air pollution. In order to receive planning permission for the introduction of this heating system, Goldsmiths was required by Lewisham Council to pay a levy that would fund the installation of a PM_{2.5} monitor. Here, attempts to address climate change contribute to air pollution. And yet the monitoring of PM_{2.5} that would document these effects is also limited in extent, as most LAQN stations do not include PM_{2.5} sensors. In this sense, there is a gap in sensing, even within a singular epistemological space of monitoring pollution, where regulatory data is patchy and incomplete.

Somewhat in response to these gaps in data, practices for sensing air pollutants are now proliferating among citizen groups that attempt to resist or reroute fossil-fuel intensive activities, traffic, industry, and development. From Kenya to Delhi, and California to the UK, community and environmental justice groups are monitoring roadside particulate matter, documenting pollution from petrochemical industries, and evidencing the effects of ongoing construction activity. Citizen-sensing projects document pollution levels to make claims about unbreathable air and hazardous environmental change, to document deleterious health effects, and to make claims for a right to the city, when ongoing development displaces and dispossesses people from their places of residence. While some atmospheric scientists query the possible uses and accuracy of low-cost sensors,¹⁶ there are now international sensor events that bring together scientists, technologists, environmental justice groups, and others to work together on developing sensor-based monitoring projects, which are often citizen-led.¹⁷ At the same time, there are multiple creative practices that move beyond technocratic modes of engagement with environmental problems to demonstrate how alternative forensic or documentary strategies can also instigate other political relations and environmental inhabitations that challenge the colonial capture of atmospheres.¹⁸

Citizen-sensing practices emerge within this space as a way to document pollutants that are not monitored and to bring pollution patterns into resolution through different modes of inquiry. Distinct environmental problems and atmospheric pollution might occur in particular areas, and yet be overlooked within regulatory systems. Low-cost and DIY sensors, together with local observations, become ways in which to make evident the accumulation of particulate

matter. However, these different ways of sensing particulate matter do not simply create additional data about PM_{2.5} levels; but they also potentially shift the perceptual registers through which particle pollutant might be encountered and evidenced. Monitoring particulate matter is also a practice of *tuning in* to development dynamics, ongoing injustices, transport problems, industry negligence, and more. Different practices for attending to environmental change can then rework the formation of environmental problems, and the possibilities for addressing these problems.¹⁹

I discuss these shifting perceptual registers in relation to environmental sensors and citizen sensing in my 2016 book, *Program Earth*, where I examine practices of monitoring air quality and how they “create,” or create distinct, if dynamic, conjugations of air and environment, particles and bodies, technologies and data.²⁰ I draw on Alfred North Whitehead to think about these creaturing processes as ways in which—similar to breathing—the boundaries and relations of bodies and environments are continually remade and rearticulated to create shifting subjects, environments, and relations.²¹ This is a way of zooming in on how processes constitute subjects as they are engaged with and through environments. Air pollution turns up here less as discrete chemical substances and more as traces of creaturely events within material, social, and political ecologies. Creaturing involves not just the formation of entities, environments, and relations, but also informs the conditions of relevance whereby environmental harm and toxicity, as well as sensing practices and citizen data, can register as significant. These different perceptual registers orient toward calls for environmental justice. And they also indicate how particulate matter becomes a kind of instigating agent that could transform urban and environmental relations.

Citizen Sensing and Perceptual Transformations

Working with these questions and perspectives in mind, in the remaining pages, I consider one specific project that tested citizen-sensing technologies to see how or whether they shifted the perceptual registers through which environmental problems were encountered. These practices and inquiry have been developed through the Citizen Sense project. Here, I address Citizen Sense’s collaboration with communities based in Deptford and New Cross in southeast London, which involved deploying particulate matter sensors and working through the different observations and forms of data that materialized. In so doing, I attend to how citizen-sensing practices evidence the concentration and movement of particles. I also investigate how or whether these practices transform the perceptual registers and possibilities for engaging with environmental change in the form of air pollution. And I consider how these practices instigate moves toward environmental justice, above and beyond merely establishing at what level pollutants might be present.

One of the first aspects of research that Citizen Sense undertook when beginning to collaborate with communities in southeast London was to learn more about existing citizen practices for sensing environmental change. People were engaged in monitoring to count traffic levels on busy streets, to monitor nitrogen dioxide levels with diffusion tubes where national infrastructure projects were proposed to be implemented, and to map and protect green space that was under threat from development. Through monitoring with diffusion tubes as a way to protest the development of the Thames Tideway Tunnel, colloquially known as the “super sewer,” community groups found that pollution hotspots were evident that did not show up on the usual maps of regulatory monitoring. People then attempted to mobilize these findings in order to push back against development plans that they felt were not helpful for their area—to greater or lesser degrees of success, since the super sewer received permission for development, and yet was subject to pollution self-monitoring and controls.

This initial engagement with existing community monitoring practices was one way in which Citizen Sense became familiar with different ways that people were sensing environments.²² These practices were, in some cases, generating data where there were gaps due to the absence of monitoring stations; in others, they were organized specifically to contest or address concerns about environmental problems and urban development. Citizen Sense also began conversations with community groups and residents about how to monitor pollution in the area, and how to document different developments in order to understand the effect they might have on air quality. Within this context, Citizen Sense began to develop a custom monitor, the Dustbox, which emerged from this research, along with fieldwork and through conversations with community members (Figure 20.1).

The Dustbox is a low-cost citizen-sensing device that monitors PM_{2.5}. Drawing its shape from particulate matter when viewed under an electron microscope, it materializes in forms that emulate pollen and contaminated soil—variously spikey or lumpy forms of particulate matter that can have damaging effects on health. As a different way in which to materialize the condition of particulate matter, these forms were developed through a 3D-printing process and cast in matte black ceramic. The Dustbox forms made evident the different particles that were circulating through the air, and which were magnified into small weighty objects that resonated with the somewhat gritty and traffic clogged environment of southeast London, as well as the different cultural forms and practices of punk and activism that characterized this area. The Dustboxes were, at the same time, doing the work of automatically collecting measurements on PM_{2.5} levels. With a Shinyei infrared sensor connected to a printed circuit board and Wi-Fi card, the Dustboxes transmitted data in the form of raw particle counts, which were translated into measurements in micrograms per cubic meter so that data could be read in relation to regulatory monitoring stations.

In order to introduce the Dustboxes to community groups and discuss how best to install them, in October 2016, Citizen Sense hosted a mapping workshop and walk where possible pollution sites and other locations could be identified, investigated, and monitored. Participants received monitors to install in identified locations, and a back-and-forth process of troubleshooting and networking the devices unfolded, as we visited monitoring locations and



Figure 20.1 Citizen Sense, Dustbox monitoring particulate matter in Southeast London, 2017

worked out infrastructural arrangements for the sensors.²³ The Dustboxes were also available at the local library, the Deptford Lounge, where new participants could check out a monitor from the library (Figures 20.2 and 20.3).

Citizen Sense worked with community members to set up a total of approximately 30 monitoring locations over the timespan of 10 months within a spatially dense zone of this area of

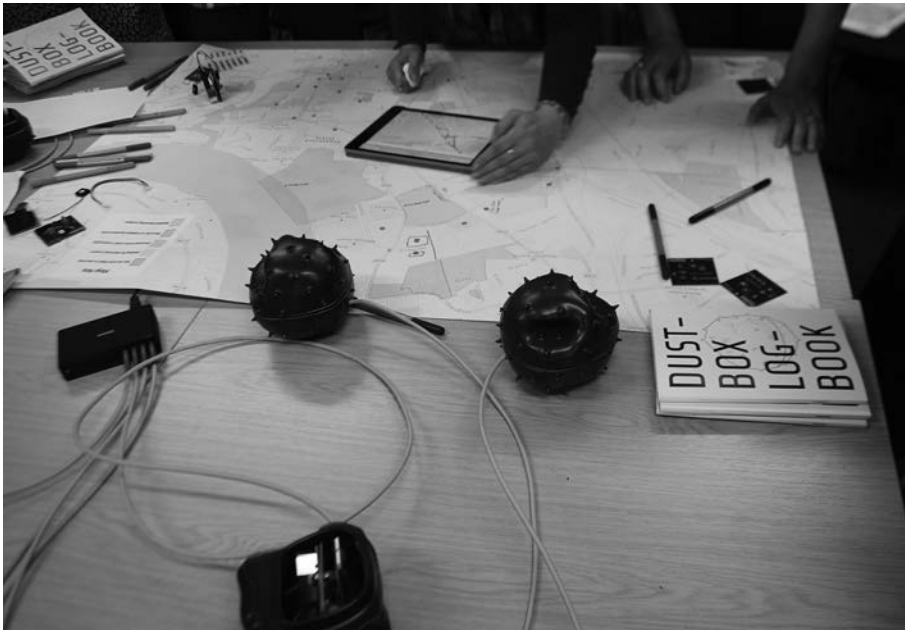


Figure 20.2 Citizen Sense, Urban Sensing workshop in Southeast London, 2016



Figure 20.3 Citizen Sense, Urban Sensing walk in Southeast London, 2016

London. Not all of the monitors collected data consistently, as some devices went offline or were returned, locations became untenable for monitoring, or people moved away from the area. Dustboxes were placed on balconies and in gardens, at art galleries and churches, near parks and playgrounds, and adjacent to busy roads and in sheltered spaces removed from traffic. From the locations where data was consistently collected, distinct patterns of pollution began to materialize that evidenced the varying exposures to particulate matter across the area.

Different modalities of data began to assemble in relation to air pollution and through the installation of Dustboxes. The data that the Dustboxes generated could be viewed through an online platform, *Airsift*, developed by Citizen Sense. Participants also received a Dustbox logbook with instructions, which included space to record observations of pollution. People noted when traffic and construction occurred, as well as major events such as fires or fireworks, which might have a considerable effect on the sensor readings. At the same time, these different practices for recording pollution provided a different way of sensing and narrating environmental events that might variously be acted upon. These observations were ways of creating data, so that environments of relevance, modes of observation, forms of data, politics and practices materialize together as part of the project of sensing environments. Sensing here was not simply a phenomenological project of detecting and becoming aware. Instead, it involved the constitution of perceptive capacities, formation of collective subjects, engagement with environmental processes, and mobilization of political processes to make evident the conditions of particulate matter pollution.

While capturing these registers of data collection, on-the-ground observations, community campaigns, data analysis, and proposals for action, Citizen Sense worked with community groups and participants to produce data stories.²⁴ The data stories were a textual and visual method for creating narratives about particulate matter and how it variously moved through and accumulated within urban spaces and processes. Through a distributed and multi-author process for composing the data stories, Citizen Sense described where Dustboxes were located, the pollution sources of concern, as well as levels of pollution detected through community monitoring. Using plots and graphs produced through our DIY data analysis toolkit, *Airsift*, we worked with communities to evidence where pollution sources might be located by combining wind and weather data with pollution readings.

Key findings from the citizen data demonstrated that traffic was a significant source of pollution in the area, especially at major intersections; construction activity was exacerbating pollution levels often in relation to traffic; the River Thames became legible as a pollution source due to dirty diesel used in ship traffic; and urban design, especially in the form of green infrastructure, had a considerable effect on mitigating and reducing pollution levels. The data stories proposed collectively authored actions for how to address these findings, from creating alternatives for traffic and transport in the area to improving construction and development activities, installing green infrastructure, and supporting ongoing air quality monitoring. In this sense, urban processes then became apparent as they unfolded through sensor readings, particulate levels, observations, data stories, and proposals for action. Practices for sensing pollution were tied together with practices for addressing and mitigating pollution in lived urban experiences.

By monitoring particulate matter, communities did not replicate expert or scientific practices for determining air pollution levels as a numerical value. Nor was this a project of monitoring for monitoring's sake. Instead, these citizen-sensing practices instigated different environmental actions that resonated with people's ongoing activism and community projects that sought to reshape and sustain urban life. In this sense, ways of creating data also generate different ways of creating environmental actions. Different ways of detecting pollution also produced different mobilizations for acting on evidence from these practices. Devices, data, environments, practices, citizens, particles, and other pollutants: these materialize as distinct creatures of urban air.

Conclusion: Practicing Environmental Justice

Practices of sensing particulate matter involve more than devices and dust: they also express urban processes and struggles for environmental justice. In working with particulate matter, different ecologies and relations become evident across pollution and transport, housing and gentrification, development and dispossession. Practices for monitoring particulate matter are also practices for expressing discontent with environments, environmental politics, and environmental pollution. People who are exposed to pollution are also those who often find their voices are not heard, and so the turn to generate different forms of evidence that capture the complex conditions that lead to pollution can be central to how claims for environmental justice are made. Particulate matter thus instigates dynamic practices for sensing and documenting urban and environmental events. But these sensing practices do not result simply in raised awareness or the identification and representation of a chemical or elemental object. Instead, these practices unearth a series of relations through which pollution forms. These relations, in turn, inform practices for acting on particulate matter. Creaturing particles is then a way of instigating environmental justice. Expanded sensing practices can then generate alternative ways to observe, experience, and act on the distributions and events of sensation.

In these material-political formations of air, particles, data, and citizenship, creaturing is a process that helps to demonstrate how chemical-elemental or regulatory understandings of particulate matter do not capture all that is unfolding within atmospheric spaces. Pollution is often concentrated in lower-income areas, people who live in council houses may also have less influence over the siting of roadwork and industry adjacent to their residences, and the loss of green space for further development can be more likely to occur in areas where governments dismiss the concerns of their less influential constituents. By sensing particulate matter, it is possible to capture not just the concentration of pollution in the air, but also the processes that lead to elevated pollution and environmental injustice. For this reason, particles also cannot be parsed merely as elements, not only because they are heterogeneous, but also because an elemental approach would overlook the processes of urban-environmental inhalation and exhalation, of transference and transformation, that lead to lived environmental effects, pollution, toxicity, and environmental exhaustion. This is not air as an elemental or regulatory medium only, but rather is air as a site of political struggle.²⁵

At the same time, particles shape-shift to transform urban bodies and environments. Particulate matter is activated in a contingent way, where chemical signals trigger interactions and transformations, but never in a unilateral direction. Rather, they do so through complex and changeable processes. Practices of tuning in to particulate matter do not necessarily settle on a chemical object or element. In fact, it is often very difficult to determine what chemicals, exactly, might compose any batch of particulate matter, which could form from direct emissions or from precursor gases, congealing into form or lapsing into gaseous states with particular weather conditions and the presence of other chemicals, and carrying VOCs or heavy metals, making particulate matters more or less toxic depending upon what other chemicals are transported along the way. Particulate matter is more of a trace of ongoing environmental processes, a sedimentation and accumulation that is environmental rather than artifactual in form. In this sense, particles are imbricated with the dynamic conditions that form, deform and transform them.

Practices of detecting particulate matter also constitute relations, ecologies, bodies, and environments by making these sensible in distinct ways. These different perceptual registers can in turn activate calls for environmental justice, and renewed claims for the right to the city, to clean air, and to breathable worlds. Sensing and being sensitized to pollution then involve engaging with generative and political practices that can form worlds otherwise—worlds that are formed in the context of differentially lived and experienced planetary environmental change.

Notes

- 1 John H. Tibbetts, "Air Quality and Climate Change: A Delicate Balance," *Environmental Health Perspectives* 123, no. 6 (2015), A148–A153.
- 2 I discuss in more detail how practices of "tuning in" can demonstrate different registers of experience across environments and subjects in Jennifer Gabrys, *Program Earth: Environmental Sensing Technology and the Making of a Computational Planet* (Minneapolis: University of Minnesota Press, 2016).
- 3 More details on the Citizen Sense project are available at www.citizensense.net.
- 4 The topic of sensing practices is discussed in more detail in the special issue, "Sensors and Sensing Practices," in *Science, Technology & Human Values* 44, no. 4 (2019), edited by Jennifer Gabrys, Helen Pritchard, and Lara Houston. See also the introduction to the special issue, Jennifer Gabrys, "Sensors and Sensing Practices: Reworking Experience across Entities, Environments, and Technologies," *Science, Technology & Human Values* 44, no. 4 (2019), doi: 10.1177/0162243919860211.
- 5 These different data practices and data ontologies are discussed in more detail in Jennifer Gabrys, "Data Citizens: How to Reinvent Rights," in *Data Politics: Worlds, Subjects, Rights*, edited by Didier Bigo, Engin Isin, Evelyn Ruppert (London: Routledge Studies in International Political Sociology), 248–266.
- 6 World Health Organization, "9 out of 10 People Worldwide Breathe Polluted Air, but More Countries Are Taking Action," News Release (May 2, 2018), www.who.int/news-room/detail/02-05-2018-9-out-of-10-people-worldwide-breathe-polluted-air-but-more-countries-are-taking-action.
- 7 A further 3.8 million people per year are estimated to die from indoor air pollution related causes, for a total of 7 million people per year dying from air pollution. See World Health Organization, "Air Pollution," www.who.int/airpollution/en. An additional study has estimated that upwards of 8.8 million people per year die from air pollution related causes. See Jos Lelieveld, Klaus Klingmüller, Andrea Pozzer, Ulrich Pöschl, Mohammed Fnais, Andreas Daiber, and Thomas Münzel, "Cardiovascular Disease Burden from Ambient Air Pollution in Europe Reassessed Using Novel Hazard Ratio Functions," *European Heart Journal* 40, no. 20 (May 21, 2019), 1590–1596.
- 8 The World Health Organization hosts a real-time air pollution map of "Global Ambient Air Pollution" available at <http://maps.who.int/airpollution>. A ranking of air pollution by most and least polluted cities has been produced by IQAir and is available at www.airvisual.com/world-most-polluted-cities. However, the data that supports this ranking appears to be generated through IQAir devices, and so by all accounts is not an "official" metric.
- 9 Royal College of Physicians, "Every Breath We Take: the Lifelong Impact of Air Pollution," Working Party Report (February 2016), www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution.
- 10 For a discussion of the various ways in which air pollution and climate change interact, and how policy measures have at times favored one over the other, see Gary Fuller, *The Invisible Killer: The Rising Global Threat of Air Pollution and How We Can Fight Back* (London: Melville House, 2018).
- 11 For a discussion on the "elemental ambiguity" of particulate matter, see Emma Garnett, "The Elemental Ambiguity of PM_{2.5}," *Toxic News* (September 3, 2018), <https://toxicnews.org/2018/09/03/the-elemental-ambiguity-of-pm2-5>.
- 12 See National Research Council of the National Academies, *Global Sources of Local Pollution: An Assessment of Long-Range Transport of Key Air Pollutants to and from the United States* (Washington, DC: The National Academies Press).
- 13 For a discussion of these transformative effects of air pollution across bodies, especially in relation to silicosis, see Stacy Alaimo, *Bodily Natures: Science, Environment, and the Material Self* (Bloomington and Indianapolis: Indiana University Press, 2010).
- 14 See European Commission, "Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on Ambient Air Quality and Cleaner Air for Europe," *Official Journal of the European Union* (6 November 2008), L 152/1.
- 15 See European Commission, "Air Quality Standards," <http://ec.europa.eu/environment/air/quality/standards.htm>.
- 16 See Alastair Lewis and Peter Edwards, "Validate Personal Air Pollution Sensors," *Nature* 535 (July 7, 2016), 29–31.
- 17 For an example of an event that brings together multiple people working on sensors and citizen-sensing practices, see the Air Sensors International Conference (ASIC) hosted in 2018 at <https://asic2018.aqrc.ucdavis.edu>.

- 18 For example, see Adrian Lahoud, “Nomos and Cosmos,” *e-flux Journal* 65, “Supercommunity” (May–August 2015), 1–9.
- 19 For an extended discussion of how intersecting practices of arts and sciences can generate different and expanded approaches to climate change, see Jennifer Gabrys and Kathryn Yusoff, “Arts, Sciences and Climate Change: Practices and Politics at the Threshold,” *Science as Culture* 21, no. 1 (2012): 1–24.
- 20 See Gabrys, *Program Earth*, especially Chapter 6, “Sensing Air and Creaturing Data.”
- 21 See Alfred North Whitehead, *Modes of Thought* (New York: The Free Press, 1966 [1938]); and Alfred North Whitehead, *Process and Reality* (New York: The Free Press, 1995 [1929]).
- 22 Environmental monitoring by citizens in the UK, the US, Europe and many other areas does not require a “permit,” and it is a practice that has been protected under free-speech legislation in the US. However, the practices are not always “legal” in more authoritarian regimes. For a brief discussion of the challenge and upholding of the right to monitor environments, see Gabrys, “Data Citizens.” See also, Brian Palmer, “Environmental Advocacy Is a First Amendment Right” (October 31, 2017), www.nrdc.org/stories/environmental-advocacy-first-amendment-right.
- 23 See Lara Houston, Jennifer Gabrys, and Helen Pritchard, “Breakdown in the Smart City: Exploring Workarounds with Urban Sensing Practices and Technology,” *Science, Technology & Human Values* 44, no. 4 (2019), 1–28.
- 24 See Citizen Sense, *Deptford Data Stories* (November 14, 2017), <https://datastories-deptford.citizensense.net>.
- 25 Lindsey Dillon and Julie Sze, “Police Power and Particulate Matters: Environmental Justice and the Spatialities of In/Securities in U.S. Cities,” *English Language Notes* 54, no. 2 (Fall/Winter 2016), 13–23.

VISUALIZING ATMOSPHERIC POLITICS

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The Earth's atmosphere is often depicted as a natural and scientific entity—although one that has increasingly undergone transformation owing to human activity—which can furthermore be studied objectively. By contrast, this essay examines practices that engage in the intertwined political and cultural production of both image-making and the atmosphere itself, in the process visualizing and producing what I call atmospheric politics.

Responding to the emergency of global overheating, practices that visualize atmospheric politics can bridge gaps between image and action in groundwork, and in various registers picture weather, climate and atmosphere. Practically speaking, works and approaches that visualize atmospheric politics critically interpret industrial capitalism's production of the atmosphere, modelling and enacting alternatives to the subjugating biopower of the "atmospheric state."¹ These practices construct new symbolizations, picture care, embody decoloniality, and contribute to climate organizing.

Visualization ranges from the translation of research outcomes into visual output and broadly encompasses experimental, hybrid, and cross-cutting cultural practices. To visualize atmospheric politics first requires critically framing visibility itself. In other words, ways of seeing and imaging are understood to be contingent and situated, as opposed to pre-given, neutral, or universal.

In 2008, the meteorologist John Thornes argued for the potential importance of visual culture for "cultural climatology,"² a scientific practice that "seeks to explore the dialectic between society and atmosphere."³ He asserted that images and visualization are necessary for social literacy and hold the capacity to stimulate conversation across the social and physical sciences. Furthermore, "cultural climatologists, like other scientists, need visual methodologies for both the critical construction and deconstruction of the images they wish to present and with which they are confronted."⁴

The visual culture theorist Nicholas Mirzoeff defines visibility as "the visualization of history,"⁵ a nineteenth-century vestige involving "classifying, separating, and aestheticizing,"⁶ which he describes as "both a medium for the transmission and dissemination of authority."⁷ To this, he proposes the need for forms of counter-visibility to confront visibility. To visualize atmospheric politics also requires grappling with questions Mirzoeff poses about the Anthropocene, which he argues cannot be seen in its totality owing to its scope and timescale exceeding a human life.

The communications scholar Shannon Mattern has also written on the recent upswell of interest in field guides “in a networked age.”⁸ Mattern, like Mirzoeff, warns the reader to be wary of the colonial vestiges of “looking, collecting and record keeping.”⁹ In this context, she traces the early history of atmospheric taxonomy and its visual repertoire from naturalist Jean-Baptiste Lamarck, who applied botanist Carl Linnaeus’s framework of biological taxonomy to the classification of clouds at the moment of industrial capitalism’s smokestack transformation of the European sky, to amateur meteorologist Luke Howard, who sketched and named the cloud forms still in use today. These forms include stratocumulus, which may disappear entirely from the sky if atmospheric carbon dioxide levels rise above 1,200 ppm.¹⁰

The art historian James Elkins additionally suggests that the work of visualizing requires engaging with the unrepresentable¹¹ and expanding the picturable. This requires acknowledging the limits of visualizing and the differences between disciplines.

Co-founders Kodwo Eshun and Anjalika Sagar of The Otolith Group, an artist collective best known for its research-intensive and evocative essay films, engaged with the problems of the unrepresentable and picturable when producing *The Radiant* (2012), a film about the Tohoku earthquake and subsequent Fukushima Daiichi nuclear plant meltdown. Speaking about the challenges of visibility they encountered in representing the disaster in the production of the film, they said:

[...] a lot of Fukushima looks quite banal and overgrown; it doesn’t look like a terrifying catastrophe has happened [...] That’s because radiation doesn’t have a visual presence, unlike an earthquake. [...] In a sense the visual is blocking a lot of the understanding.¹²

The kind of critical visual analysis articulated and enacted by Mirzoeff, Mattern, Elkins, and The Otolith Group resonates with and can also learn from other fields that grapple with the limits and problems of the picturable. These fields, such as epidemiology, the investigatory branch of medical science in which disease distribution is analyzed and responses are proposed, are necessarily and urgently invested in picturing the previously invisible and diffuse. For example, John Snow’s iconic bar maps of the 1854 Broad Street Pump cholera outbreak helped eventually overturn the miasma theory that “bad air” caused the disease, instead showing the correct attribution to contaminated water.¹³ While still tied to the territorializing and “mythic”¹⁴ power of maps within colonialism, imperialism, and capitalism, Snow’s cartography transformed the understanding of disease transmission; his cholera maps indeed remain groundbreaking examples of medical geography, epidemiological communication, and data visualization.¹⁵

Here is an image: A black and white photograph of a bearded, top-hatted man seated on a small cart pulled by a donkey (Figure 21.1). Across the side of the cart, facing the camera, is a long, hand-painted banner reading: “The Society for Better Living for Fresh Air ~ Green Grass.” The Pennsylvania site of the photograph is Webster, just across the river from Donora, an industry-dominated factory town where in 1948, sulfuric acid, sulfur dioxide, fluorine, and other emissions from the American Steel and Wire plant and the Donora Zinc Works, then the world’s largest zinc smelter, combined with a temperature inversion to produce a low-lying noxious smog that was the deadliest air pollution disaster in the history of the United States. It sickened 5,000 of 14,000 residents and killed twenty by suffocation and poisoning before the smog dissipated. The aftermath brought together residents of Donora and unincorporated Webster in a secret meeting, leading to the founding by Abe Celapino of the Webster Society for Better Living, one of the first grassroots antipollution organizations in the United States. The man on the cart is Stephen “Beanie” Huhra, an accountant in the Wire Department of US Steel in



Figure 21.1 Stephen "Beanie" Huhra and his donkey-drawn cart with the Banner for the Webster Society for Better Living, August 1951

Donora who often participated in local parades. Huhra was a "visible representative of the Society,"¹⁶ which was recognized in hindsight as in the "forefront of the movement to call attention to the hazards the air pollution was creating for the local environment."¹⁷

This disaster led to the first noteworthy epidemiological investigation of an environmental health catastrophe in the United States.¹⁸ The disaster pitted the research and findings of Donora-born Mary Amdur, the "mother of air pollution toxicology,"¹⁹ who was tasked with studying the effects of the smog, against her research funder, the American Smelting and Refining Company, which hoped to show sulfuric acid and sulfur dioxide emissions were a minor contributor to the disaster. When her research undercut AS&R's desired findings, the company retaliated to prevent her from reporting her research data—physically intimidating her at a conference, blocking the publication of her paper in *The Lancet*, and successfully ousting her from the Harvard School of Public Health in 1953. While her work was later used in the creation of air pollution standards, the paper was never published, in a skirmish that foreshadowed our present necropolitical struggles over atmospheric emissions, scientific findings, and public health.

Today, epidemiology informs the contemporary fields of human biometeorology and human bioclimatology, which study the effects of weather and climate on living organisms and human health, and, conversely, the "effects of human activities on the atmospheric environment."²⁰ Under climate change, "epidemiology has met ecology."²¹ Atmospheric politics are intertwined with the climate biopolitics of global human health, from expanding routes of infectious disease transmission to increased rates of heatstroke, asthma, depression, and skin cancer. As medicine is bound to the Hippocratic oath, in the context of atmospheric politics, it invokes the precautionary principle—to do no harm. In this context, the telegenic, anonymous photograph of Beanie Huhra constitutes an early counter-visual of grassroots public demand for health and justice against industrial capitalism's airborne emissions.

One might also look to the work of radical geographer, William Bunge, such as the *Nuclear War Atlas* (1988). The *Atlas* is a counter-cartographic indictment of what the geographer Ian Shaw describes as the capacity of the “atmospheric state” to exert its biopower, especially on the bodies of children. The *Atlas* catalogs nuclearism’s annihilating capacities, from windborne radioactive fallout from nuclear testing on downwinders to ring maps of the geography of “New Chicago,” after its hypothetical transformation by a nuclear firestorm.

Before publishing the *Atlas*, Bunge linked his early work on quantitative spatial analysis and theory with anti-racist radical geography in the co-founding, with Gwendolyn Warren, of the Detroit Geographical Expedition and Institute (1968–72). One aspect of the DGEI’s geographic research and educational activism was the groundbreaking publication *Fitzgerald: Geography of A Revolution* (1971), which joined academic and “folk” geographers with “members of the African American community... to create ‘oughtness maps’—maps of how things are and maps of how things ought to be.”²²

The closing chapter of the *Nuclear War Atlas*, “The Future,” includes Ojibway interdisciplinary artist and activist Duke Redbird’s *Map 3.23 The native plan for Toronto*.²³ This “oughtness map” depicts a non-idealized, speculative and Indigenous-hybrid reterritorializing of Toronto. Redbird reshapes the city core through de-growth into city-village settlements where people can easily gather for assembly. He leaves the planetarium, science center, and freeways intact, moving the business center beyond the freeway and replacing the city core with a meeting ground for cultural and educational assembly, ringed by reforested, specialized zones for settlement, craft, farming, and fishing.

In the present, the twenty-first century offers an unprecedented deluge of data, imagery, and other materials expansively related to representing the atmosphere. In their capacity to lessen information asymmetry, projects that provide frameworks to reorient materials are particularly relevant. Combined with the capacity of the digital humanities to archive, analyze, visualize, and publish, this unevenly accessible mass of data holds latent opportunities for repurposing materials outside their original contexts for experimental historiographies of the atmosphere. In the remainder of this essay I’ll turn to several such contemporary projects.

Photogrammar (2014), for instance, by Laura Wexler, Lauren Tilton, Taylor Arnold, and the Yale Digital Humanities Lab Team, is a “web-based platform for organizing, searching, and visualizing”²⁴ the large photographic archives of the United States Farm Security Administration and Office of War Information (FSA-OWI). The singular collection holds iconic images by New Deal Resettlement Administration photographers like Dorothea Lange and Walker Evans, and its interrelated subjects include the Great Depression and the Dust Bowl’s drought conditions, windstorms, labor, and migrations. The 170,000 photographs in the archive, most of which are in the public domain, were taken between 1935 and 1944. A “digital, public humanities project,”²⁵ *Photogrammar*’s goal was to provide “a user-friendly platform for exploring the collection to a broader set of publics.”²⁶

Photogrammar employs photogrammetry, which uses and interprets photographs to survey and map the distance between places, to geographically orient the collection and expand its uses and meanings. *Photogrammar*’s interdisciplinary team used the FSA-OWI collection as a case study for how to integrate methodological research into a digital public project. To do this, they used computational methods to extract contextual metadata (dates, titles, etc.) from the digitized photo archive, and used photogrammetry to geolocate the collection’s photographic data. Their techniques included geocoding and mapping the photographs over a 1937 Vico Motor Oil road map, recreating historic cataloguing systems, and digitally re-stitching rolls of film. This allowed sequences to be put in shooting order, providing insight into the travel paths of individual photographers. They digitally reconstructed the original FSA cataloging system, producing new

searchability and permitting quick visualizations and arrays, and reconstructed strips of film exposing more latent metadata. This helped repair misattributed images, reattach names and meanings to subjects, and support better understanding of photographers' editing and printing choices. *Photogrammar's* uses can now access and visualize aspects of the archive through search by classification tag, lot number, photographer, location or keyword, and by exploration of the project's experimental viewing tools.

While *Photogrammar* wasn't developed with the aim of excavating the atmosphere's political ecology, its cross-cutting work of expanding public access, searchability, and visualization makes the Dust Bowl's political, social, and environmental factors more accessible. The project enhances public use and close reading, providing a platform which sets up the possibility to reorient the collection's materials to our present climatic situation, whether through large sets of photographs or single images, like social realist Ben Shahn's *House stained by coal dust, Pursglove Mine, Scotts Run, West Virginia*, 1935 (Figure 21.2).

Photogrammar's metadata work, photogrammetry, and experimental tools support and deepen public access and usability and create new photographic adjacencies and relationships across a large digital archive. It also reconnects the collection to the petroleum-based automobility that underlay its production and our present atmosphere, further creating opportunities for experimental historiography.

The potential of visualizing atmospheric politics to stimulate conversation, assert counter-visibility, and expand the picturable, spans a diverse field of artistic projects and interdisciplinary practices. From here on, I focus on three: desert ArtLAB (2009), The Natural History Museum (2014), and Data Refuge (2016). These efforts, in various ways, operate decolonially, producing ethical paths toward a survivable present and future; work collaboratively to facilitate, educate, and agitate for science and climate justice; and preserve and reorient at-risk federal



Figure 21.2 Ben Shahn, *house stained by coal dust, Pursglove Mine, Scotts Run, West Virginia*, 1935

environmental and climate science research records. These projects could be argued to operate in what Thornes defines as the space of cultural climatology, and across their diverse intersections with representation, to critically expand atmospheric politics.

Desert ArtLAB is a project by April Bojorquez and Matthew Garcia for living with desertification within “arid land ecologies.”²⁷ The multi-site project involves cultural and environmental restoration in Colorado and Arizona, experimentally practicing continuity and resilience based in indigenous dryland cultural traditions and environmental remediation. In the context of current and future anthropogenic desertification, Bojorquez and Garcia work to reorient desertification not as a loss, dystopia, or a wasteland. The project’s aims include preparation for future generations to live and be culturally emplaced in a hotter, drier world. Their project foregrounds learning from Indigenous traditional cultures; growing, invoking, and teaching Indigenous food practices, and employing their *Mobile ECO-STUDIO* (2013) as a “portable native ecology site”²⁸ for facilitating participatory workshops teaching Sonoran Desert food traditions.

Desert ArtLAB’s current primary research site is a residential lot in Pueblo, Colorado, one of a series of project sites purchased in 2015. The site is near the Colorado Smelter, which extracted silver and lead and closed in the early twentieth century. According to Garcia, “the EPA has designated an area of the city that is next to the recently designated EPA Superfund site a ‘study area’”²⁹ for contamination remediation, but the soil has not been tested yet for arsenic or lead. Work at the prototype site, titled *Eco Installation/Field Site Phase One* (2015), has involved reforestation with the planting of cholla cacti in an orthogonal design. Cholla was chosen for arid dryland afforestation as it can survive without irrigation and can be a food and fiber source or building material (Figure 21.3).

Eco Installation/Field Site Phase One is a small-scale experiment toward a just transition, with the capacity to model and render climate justice at the scale of the family and neighborhood. It



Figure 21.3 ArtLAB/Garcia, aerial images of land-use change at Eco Installation/Field Site Phase One, 2015–2018

posits a speculative model wherein residents of an existing community likely subjected to soil contamination from elevated arsenic and lead levels might re-inhabit a remediated urban dryland from the social-ecological position of Indigenous dryland traditions. Garcia foregrounds the intergenerational duration of work and education required to fully develop the project, which may only begin to be established in the co-director's lifetimes. This owes to the unknown timeline for soil testing, possible remediation, and for the cacti to grow to full size. He also recognizes limits to the adaptive capacity of the project, and the risk that global warming may make the land uninhabitable for cacti or human culture over that duration.

Bojorquez and Garcia's multi-site process has also involved the dispersal of native seed-bombs onto empty lots in Phoenix, Arizona, "where vacant lots comprise forty percent of the urban land,"³⁰ an approach that points informally towards the city-scale Indigenous reforestation proposed in Duke Redbird's plan for Toronto.

As a research station, *Eco Installation/Field Site Phase One's* outcomes are open, and counter-visibility appears in seeing others within the project's social and public engagement (ground-breaking, planting, prayer ceremony, group portraiture), in documentation of its processes over time, such as proposal and research materials, aerial Google imagery screenshots, and digital photographs of the participatory cacti planting process, and in mimetic museological installations incorporating collection and artifact display.

These approaches and media broadly form the visual field of atmospheric politics in desert ArtLAB's response to the terrestrial impacts of atmospheric heating and its relation to increasing desertification; undertaking various reterritorializations using a methodology that speculates and applies decolonial practice for sustainable habitation on degraded land, with a commitment to an intergenerational timescale.

The problems of the territorialization, representation, and symbolization of the sky and atmosphere are inseparable from visualization's power, from cloud classification in the early eighteenth century to the activities instigated by The Natural History Museum (NHM), a project of the Not An Alternative collective, which proposes that we perpetually "inquire into what we see, how we see, and what remains excluded from our seeing."³¹

Not An Alternative is an interdisciplinary social justice art collective and nonprofit organization that "works at the intersection of art, activism and pedagogy"³² with a stated mission "to affect popular understandings of events, symbols, and history... (in) work that questions and leverage[s] the tools of advertising, architecture, exhibit design, branding, and public relations."³³ It was co-founded by Beka Economopoulos, an artist who was formerly the director of online organizing at Greenpeace and an organizer for Occupy Sandy, and Jason Jones, an art and activist organizer, curator, and media producer.

The Natural History Museum, a large-scale initiative begun by Not An Alternative in 2014, entails programs that frequently appear "within established art, science and natural history museums"³⁴ and draw critically on methods and critiques of anthropological collecting, display, representation, and interpretation—e.g., foregrounding, teaching, and complicating these methods, taking lessons from institutional critique, socially engaged and decolonial art practice, and tactics from the media strategy work of environmental NGOs.

The NHM's work often involves collaborations between Indigenous activists, environmental justice organizers, and scientists. These include an ongoing alliance for exhibitions and events with The House of Tears Carvers of the Lummi Nation, an Indigenous Washington Coast Salish group that creates, travels to, and ceremonially dedicates themed totem poles in communities "threatened or impacted by fossil fuel projects."³⁵

For its 2016 project, *Mining The HMNS* (2016), which "[interrogated] the symbiotic relationship between the Houston Museum of Natural Sciences and its corporate sponsors,"³⁶ the



Figure 21.4 Not An Alternative/The Natural History Museum, photo from *Mining the HMNS: An Investigation by The Natural History Museum* exhibition at Project Row Houses, Houston, TX, 2016

NHM collaborated with Texas Environmental Justice Advocacy Services (t.e.j.a.s.). *Mining The HMNS*'s program included toxic tours of East Houston's petrochemical plants and refineries, air quality monitoring with scientists from Texas State University, and the production of a hologram "mini-diorama" video in which members of t.e.j.a.s., green-screened into a diorama of refineries bordering the fence-line neighborhood of Manchester at night, present a toxic tour of the Houston Ship Channel. The NHM also facilitates citizen-science workshops like Air Quality Summer Camp (2014) to demystify the atmosphere. During the camp, "explorers studied the Earth's atmosphere through sampling air quality [and] climatologists trained campers on the historical methods of studying air quality (Figure 21.4)."³⁷

The NHM frequently engages the methods of environmental interpretation in a wide range of what the US National Park Service (NPS) would describe as personal services and interpretive visual media, including a "traveling pop-up museum that offers exhibitions, expeditions, educational workshops, and public programming."³⁸ Interpretation offers techniques and approaches for counter-visualizing solidarity, reframing and re-siting debate around climate justice using interpretive modes including tours, exhibitions, signage, and hands-on encounters with objects and other resources, which the NHM combines with approaches to process, representation, picturing, and distribution from fine arts, activism, and media strategy to support "reframing the past to save the future."³⁹

The field of "interpretation" utilized by the NHM is based on principles developed in the 1950s by Freeman Tilden for NPS rangers and other interpreters to meaningfully connect visitors to park resources. He defined interpretation as: "An educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information."⁴⁰ He also developed a set of principles, including that "the chief aim of interpretation is not instruction but provocation."⁴¹ These principles have been further developed by the NHM to foreground

the promotion of audience agency to support intellectual and emotional “revelation, perception, insight or discovery”⁴²—how we see— and to embrace the conflicting, traumatic, and ambiguous meanings of a resource which are typically excluded from interpretive accounts.

These principles inform contemporary interpretation, which is grounded in knowledge of communication theories and the recognition that park visitor needs are diverse and divergent. Well-grounded interpretation cohesively, relevantly, and provocatively explores an idea, which is then brought to visitors using contextually appropriate interpretative techniques, whether “personal services” including informal encounters, guided walks and demonstrations, or interpretive visual media including exhibits, dioramas, guides, brochures, and labels. The NPS Interpretive Development Program’s curriculum warns that interpretation that fetishizes method or information over interpretation can alienate, and that “without understanding the audience an interpreter may provide opportunities for the audience to care less ... something no interpreter can afford to do.”⁴³ Within the NHM’s mission and projects, tactics from the field of interpretation and its contextual, situated, and audience-aware approaches confront visibility through the collective’s use of “sound interpretation” methods to support pro-science and decolonial climate activism, promote audience agency, and encourage engagement with complexity and care.

Beyond approaches from interpretation, in response to the “events, people, and possibilities”⁴⁴ capitalist enterprises exclude, the NHM also uses telegenic divestment activism to remove fossil fuel funders from science and natural history museum boards. Their 2014 action to remove oil refinery heir and anti-climate-science funder David Koch from the board of the American Museum of Natural History took the form of an open letter signed by notable climate scientists, which circulated in international news media. Koch stepped down from the board in 2016, of which Economopoulos said in a statement to *The Guardian* (UK) that “regardless of the reason for his decision, it’s a step in the right direction.”⁴⁵ This approach follows in the mediagenic footsteps of other artist-activist mobilizations against fossil fuel museum funding, such as Liberate Tate (2010), which existed until 2016, when British Petroleum ended its sponsorship of the Tate group of museums.

Viewed together, the NHM’s projects break down historic modes of visibility in pursuit of a survivable atmosphere. In collaboration with community organizations and institutions, its projects perform counter-visibility, foregrounding the need for decolonial representations, enacting cultural climatology, and creating new symbolizations in specific political conditions in support of science. The diverse aesthetic tactics they use educate, reorient visibility for audiences and connect visibility to action, strengthen solidarity, and, in doing so, expand agency.

Other projects, like Data Refuge (2016), reorient data and visual materials in acts and processes of preservation for continuity of access to public records under conditions of political pressure. Data Refuge was co-founded by Bethany Wiggin and is headed by the Penn Program in Environmental Humanities and the Penn Libraries. The project is a “community-driven, collaborative project to preserve public climate and environmental data”⁴⁶ subject to politically motivated deletion after the 2016 presidential election of Donald Trump, which is also intended to “draw attention to how climate denial endangers federal environmental data.”⁴⁷

Over late 2016 and 2017, thousands of volunteers participated in “rapid-response data preservation,”⁴⁸ organized by Data Refuge under the project title, *Data Rescue*. This included events at libraries, involving scientists, archivists, public advocates, and organizations like the Environmental Data Government Initiative. Their work involved participatory archiving of federal records, including data that was “difficult or impossible to harvest through web crawlers,” and the creation of distributed trustworthy copies. The records they documented, organized, and backed up, included 395 datasets from 33 agencies, including NASA, NOAA and the Laboratory for Atmospheric and Space Physics, which are accessible in Data Refuge’s data catalog. The

records, which include satellite imagery, PDFs, and stories, are mirrored and stored by the project's partners, including the Internet Archive's End of Term Web Archive (2008), which "captures and saves U.S. Government websites at the end of presidential administrations"⁴⁹ and Climate Mirror (2016), a volunteer, distributed effort "to mirror and back up U.S. Federal Climate Data."⁵⁰

This reorientation shifted the shape of the datasets, which are now fragmentary or partial records separated from their original agency contexts. This loss of context created potential problems with usability and legibility, and the need for further decoding of (poor) images and data, depending on the material. At the same time, the cumulative archiving acts that formed the participatory rescue process created a new shape and context, producing new adjacencies, readings and meanings of the data against its political context, providing new frameworks for visual translation of the research outcomes, whether of a single image (for example, *uavmethane20160328.jpg?itok=_ZyAKrB4*, tagged "image of drone flying over field") or full datasets.

Along with the creation of institutional alliances and partnerships formed over the course of the project, Data Refuge distributed its own image through news media, as in Sam Hodgson's hackathon photographs of the New York University *Data Rescue* event for Amy Harmon's *New York Times* article "Activists Rush to Save Government Science Data—If They Can Find It."⁵¹

To continue their work after the response process ended, Data Refuge introduced *Data Stories* (2018), a participatory project to "explore some of the many ways climate and environmental data live in the world."⁵² Akin to Photogrammar's reframing of the FSA-OWI collection and its public-facing platform and tools for visual interpretation, alongside the participatory archiving and data preservation of Data Refuge, *Data Stories* uses experimental multimedia and narrative forms to facilitate, "the flow of scientific facts and data to multiple publics."⁵³

As the political control of climate science and environmental data and imagery shapes the atmosphere, projects like Data Refuge are particularly timely, as they engage in the intertwined political and cultural processes of atmospheric representation, preventing the loss of the picturable from mirroring datasets to collaborative hackathons and participatory media storytelling.

In the context of the current climate emergency, atmospheric politics intersect with visibility as representation, symbolization, and agitation, in their respective capacities to envision, attribute meaning, and act, in conversation with responses to historical, ongoing atmospheric crises from air pollution to nuclearism. To visualize atmospheric politics requires committed attention to the problems of visualization, from its colonial origins to the contours of information asymmetry and bias shaping contemporary knowledge and image production.

While art, visual culture, and the digital humanities are inextricable from the image politics framing their production, distribution, and reception, projects like desertArtLAB's *Eco Installation / Field Site Phase One*, the Natural History Museum, and Data Refuge contribute grounded, situated responses to the worsening effects of global warming and the destructive policies of the violently climate-denialist triumphalism of the Trump Administration. Beyond merely valorizing the depiction of activism, they imagine and assert counter-visual, decolonial models of habitation, reduce the distance between picturing and experience, use cross-cutting approaches to perform cultural climatology, assert public access in response to the repression of climate science and environmental research, support social movements, and act for climate justice.

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ATMOSPHERES AND THE ANTHROPOGENIC IMAGE-BIND

Caroline A. Jones

“We are not inhabitants of the Earth; we inhabit the atmosphere.”

—Emanuele Coccia, “In Open Air: Ontology
of the Atmosphere,” *The Life of Plants*, 2018

Atmospheres

Energy regimes drive modern art and its history, although none of us were educated to perceive that epistemic surround. Recently, contemporary artists and scholars have begun to argue that forcings in the atmosphere can be met by forcings in aesthetic theory and activist imagination (this volume attests to that optimism).¹ Not “seeing” air (or its precipitates on the surface of water and land), we must produce other forms of sensory cognition and radical mediation that tear open the seams of the anthropogenic image-bind.

The Euro-American historical awareness of “atmospheres” must begin my account. Those who needed such a word were fortified by taxonomic, Linnaean understandings of the weather as an *animation* of passive matter into *characteristic and knowable forms*. The seventeenth-century coinage combined the Greek *atmos* + the Latinate *sphere* (yielding the polyglot concept of “vapor orb”), understood to be no longer just a lucent layer of inert air, but a suffusing “sea” of volatile gases, governed by rules and classifications rather than the whims of the gods. In this Western modernity, “atmosphere” was *ontologically distinct from human agency*. Science filtered human smudge and smoke from accounts of “Nature’s” lambent sphere of operations.

Writing of “the metaphysical snobbery that defines our culture,” philosopher Emanuele Coccia fuels the critique I offer in this essay, finding in atmosphere a radical critique of our heretofore anthropocentric bias:²

When there is life, the container is located in the contained (and is thus contained by it); and vice versa. The paradigm of this mutual overlap is what the ancients called “breath” (*pneuma*). To blow, to breathe—means in fact to have this experience: what contains us, the air, becomes contained in us; and, conversely, what was contained in us becomes what contains us.³

How to vaporize our mental patterns into this interdependent awareness? Atmospheres demand artists (and critics) to be held to a higher standard than modernism, and even “eco-art,” has

henceforth provided. Our current atmospheres, produced by life but now entangled with capitalist extraction and combustion, require a different relation to breath and image. Until we can understand what every human-made image necessarily *filters* from pneumatic existence, we will remain trapped in the logic of anthropogenic naming, claiming, making, and envisioning.

The assertion of an anthropogenic image-bind begins with a tautology: in modernity at least, it is the ever-more-finely sensing human to whom the human-made image is addressed, and whose sensitivities it aims to enlarge and expand. Atmospheric representations in nineteenth-century modernism showed scenes of “anecdotal” interest: the carboniferous fog, the “London particular,” the reality of smokestacks and steam. But it was the individual, sensitive to formal arrangements (still dominated by vision and two dimensions) that gave modern artistic protocols purpose.⁴ Honest about their human source, modernist painters celebrated the roar of conflagration in their depictions of anthropogenic atmospheres—but only to summon the delectation of “nocturnes” and visual harmonies.⁵ Yes, we would later don our Marxian thinking caps and find criticality and brutal realism in canvases of steam and speed—but secretly we too enjoyed how roaring furnaces, grinding iron horses, crackling coal fires, pumping steam, and sheer power could be tamed with a squinting eye and formal analysis. In sum: modernist aesthetics of anthropogenic atmospheres propelled a sensitive subject then canonized in art history. In the process, we cloaked—as aesthetic—our insanely extractive relations to earth.

New media do not necessarily break these anthropogenic affordances. But critically reflective artists occasionally do. This essay hopes to trace contemporary attempts to confront the anthropogenic image bind, while being honest about the impact and potential of these attempts. Art increasingly confronts non-art images that shake us from our aesthetic distractions. Machinic, or more-than-human, these are the promising aesthetic operations that might suddenly *make sense* of the anthropogenic.

Contesting the Image-Bind 1: Earth Practices

Land Art erupted in the 1970s following the ultimate anthropogenic image—tamed by the nickname “blue marble.”⁶ Atmospheres were uniquely apparent in that first, stitched-together satellite image (from ATS-3, November 10, 1967): eddies of clouds raked by winds with a breathy, blue-violet thickness at the edge of the round orb. Here, where dominating nitrogen mixed with 20% oxygen ruled a watery mesosphere, we could suddenly see both how touchingly fragile and tantalizingly material the planet was. It could either foster thinking about raw material for carving with earth-movers on an unprecedented scale (cue Michael Heizer, Smithson, De Maria), or it could summon the tender hymns of Hippie mythologies (Joni Mitchell’s “Clouds,” 1969, Judy Collins’s collaborations with whales in 1970). Hungarian immigrant-turned-New Yorker Agnes Denes was somewhere in between. Her *Wheatfield—A Confrontation* emerged in 1982, within landscape, as a public work of art.⁷ *Wheatfield* was explicit in its efforts to address the environment and our customary relations to “land.” Built on *fill* pushed into the Hudson from material excavated for the World Trade Center towers, this ephemeral work of agro-environmental public art asserted a “Confrontation” with its intensely urban setting, a subtitle promoted when documentation was first published in the 1990s.⁸

Breathing the unexpected sweetness of the wheat stalks drying in the hot summer sun, perhaps caressing their ripening husks sheathing the berries within, visitors could have experienced *Wheatfield* as a kind of full-body riposte to the humid atmospheres of moistened humus in Walter De Maria’s entirely sterile 1977 *Earth Room*, opened to the public just two years before. The air around the two works would have said it all: dynamic and changeable as the weather (fields), or static and permanently potential (earth) (Figure 22.1).



Figure 22.1 Left: Walter De Maria, *New York Earth Room*, 1977 (© Estate of Walter De Maria, photo: John Clett/ Dia Foundation); right: Agnes Denes, *Wheatfield—A Confrontation: Battery Park Landfill, Downtown Manhattan—With Statue of Liberty Across the Hudson, NY*, 1982
Source: © Agnes Denes, Courtesy Leslie Tonkonow Artworks + Projects, New York

But the art historical canonization of both Denes and De Maria's earthworks relied on flat, circulating, now digitized images. You cannot smell either De Maria's dirt or Denes's wheat in the page you have before you. Exemplary of this documentation is the one in which Denes's fragrant field dramatically confronts a tiny, distant, and metallic Statue of Liberty in a vaguely clouded sky.

Whatever atmospheres were available on the ground, the imaginary in Denes's canonized picture is yoked to a traditional agricultural narrative of sky as medium for sun and rain, air as vector for solar energy, land as midwife to wheat. The wheat's activity as terraforming agent was the point, not the "vapor orb" it both required and to which it contributed. Explicitly questioning the rapacity of humanity's "mismanagement [of] food, energy, commerce, world trade, economics," and the environment more generally, Denes conceived *Wheatfield* as "obstructing the machinery by going against the system."⁹ But in one sense she merely substituted the agricultural system for the "parasitic" capitalist one of trade, finance, and commodity exchange. ("Wheat futures" were traded even as *Wheatfields* instantiated the ever-recurring persistence of the anthropogenic image-bind, romancing the species' post-Edenic mindset.)

By contrast, De Maria's never-fecund-always-potential *Earth Room* (which I adored back in the late 1970s) now seems grimly Heideggerian in its warehousing of relocated dirt as a pristine "standing reserve" available to agrilogistics.¹⁰ On the other hand, what if we refuse the blandishments of gardening? De Maria's *Earth Room* turns out to offer something *surprisingly atmospheric*. Because we cannot enter the urban installation, what we experience is a redolent space of air that we begin to encounter on the landing even before broaching the vestibule of *Earth Room*. This air, perfumed no doubt by those entities between plants and animals (the fungi actinomycetes), gives us the glorious scent of *petrichor*—that atmosphere of earthiness available to humans largely as smell or taste, borne only in vaporous air.¹¹ De Maria's circumventing of the image-bind by getting past the human compulsion to *look* is paralleled by Denes's drawings that posit non-human ways of seeing and being. Both critiques of the anthropogenic image-gaze are important aspects of *aisthesis* that we may want to revive.¹²

Contesting the Image-Bind 2: Machinic Visions

Pace Denes, probing the other-than-human has usually led us right past vegetal earth practices to the machinic phylum, as in Trevor Paglen's exploration of the "operational image" first theorized in the 1990s by Harun Farocki.¹³ Even the videos made by Rachel Mayeri that claim to

be *Primate Cinema: Movies for Monkeys* relate more readily to machine vision in the way they code edges and contrast as the primary point of seeing; Mayeri thus appeals to pongid vision by aping machinic recognition algorithms. This is not surprising; the model organism for machine vision is human, and humans' visual perception circuits are modeled on the macaque monkey. Edges and orientations were "priors" found to be "hard-wired" in macaque visual cortices.¹⁴ Mayeri's amusing videos (c. 2011) might seem to be directed at our simian kin (and in some cases played for them at various zoos), but when we humans see her programmed abstractions (such as the pink concentric circles—"flying anuses"—moving around on a white field), they reveal themselves to be machinic segmentations of animal locomotion in the long tradition of such work, from that by Etienne-Jules Marey and Eadweard Muybridge to Harold "Doc" Edgerton. These abstractions originate in machine modes of registering and segmenting electromagnetic energy, draining liveliness out to fix successive instants as informational bits. Ultimately, Mayeri enjoys the ironic question of how any such "inert video" such as hers could possibly reach the scent-bonded, social, "kinesthetic, interactive, and sensual" monkeys.¹⁵

If machine vision is invariably bound up in our attempt to think the more-than-human, then the scentless atmosphere invoked here would be the discourse of "The Cloud," in which algorithms compress digital images and recode them for expansion on varieties of screens via multiple platforms. (The cloud metaphor is a perfect example of atmospheric thinking that is nonetheless a fully functioning aestheticization of an energy regime.) Staying within the boundaries of the human sensorium but exploring such technologically enhanced edges, Berlin-based artist Dierk Schmidt pursues a critical practice that studies the oil-painted tableau as a hoary Western art-historical format he contests and complicates with contemporary search engines brought elliptically into his installations, materializing the Cloud in fossil oil paints.¹⁶ Bridging the twentieth and twenty-first centuries while returning us to some of the eighteenth- and nineteenth-century problems that opened this essay, Schmidt has long reflected on his own contemporary struggle to visualize the "history image." This desired revelatory image confronts the invisibilities embedded in our image world: "Is an image possible where no previous media images are existing?"¹⁷ The search for the adequate "history image" embraces its anthropogenic logic, but pushes the artist precisely to explore "the difference between an *operative* and an *idealistic* aesthetic" (with Schmidt's notion of the "operative" intriguingly different than Farocki's).¹⁸ Producing tableaux for human emotional comprehension, he wants to confront nearly incomprehensible loss, drawing out the logic of machinic dispersion and transformation precisely at points of maximum invisibility in the world of representations that humans build every day.

Schmidt allows me to address the anthropogenic image as a regime we are immersed in (like atmospheres). When such words as "visible" and "invisible" are not adjectives, but nouns, we can trace their derivation from the French: "*la visibilité*." Usually meant to characterize a diffuse condition of apprehensibility by human sight, the concept was turned by philosophers Michel Foucault and Gilles Deleuze into a structuring *dispositif* or apparatus. The apparatus of visibility was both a symbolic and a material infrastructure, comprising hardware, channeling, framing, and enabling technologies—thereby requiring a definite article. Deleuze and Foucault worked to clarify the active operations by which humans in modernity became *selves* and *subjects*—through speech acts, written statements, and hearing, in parallel to images and sight. (It is in full knowledge of such philosophies that Schmidt describes his operation as "using the historically charged dispositive of painting"...) ¹⁹ The privileged example of the interlocking system of the seeable & sayable is offered in Foucault's compelling analysis of incarceration, *Surveiller et punir* (1975). Parallel to explicit enunciations and texts (such as laws "on the books" that turn persons into prisoners), the carceral visibility forms a system that makes the prisoner surveillable (literally, *sur + veiller*, capable of being "watched over"); these positionalities and architectures are then

internalized by the prisoner, who self-surveys. The visibility is not just that-which-is-displayed, but the system of distribution of illumination itself. It is not just the seen, but the constructed subject position of the one who sees and the one who is surveilled. Importantly, the system of making-visible and allowing-to-see can simultaneously produce *sectors of occlusion*, shadows, blockages, and invisibilities. Interrogating the shadows to a given visibility allows us to pursue Foucault and Deleuze's larger project, to think the unthought. Because for every visibility there is a corresponding invisibility, just as for every speech act there is a system of silences, breaks, punctuating pauses and caesuras that allow meaning to be made.²⁰

This gets to the heart of the anthropogenic image-bind. What we make for seeing *forms* us in very characteristic ways. I suggested at the outset of this essay that modernist paintings, in particular, constructed an individualist psychology of the sensing aesthete for whom atmospheres offered sublimely stimulating phenomena.²¹ On the other hand, since all external images are made for and by humans, they can also drift toward formula and cliché. Take the journalistic documentation of any recent oil disaster: the oil-soaked shorebird, the satellite picture of iridescent slicks far below on the ocean's surface, the dirtied human volunteer. These form an image repertoire that plays out from a familiar script.²² The more generalized anthropogenic images of the Anthropocene include the polar bear isolated on a broken ice-floe or the steaming smokestacks behind rush hour traffic. Only recently, lawsuits have added to these the drone footage of endless pig-shit lagoons surrounding animal agriculture's industrial "confinement" facilities.²³ Schmidt's paintings contest all of these images of desperate failure by entering the Cloud and materializing both the fossil fuels that drive it, and the social and critical potential it enables.

Take the series titled *Image Leaks: On the Image Politics of Resources* (2011). (Figure 22.2, in an installation view from the Frankfurter Kunstverein). Schmidt's *Image Leaks* responded to the 2010 Deepwater Horizon oil "spill"—more accurately, a methane explosion that blew out a control valve, allowing the ocean floor wellhead to spew oil and methane, no longer in tubes tethered to the industrial offshore oil rig owned by the Transocean corporation and leased to British Petroleum for prospecting in the Gulf of Mexico. Over the 3½ months of the leak's duration, the out-of-control BP gusher emitted close to 5 million gallons of crude oil, unmeasured methane, and uncounted metric tons of "BTEX" gases (benzene, toluene, ethylbenzene, and xylene, gases that waft from any source of crude oil) until it was capped in July 2010. The images of the ongoing event were deeply anthropogenic *and* machinic: made by robots and satellites designed by humans to allow humans and their machines to see well beyond our native capacities, they operated at several scales (ocean floor, ocean surface, and shoreline) mediated by satellite hookups allowing digital streaming of the pixels obtained. At no point in the crisis did

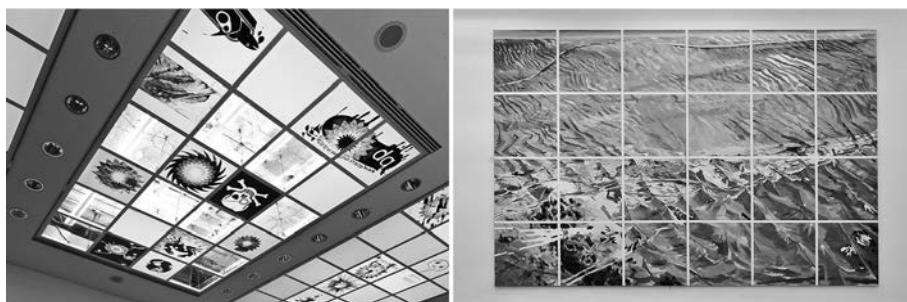


Figure 22.2 Dierk Schmidt, *Image Leaks*. Left: installation view (detail), Frankfurter Kunstverein, 2011; right: *Seascape*, 2011

Source: Photos by N. Miguletz, ©VG Bild-Kunst, Bonn 2020, Courtesy the artist and KOW

we see images that might be imagined to be the perspectives of creatures of the ocean and its complex non-human ecosystem—planktonic or bacterial dwellers in the water column, for example. The Deepwater crisis dramatized the inadequacy of the image *qua* image to capture the extent of our anthropogenic effects on more-than-human life.

The anthropogenic (like the photogenic or the telegenic) constitutes a now smoothed aesthetic. Framed by horror or sadness, in the context of the Anthropocene it can give us the rush of the sublime—before fading back into oblivion. Schmidt's work urgently engages with this human circuitry of desire, frustration, *erhebung*, and boredom. The artist addressed how “idealistic” images (the volunteer helping the oil-covered shore bird) were actively produced by BP, which tripled its advertising budget during the disaster.²⁴ He set out explicitly to produce counter-images by mining the Cloud for the thousands of pretend logos critical of BP that had been produced for a Greenpeace campaign on Flickr (called “Behind the Logo,” it is ongoing and totaled 1,926 postings, getting 1,049,596 views as of June 2018).²⁵ Schmidt curated these crowd-sourced critical versions of the BP logo (which the corporation had cynically redesigned in 2000 to echo the Green Party sunflower). He then artisanally painted them—in oil, of course—on the gridded glass ceiling of the art museum. Glowing from behind, these hacked, distributed, and now lovingly reproduced counter-logos served to surface the artificial atmosphere of the white cube, even as they converted viewing subjects to critical historians of extraction's contested visibility. Per curator Holger Kube Ventura, while visitors reclined on deck chairs looking up (arranged as if on the deck of a ship, perhaps the *Titanic*), they could observe how

the grid of the ceiling appears as a *verre églomisé* picture of economics. On the back part of the ceiling is the development of the BP stock price over the course of the oil leak; this chart acts like a prognosis in response to the circulating images and consistently proves itself sensitive to the company's visual capital and the endangerment or annihilation thereof.²⁶

To complete the installation, Schmidt recapitulated the modernist grid of the ceiling on the surface of an impasto-laden “marine painting,” also by his hand (*Seascape*)—a deceptively Romantic image in the tradition of Turner, but one that connects the history of oil *painting* to the history of oil *extraction*:

In the tradition of the genres of painting, I was interested to add a so-called “sea piece” into the situation. But in that case it was a very dirty one. To paint again with *bitumen*... the tar which is catching every light. Of course it's dirty, dripping and smelling, but wonderfully shiny, like a rainbow.²⁷

The anthropogenic image bind is performed in a loop of fossil-fuel materials depicting fossil-fuel materials—fouling the ocean surface and gleaming on the canvas. Schmidt ties these regimes of modernism to the chemical industry itself in expanding circles, “this point again of visibility starting from the sea and enlarging and enlarging.” (Note how the pictorial atmosphere thrives on the immersive eradication of depicted “atmospheres” in excising the horizon that separates earth, sea, and sky.) Thus, the “rainbow” slick of oil is transposed from an atmospheric effect to an ocean surface to an aesthetic that addresses that dependent circuitry.

Contesting the Image-Bind 3: Giving Standing

Also engaging “slick images,” Susan Schuppli offers a new media take on the anthropogenic as a kind of collaboration with human-made substances that then “image themselves” as material witnesses in an ongoing forensic documentation of climate change. Schuppli's various artifacts, videos, texts, and lecture/essays produce an incisive take on the atmospheric interface between

volatilized petrochemicals and water—pursuing the dynamic lensing of light that “nature itself” has produced via unstable molecules of air, oil, and water. For Schuppli, “Matter can bear witness to events as a registration system,” both internally in its molecular structure and externally as transformations in the (humanly) visible spectrum. Ocean + oil + atmosphere combine to form a kind of *cameraless film*, never capable of being firmly “developed” into a fixed anthropogenic image.

The conceit is both trivially disproven (there is, after all, a video, a sculpture, and other things made for humans as artworks in a gallery) and yet profound in its epistemic demands. “Anthropogenic matter,” in Schuppli’s account, is “relentlessly” making images of itself, tracing its interactions with other kinds of lively matter. Anthropogenic images emerge as bizarre patterns in tree rings, register as “photochemical smog,” pictured in gestural sprinklings of black snow in the Arctic that then differentially melt the icy substrate. These are admittedly “image-matter hybrids;” in her poetic rendering, “They constitute the means by which the Earth sees.”²⁸ And so, in her video installation *Nature Represents Itself* (2018), the minute differentials between a molecule-thin film of oil and the water molecule it sheaths create, in a very real sense, a photosensitive *emulsion* (Figure 22.3). The fact that we humans can document this emulsion in its shimmering iridescence does not remove it from forensic status as a registration of its own physical properties, reflecting into atmosphere as differentiated wavelengths of light. As Schuppli puts it in her text *Slick Images* (2015):

The image-making capacity of the oil film isn’t simply a question of its ability to mirror or project some kind of image-like event back at us—abstracted and lurid patterns of reflected light—but is a cinematic feature of its very ontology, its molecular structure and behavior.²⁹

Importantly, her thinking on the photoactive capacities of anthropogenic matter led Schuppli to a rather different place three years later. By positioning “Nature” at the site of witnessing these interactions forced upon them (my use of the collective yet personable and nongendered pronoun is intentional), Schuppli gave her video the title *Nature Represents Itself* a double meaning. “Representation” here conveys juridical *standing*.

Standing is the legal capacity to appear as a person in a court of law, in upright rectitude.³⁰ Long the subject of Enlightenment consideration about who may enjoy “natural rights,” standing was denied historically to slaves, women, migrants, animals—yet once conveyed, standing permitted ventriloquizing by lawyers who were constrained to speak, even for fictive persons (corporations, for example) who were otherwise mute. Schuppli knows how Nature, in their



Figure 22.3 Susan Schuppli, *Nature Represents Itself*, 2018 (video contribution to the exhibition *74 million million million tons*, Sculpture Center, New York, 2018)

Source: Photo by Kyle Knodell

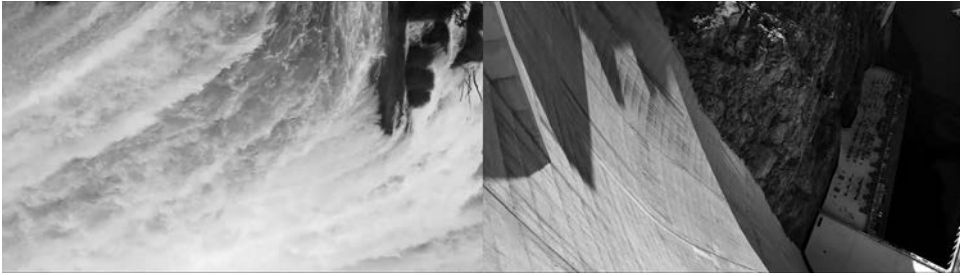


Figure 22.4 Screen View of Carolina Caycedo, *To Stop Being a Threat and To Become a Promise / Dejar de ser amenaza para convertirse en promesa*, 2017

Source: 2 channel HD Video, color and sound, 8:03 mins. Cinematography and Edition / Fotografía y Edición: Carolina Caycedo, Sound: Daniel Correa

nonverbal personification as *Pachamama* (Indigenous name among many South American tribes, designating planet-mother), has recently been given standing under the Ecuadorian constitution. “Representation” works with Schuppli’s concept of *material witness* to make elliptical reference to the legal transformation of anthropogenic victims into “speakers” for reciprocity and respect for their more-than-human lives.

Members of the activist groups *Acción Ecológica* in Ecuador, international Oilwatch (specifically represented by members from Nigeria and Ecuador), the Mexican group *Desarrollo Alternativo*, the Ecuadorean Indigenous groups *Ecuarrunari* and *C-CONDEM* (*Corporación Coordinadora Nacional para la Defensa del Ecosistema Manglar*), all banded together with the prominent Indian national, postcolonial critic, and controversial scientist-activist, Vandana Shiva, to speak for the ultimate subaltern—Nature “herself”—whose aggregative life force I am choosing to designate “them” when it is legally arranged in confrontation with the human. The human aggregate of activists, scientists, and legal experts referenced above crafted an appeal to the Ecuadorian Constitutional Court, because the BP Deepwater Horizon disaster disrupted the entire planetary ecosystem. These humans argued that not only did the ocean and its accompanying atmosphere have *standing* in the face of such an assault, but also that these entities could sue for the right to reparations.³¹ Paulo Tavares sees the activist-scientific group behind the Ecuadorean suit as “appropriating the classic tools of environmental advocacy to expose its own limitations, [making] visible how the existing legal order inevitably legitimizes the ecological violence it should help to restrain.”³² In other words, rather than demanding that government *regulate* extraction or *limit* pollution as if these things were inevitable, Shiva et al. contested the very structure of those capitalist anthropogenic operations. The plaintiffs attempted to foreground a new legal order altogether, in which “the international system of rights” would be forced to recognize “the rights of nature” as such, extending “the precautionary principle and compensation for impacts on nature” to the interdependent life forces of *Pachamama*.³³

In her work as a social scientist pursuing resolutely decolonial perspectives, Macarena Gómez-Barris echoes such demands, celebrating the rise of Indigenous perspectives and affiliated social-practice art forms as offering important transformations in our relation to “extractive zones.”³⁴ Writing about the experience of life inside a river, Gómez-Barris conjures the “fish-eye episteme” articulated in the hydrophilic artworks of Carolina Caycedo (as in the series “Be Dammed,” ongoing, an exemplar of which is in Figure 22.4).

These are promising trends, as the anthropogenic image-bind is pried open at its seams, allowing alternative thought-forms and life-forms to begin the philosophical work of *symbiontics*.³⁵

Conclusion: Binding to the More-Than-Human

The now ubiquitous media of video and performance can be used for these more-than-human transductions of energies, pushing at the edges of our evolved viewing capacities and insisting on discourses as fiercely theorized as they are deeply researched. In confronting human-driven climate change, artistic agents must contend with twin conundra: a past history and valued aesthetic of paintings that aestheticize the very extractions and combustions undergirding their modernity, and a future cultural evolution alongside more-than-humans driven by art that must inevitably appeal to a human destination. This is the anthropogenic image-bind.

But we are stubborn in our optimism, particularly in light of these not-just-verbal-or-visual artworks engaging more-than-human concerns. For Amitav Ghosh (as for us), even in derangement the *image* holds promise, perhaps even offering a privileged role for its own dismantling: “Would it follow... that to think about the Anthropocene will be to think in images, that it will require a departure from our accustomed logocentrism?”³⁶ Images alone, of course, won’t do the job—nothing can be left to its old ideological devices. The departure from logocentrism must also be a launching point, into a new sensory *aesthesis* that might deploy the anthropogenic image in as yet unknown atmospheres and immersions, scents and subsonic murmurs that give standing to our more-than-human co-dependencies, in which a “them” of Nature becomes the symbiotic “us” of life.

Notes

- 1 See Nicholas Mirzoeff’s recent thinking on “(An)Aesthetics” of the Anthropocene, in his “Visualizing the Anthropocene,” *Public Culture* 26(2) (Spring 2014): 213–232.
- 2 Emanuele Coccia, *The Life of Plants. A Metaphysics of Mixture* (first published in French as *La vie des plantes: Une métaphysique du mélange*. Paris: Payot & Rivages, 2017; English edition Cambridge UK and Medford MA: Polity Press, 2018), 3.
- 3 *Ibid.*, 10–11.
- 4 Whistler: “By using the word “nocturne” I wished to indicate an artistic interest alone, divesting the picture of any outside anecdotal interest which might have been otherwise attached to it. A nocturne is an arrangement of line, form and colour first.” As quoted in Richard Dormant and Margaret MacDonald, *James McNeil Whistler* (New York: Harry N Abrams 1995), 122.
- 5 Mirzoeff (2014) discusses some of these, but in place of his argument that they are (An)Aesthetic, I argue that the *progressive* smell of carbon-combustion was baked into modernist aesthetics, through and through, as we were trained to rise above it and become the transcendental subjects of art.
- 6 Denis Cosgrove, *Apollo’s Eye: A Cartographic Genealogy of the Earth in the Western Imagination* (Baltimore: Johns Hopkins University Press, 2001).
- 7 See also Jones, “Wheatfield and the Anthropogenic Image-Bind,” in *Agnes Denes: Absolutes and Intermediates* (New York: The Shed, 2020).
- 8 Public Art Fund, New York (who commissioned the project) used a different title for this second work in their series “The Urban Environmental Site Program,” viz., “Wheatfields for Manhattan,” www.publicartfund.org/view/exhibitions/5706_wheatfields_for_manhattan (accessed August 2019). The work is also found simply as *Wheatfields*, and there are scattered references to it as *Victory Garden*; Denes would now like it to be known uniformly as *Wheatfield: A Confrontation*.
- 9 *Agnes Denes: Wheatfields for Manhattan*, 1982, Public Art Fund, accessed December 14, 2018, www.publicartfund.org/view/exhibitions/5706_wheatfields_for_manhattan.
- 10 For “agrilogistics,” see Timothy Morton, *Dark Ecology: For a Logic of Future Coexistence* (New York: Columbia University Press, 2016). For “standing reserve” see Martin Heidegger, [1954] *The Question Concerning Technology*, translated by William Lovitt (1977).
- 11 Fungal *actinomyces* form thread-like filaments in moist humus and spores when dry; the latter are aerosolized by raindrops hitting the ground and become atmospheric, where we smell them, a scent recently named *petrichor*. It remains paradoxical how we can smell actinomyces in *Earth Room*, meticulously groomed as it is by attendants pulling out the tell-tale hairs of fungus. But I well remember that smell, which is now impossible to dislodge from my experience of *Earth Room*.

- 12 Denes's meditations on non-human perceptual and functional modes would include the drawings *Probability Pyramid as Seen Through the Eyes of a Scallop* (1998–2001) or *Arthropoid* (1974). For "aisthesis" in its variant spelling see Jacques Rancière, *Aisthesis: Scenes from the Aesthetic Regime of Art* (New York: Verso, 2011).
- 13 Trevor Paglan, "Operational Images," *e-flux journal*, #59 (November 2014).
- 14 The paradigm in question dates to Nobel-prize winning research in the 1960s by David Hubel, in which areas of the macaque visual cortex are revealed as "edge processors" or "angle processors." This locational paradigm and its edge/orientation functionality are directly linked to the machine vision algorithms in use today.
- 15 Rachel Mayeri on *Primate Cinema*, <http://rachelmayeri.com/blog/2011/01/06/saimiri-cinema/>. Other examples include programming for chimpanzees, and baboons – with varying results. Accessed August 2019.
- 16 My research on Schmidt's work is published in fuller form in Lars Bang Larsen et al., *Dierk Schmidt: Guilt and Debts* (Madrid ES: Museo Nacional Centro de Arte, Reina Sofia, 2018), 188–207. Downloadable at www.museoreinasofia.es/en/publicaciones/dierk-schmidt
- 17 Dierk Schmidt, "History Image vs. History Painting. Painting by Dierk Schmidt", in: *Painting. The Implicit Horizon*, eds Avigail Moss and Kerstin Stakemeier (Maastricht: Jan van Eyck Academy, 2012), 46.
- 18 Schmidt, "History Image" (2012), 5; referencing Peter Weiss, *Aesthetics of Resistance*, a novel in 3 volumes (1975–1981). This is an important German source for the "operative image" that predates the concept used by Harun Farocki and discussed by Paglen.
- 19 Schmidt, "History Image" (2012), 1.
- 20 For visibility see Jones, *Eyesight Alone* (Chicago: The University of Chicago Press, 2005) and Gilles Deleuze, *Foucault*, trans. Séan Hand (Minneapolis: University of Minnesota Press, 1988), 47 (et. passim).
- 21 Mirzoeff (2014) suggests these are counter-aesthetic images; I argue for the precise opposite: these are the proper "sense" (aesthetic) relation to capitalist extraction.
- 22 Jones and Galison, "Unknown Quantities," *Artforum* (November 2010).
- 23 See the forthcoming *Invisibilities* by Galison and Jones, which examines image regimes in three registers: air, water, ground.
- 24 See Holger Kube Ventura, "On Image Leaks," in Schmidt, *Image Leaks—Zur Bildpolitik der Ressource* (Frankfurt am Main, Frankfurter Kunstverein, 2011), n.p.
- 25 www.flickr.com/photos/greenpeaceuk/sets/72157623796911855/
- 26 Holger Kube Ventura (2011), n.p.
- 27 Dierk Schmidt, interview with the author, March 28, 2018.
- 28 Quotations transcribed by the author from Susan Schuppli, videotaped lecture, "Dark Matters—Bearing Material Witness to Climate Change," given November 28, 2015 at the Aurora cinema, Murmansk, Russia. Online at www.youtube.com/watch?v=ZKEM1dOBETI. Accessed June 2018. See also Schuppli, "Material Witness," website text linked to a volume by that name, listed as forthcoming with MIT Press in 2020; <http://susanschuppli.com/research/materialwitness/>. Accessed August 2019.
- 29 Susan Schuppli, "Slick Images: Photogenic Politics of Oil," in Mihnea Mircan and Vincent W.J. van Gerven Oei, eds., *Allegory of the Cave Painting* (Milan: Mousse, 2015), 435.
- 30 Cf. Adriana Cavarero, *Inclination: A Critique of Rectitude* (Stanford: Stanford University Press, 2016).
- 31 Vandana Shiva et al., submitted to the Honourable Secretary General, Constitutional Court of Ecuador, Quito, Ecuador, November 26, 2010.
- 32 Paulo Tavares, "Nonhuman Rights," in Anselm Franke, Eyal Weizman, and Forensic Architecture Project, eds., *Forensis: The Architecture of Public Truth* (Berlin DE: Haus der Kulturen der Welt, 2014), 557.
- 33 Shiva et al. (2010).
- 34 Macarena Gómez-Barris, *The Extractive Zone: Social Ecologies and Decolonial Perspectives* (Duke University Press, 2017).
- 35 I polemicize for *symbiontics* (my neologism)—for symbiosis as that-which-is. The polemic is driven by the work of theoretical biologist Lynn Margulis, who viewed "symbiosis" simply as adjacency and physical contact between different species—viewing relations of "cooperation" rather than "competition" as prevailing on earth.
- 36 Amitav Ghosh, *The Great Derangement* (Chicago and London: Chicago University Press, 2016), 83.

WAYS OF SAYING

Rhetorical Strategies of
Environmentalism Imaging*Suzaan Boettger*

If one is alive to the world at a time of crisis, one wants to be “woke,” and to awaken others. That motivation, to manifest persuasive agency toward increasing awareness of climate change, is fundamental to environmentalist art. Thus, akin to environmentalism itself, in advocating attention to ecological losses, ameliorative measures, and proactive policy change, environmentalist art’s relation to the viewer is—tacitly or explicitly—polemical. That intention influences both the practice of artmaking and the ways it is received and discussed. Most often, emphases on knowledge of the crises’ dimensions and on finding fixes have led to enlarging subject matter but slighting the persuasive powers of artistic form itself.

It is understandable that the environmental and social disequilibria stimulating artists’ environmentalism are so urgent that attention to topical crises and potential cures dominate. Yet if we consider environmentalist art as intended to be public address, a kind of speech, is emphasis on information, or demonstrations of artists’ engagement with solutions, enough to alter viewers’ subjectivities? Rather, a potentially more socially effective approach of creating affective resonance is demonstrated by artists who in their artmaking both draw from, and speak to, pre-cognitive, sensory, and corporeal experience.

In a 2009 jeremiad, whose fervency and topical neologism, “Ecoaesthetics: A Manifesto for the Twenty-First Century,” garnered influential attention, artist, writer, and curator Rasheed Araeen anachronistically denounced “the extreme self-entered individualism of art today.” As did the Dadaists and other radicals across the twentieth century, Araeen urged artists to “abandon their studios and stop making objects.”¹ Essentially, Araeen reiterated calls for artists to focus on altruistic subjects and acts. Eco-art had originated forty years earlier, and while socially engaged art was central to the feminist art movement from the 1970s, it had gained traction in the mainstream already sixteen years before in the controversially political work prevalent in the 1993 Biennial of the Whitney Museum of American Art. That prominent exhibition stimulated—gave high-level professional permission to—artists far and wide to take up social injustices (and propelled one of its curators, Thelma Golden, to the directorship of the Harlem Museum). Even more so today, the predominant genre of current art calls out abuses in relation to social identities (gender, race, ethnicity, and, recently, immigration). The artists admirably aim to heighten awareness of social injustices and the need for reform.

But their—and environmentalist art’s—emphasis on subject matter also participates in a preceding trajectory of art history. Categorically, that purposefulness differentiates it from

nonpartisan, “disinterested” art taken to be the expression of personal vision, or, at the other end of the intentional spectrum, from a collective criticality regarding styles of form, material, space, mode of expression, historicism, etc. as in Modernism’s sequential “-isms.” In its decadent late form specified by Clement Greenberg in the 1940s–60s,

“Art for art’s sake” and “pure poetry” appear, and subject matter or content becomes something to be avoided like the plague [...]. In turning his [sic] attention away from subject matter of common experience, the poet or artist turns it in upon the medium of his own craft.²

The quest for purity of medium reduced painting, for example, to mere opticality, sculpture to form and spatiality.

Subsequently, and especially since the 1990s, this Greenbergian equation has been inverted: a concurrent plurality of styles and media both within and between bodies of artistic work is commonplace and subject matter is absolutely “interested,” that is, it serves—in degrees of directness—as advocacy. But in doing so, artists and their works’ analysts and presenters frequently slight the complementary attention to the manner of visual presentation, the specifics of sensory and material elements and the affects they engender. Of course, it is more difficult to either make or discern art in which its visual and material facture is productively ambiguous—that is, not elusive but provocatively allusive—than to rally around subject matter. But the scarcity of attention to traditional nonverbal aspects of visual art across the cosmopolitan contemporary art world is evinced by a German professor of art and philosophy’s observation that

In late modern and postmodern times, art has been redefined as a primarily “managerial” phenomenon, in other words, reduced to its position and use in the art world—something whose meaning is in effect little more than the intersection of those critical, historical, curatorial and administrative interests that are parasitic upon art practice... There is no meaning to the work over and above this nexus of managerial concerns, [ignoring] a dimension of aesthetic visual meaning.³

As the psychoanalyst and philosopher Félix Guattari remarked in his *Chaosmosis: An Ethico-Aesthetic Paradigm*, when art has an

existential function—namely, rupture with signification and denotation—ordinary aesthetic categorizations lose a large part of their relevance. Reference to “free figuration,” “abstraction,” or “conceptualism” hardly matters! What is important to know is if a work leads effectively to a mutant production of enunciation.⁴

Guattari’s “mutant production” doesn’t sound reductive, but a simplistic emphasis on ethical subject matter can reduce the art to mere real life speech.

That is exemplified in a highly cited work of art from the 2019 Venice Biennale that consisted of a rectangular message in four rows of capitalized text in white neon against orange edged in yellow: “ARTISTS NEED TO CREATE ON THE SAME SCALE THAT SOCIETY HAS THE CAPACITY TO DESTROY.” Made by Lauren Bon of The Metabolic Studio, Los Angeles, 2006, this earnest declaration could be historically validated as playing off of Bruce Nauman’s 1967 statement in cursive within a spiral, *The True Artist Helps the World by Revealing*

Mystic Truths, also in neon. But whereas Nauman's then-inventive use of electric commercial signage satirizes Abstract Expressionism's metaphysical aspirations, the bluntness of Bon's battle cry (in what we now recognize as a resource-consuming medium) entices no more thought than would a neon Budweiser logo in a dive bar. Its "production of enunciation" doesn't encompass either the mutancy or the mix of life and art.⁵

In his "Ecoaesthetics," Araeen specifically called for "the establishment of desalination plants around the world... as an artistic idea."⁶ Artists as scientists? As administrators? Ask artists to instrumentally carry a flag and it becomes just that: flattened into a sign of affiliation and squeezing out art's polysemous potential. Nevertheless, as if taking up Araeen's mandate, a large and widely shown exhibition concurrent with this book's production exemplifies curatorial and critical grappling with climate change by emphasizing environmentalist works' social utility. "Eco-Visionaries: Art, Architecture, and the New Media after the Anthropocene" was presented at six European museums of art, art and science, technology, as well as architecture.⁷ Its exhibits on material manifestations and responses to climate change were grouped in sections designated "disaster," "confluence," "extinction," and "adaption," driving viewers' and catalogue readers' to attend to these subjects.

The rhetorical strategy of these "visionaries" is by and large that of the "mad" (affectively and creatively) scientist who cleverly applies information and technology to design works that are pseudo- or proto-pragmatic. So we see Malka Architecture's *A Green Machine* (2014), an image illustrating an expanse of desiccated cracked earth above which a group of elevated buildings are supported by huge latticed wood mobile pylons that seem to be producing the furrowed crops below it; SKREI's large ovoid metal tank within a support structure and with various metal appendages as a domestic *Biogas Power Plant* (2017); and Gilberto Esparza's tabletop creature, *BioSoNot 2.0* (2017), with two arms, three legs, and domed head above a body of circuitry and throngs of cables, speaks in sound levels generated from the metabolism of microorganisms in its torso's contaminated water, serving as a pollution alert.

The procedures of these designers, artists, and many others in such surveys parallel those of the original eco-artists of the 1970s such as Newton and Helen Mayer Harrison, Hans Haacke, Patricia Johanson, and Mel Chin, all of whom often collaborated with scientists in direct terrestrial remediations, modelling responses to environmental debilitations with some corollary public exposure to the conditions. In the fifty years since the onset of "eco-art" — now about so much more than the then-fashionable emphasis on "eco"-logical networks—the degradations of climate change are obvious to anyone alive to the world: displayed in journalistic reports of both disasters and corporate and governmental malfeasance; in novels, film, and video games; and through personal privations from volatile weather, flooding and wildfires. Scientists and technologists increasingly take up climate change and its sequelae. As Guattari recognized as early as 1992, articulating art's progressive potential, "It's not a matter of transmitting messages, investing images as aids to identification, patterns of behavior as props for modeling procedures, but of catalyzing existential operators capable of acquiring consistence and persistence."⁸

In the "Eco-Visionaries" catalogue, one of its curators, architect Mariana Pestana, asks the rhetorical question, "If [the Enlightenment's] ideas of reason and science that stimulate technological progress can be directly linked to environmental destruction... what are the alternative orienting principles of reason, objectivity and rationality?" The ongoing environmental catastrophes around us demonstrate that like the presentation of data, urgent logic hasn't been very persuasive. Every conception of art implies a construction of the viewer. Modes that are primarily scientifically demonstrative or rhetorically polemical speak to viewers' powers of deductive analysis or potential outrage. It's time to change art professionals' perception of audience—to promote works of art addressing other than rational communicative modes, not to "rescue a



Figure 23.1 John Gerrard, *Western Flag (Spindletop, Texas)*, 2017

sense of hope in the future”—nothing merits that except the will to be hopeful—but to affect individuals who may then press for governmental policies.⁹

One of the most affecting works among the “Visionaries” group, Irish artist John Gerrard’s *Western Flag (Spindletop, Texas)* (2017) exceptionally has no utilitarian aims (Figure 23.1).

A continuous moving picture made by animated computer graphics, the work depicts a high pole planted at the present-day rural spot of the “Lucas Gusher,” the world’s first major discovery of oil, in Texas, 1901. The virtual reality simulates the site’s actual diurnal and annual cycles of light, as if slowly encircling the pole and transmitting a live image feed from Texas. At the pole’s top, dense black smoke continuously streams from seven regularly spaced vertical spouts as if billowing a flag’s horizontal stripes, ragged. The continuous emission of black murk portends death by asphyxiation, and the barren environment, a post-apocalyptic future. The single pole, Texan location, and allusion to the United States flag—the seven spouts echoing its seven red stripes—call up the US’s current stance of belligerent exceptionalism and refusal to sign international climate accords.¹⁰ Its allusions are timely, but also timeless. The centered pole in *Western Flag*’s symmetrical composition evokes an omphalos, the world navel or still point symbolizing both the importance and the centrality of the consumption of petroleum around which every element of urban life continually turns.

When *Western Flag* was first publicly shown in April 2017, it was on a huge free-standing LED screen (10.1m × 8.2m) in the courtyard of Somerset House in London. The size simultaneously monumentalized the territorial indomitability associated with a national flag and memorialized the loss of industrial optimism. But the piece’s politically environmentalist impact also derived from its phenomenological relation to viewers: large-scale in comparison to human height, allowing peripheral sight, absorption into the pictured landscape, and an overall perceptual and corporeal envelopment.¹¹

In speaking to several realms of the art/life mix, *Western Flag* has generated an enormous following. Gerrard's video's widely posted illustration on the internet, viewing numbers on YouTube, and repeated inclusion in exhibitions (e.g., concurrent with "Eco-Visionaries," a version of it was projected at the *Desert X* exhibition in Coachella Valley, California), suggests the extent to which audiences groove with it. Likely, this derives from the artist's synthesis of the topical, the technical, and imaginative visual sensitivity. Garrard's subtle fusion of subject matter and visual form speaks to psychic levels deeper than awareness of oil = death or awe for simulation wizardry.

Questioning Araeen's exhortation, art historian Alan Braddock has cautioned, "Under such conditions, hasn't the role of the artist simply collapsed into ecological activism as such? Or is there yet something distinctive about the work an artist does?"¹² Likewise, in his comprehensive history, *Landscape Into Eco-Art*, Mark Cheetham advocates attention to aesthetics, asking "Is some degree of separation warranted [here, between art, science, and engineering], perhaps even to uphold art's ability to make a difference precisely through its difference?"¹³ Art historian Claire Bishop focused on these concerns in her substantial analysis of the evaluative criteria of performance art, another genre with a strong identification with social issues and remarkably pertinent to environmentalist art. These art historians all share what Bishop succinctly identifies as "the ongoing struggle to find artistic equivalents for political positions."¹⁴ Her assessment of performance art sounds like the inventive structures predominant among the "Eco-Visionaries": "Through this language of the ideal system, the model apparatus and the 'tool,' art enters a realm of useful, ameliorative and ultimately modest gestures." Viewed as social speech, and in the case of environmentalism, sometimes direct ameliorative utility, the artwork expands its polemical aim toward life but is trivialized as a creatively mediated presence itself. Bishop's analysis centers around a critical splitting that is also applicable to environmentalist art. Preliminarily acknowledging the insufficiency of formal analysis toward understanding art, she notes, "Participatory art demands that we find new ways of analyzing art that are no longer linked solely to visibility." She is then free to declare the necessity of attending to that very essential component: "even though form remains a crucial vessel for communicating meaning."

Bishop critiques a shared pattern in the reception of performance and environmentalist art:

[...] an ethically charged climate in which participatory and socially engaged art has become largely exempt from art criticism: emphasis is continually shifted away from the disruptive specificity of a given practice and onto a generalized set of ethical precepts... And so, we slide into sociological discourse—what happened to aesthetics?... It is also crucial to discuss, analyze, and compare this work critically as art, since this is the institutional field in which it is endorsed and disseminated, even while the category of art remains a persistent exclusion in debates about such projects.¹⁵

With this critique, Bishop applies to the visual art realm abstract formulations by Guattari and Jacques Rancière, who posits that

the ideal effect is always the object of a negotiation between opposites, between the readability of the message that threatens to destroy the sensible form of art and the radical uncanniness that threatens to destroy all political meaning—in other words, between the message and the customarily more multivalent, ambiguous visual form.¹⁶

Likewise, Guattari describes an unstable balance within which art needs to maintain its independence:



Figure 23.2 Edward Burtynsky, *Oxford Tire Pile #8*, Westley, California, USA, 1999

Each work produced possesses a double finality: to insert itself into a social network which will either appropriate or reject it, and to celebrate, once again, the Universe of art as such, precisely because it is always in danger of collapsing.¹⁷

Photography is a popular medium among environmentalist artists for the camera's documentary potential regarding scenes of devastation, but in an artist's hands—and eyes—adeptness at handling the formal elements of composition, scale, light, and texture take it beyond witnessing. In Edward Burtynsky's 1999 image of millions of damaged vehicle tires in a southern California valley, *Oxford Tire Pile #8*, the mountains of black rubber rings are awesome in themselves, evidence of population growth, energy consumption, and a hoarder's (and would-be recycler's) obsession (Figure 23.2).

But Burtynsky's viewpoint on those massive jumbles, from above the narrow path that they constrict, extending to a small triangle of green grass, intensifies the image's desolation. Beyond the sheer mass of tires, the distant countryside conjures a verdant paradise lost; the image is affecting for its use of color, scale, perspective, space, and cultural associations of nature as primal fertility.¹⁸

There is a reason that powerful art is called "moving." Its engine is affect, stimulating emotions. Art reconstitutes information that speaks in complex ways that other means do not, and through its engendering of affects, offers access to aspects of the self, and the self in the world, that non-art forms cannot reach. Affects are popularly considered synonymous with emotions, and that is accurate in the sense that a thing's affect is its emotional tenor, as, for instance, a disadvantage of terse email is the absence of a voice's inflection of affect, which helps to disambiguate a speaker's intention. But more precisely and biologically, affects register physiologically, prior

to feelings and cognition, as corporeal responses along a spectrum of attraction–repulsion to things sensed or experienced. When the right match for a sensation producing an affect is found in words, it is identified as a feeling and emotions are associated with it.

Affects are transmitted at subliminal physiological levels among and between people as pheromones; as visual or auditory vibrations; bodily movements and gestures; and imitations of rhythms effected by sight, touch and hearing. Psychologist Teresa Brennan notes,

Visual images, like auditory traces, also have a direct physical impact; their reception involves the activation of neurological networks, stimulated by spectrum vibrations at various frequencies. These also constitute transmissions breaching the bounds between individual and environment.¹⁹

Thus, affects are inherently *environmental*. They are the biological level of the now widely accepted understanding that identity is not just a product of individual acts, experience, and genetics, but is also strongly affected by shared cultural conventions regarding gender, race and ethnicity.

Early in this century, critical theorist Brian Massumi observed, “There seems to be a growing feeling within media, literary and art theory that affect is central to an understanding of our information–and image–based late capitalist culture, in which so–called master narratives are perceived to have foundered.”²⁰ A basis for understanding how culture and society changes, argues Brennan, is to reconceptualize the self. Just as politicians and environmentalists urge recognition that we are communities of shared interests, Brennan argues that the propensity toward considering the thus socialized individual as cognitively and biologically self–contained has prevented recognition of the importance of the interpersonal and socially contagious transmission of affects. Whereas, regarding their transmission among individuals, “Affects have an energetic dimension... they can energize or deplete.”²¹

The same, commonplace lack of recognition of the affective aspects of social interactions corresponds to inattention to the communicative power of affects in art. Both indicate a privileging of the cognitive over the sensory. This potent source of art’s communicative power, and, not incidentally, experiential pleasure, has been insufficiently attended to in terms of rhetorical strategies. Integration of affects in analyses of art requires scrutiny of their carriers, that which evokes affect, which as much as subject matter are the formal elements through which they are conveyed. Art historian Emily Eliza Smith emphasized this when she recognized the video of artists Jennifer Allora and Guillermo Calzadilla, *Raptor’s Rapture* (2012), as “trading a topical approach for one that operates in the realm of affect.”²² Scott’s tracing of the phenomenological and suggestive aspects of this artwork offers a rare example of addressing the evocations latent in color, light, shape, texture, sound, and all the sensory and material elements brought to life by a beholder’s sensitive articulations.

One of the most poignant essays on climate change as a problem of public persuasion was written by the novelist Zadie Smith. Beginning with “what is happening to the weather,” her reflection on rationales for insufficient responses includes surmising her explanation to future grandchildren. “Apocalyptic scenarios did not help—we had a profound historical attraction to apocalypse. In the end, the only thing that could create the necessary traction in our minds”—to generate what she had described as the absence of “a global movement of the people that forced [climate change] onto the political agenda, no matter the cost”—“was the intimate loss of the things we loved.” That statement’s most potent word is not “loved” or “loss,” but “intimate.” It is that ability to make the unfathomable amorphousness of climate change feel personal and emotionally affecting that allowed Smith to conclude, after recounting her experience of a

desiccated countryside, “I found my mind finally beginning to turn from the elegiac *what have we done*, to the practical *what can we do?*”²³ Her mourning was not immobilizing but galvanizing.

Awareness of the power of affects to create sensations of direct experience—of intimacy with the subject—opens up new syntheses of environmentally topical subject matter and its imaginative materialization. Exemplifying this, Brandon Ballengée’s body of work creates a sense of intimacy with the species whose loss, resulting from climate change, he honors. An artist and zoologist who studies reptiles and amphibians, Ballengée is an expat Brooklynier based in rural Louisiana, which, due to its lack of commercial development, is a hotspot of amphibious diversity, facilitating biological research.²⁴ As a multimedia artist-activist, in conjunction with art exhibitions—many more in European institutions than elsewhere—Ballengée conducts field research workshops as biology instruction for children. With his partner Aurore Ballengée, he is developing on his property an *Atelier de la Nature* (the title a bow to the Louisiana French Creole spoken locally and Aurore’s native French), that will restore land for agriculture and animal habitats and teach conservation in public events. Although his research, teaching, activism, and art share the subject of species loss and other consequences of climate change, these practices’ rhetorical strategies differ: the science experimentation is published in journals and the art in striking visual formats that merge science’s objectivity and art’s potential to evoke and provoke.

Targeting the crucial issue of species loss through science and art, Ballengée’s “Frameworks of Absence” series (from 2014), for example, takes authentic historical prints of naturalistic renderings of wildlife, such as Audubon’s birds in lush foliage, and excises those species which as of the prints’ creation had become extinct (Figure 23.3).

Displayed in ornate frames in styles contemporaneous with the prints’ period of origin, yet small in scale in relation to the viewer, the intimate presentations conjure devotional images of beings both sacred and vulnerable. Ballengée’s desecration of the work of a revered illustrator, doubled by the gaping and shadowed holes where delicate species had been and intensified by the contrasting hue (in gallery/museum installations, blood red) of the then-exposed rear wall, both evoke and enact loss. The painful image cuts to the heart of the matter, and that of the viewer. The discarded paper is burned, and the ashes contained in a small black vessel labeled with the corresponding name of the extinct species, and displayed as a group in rows of shelves as *Frameworks of Absence Funerary Urns*.

Ballengée’s even earlier group of works called *Malamp* (begun in the 1990s), an acronym for “malformed amphibian project,” is informative, but the source of its affective power is less in the damaged anatomies of individual specimens depicted than in Ballengée’s choices of light, lighting, and symbolism when presenting them. Frogs’ predators, nourished by climate change’s enhancement of their wetlands habitat’s bounty, eat their legs, which grow back as just too many limbs or not entirely or enough. Collecting these terminally deformed amphibians after death, or euthanizing them, Ballengée gives them new life as aestheticized evidence. Flaying their bodies, he stains bones, tendons, and cartilage contrasting saturated hues, predominantly turquoise, red, and yellow. Photographed, scanned, enlarged, these become luminous beauties dramatically seen individually and centered against a black field spotted with glistening bubbles, as if figures floating among stars or martyrs spiritually risen. Printed on 46- × 34-inch watercolor paper, the large-scale forces viewers to examine frog anatomy disabled by climate change and challenges the historical anthropomorphic preeminence of human beings. He considers the *Malamp* pictures to be portraits and, out of respect for each subject, makes only a single print of each. Yet he also draws upon spatial encouragements of relationship. Scaling up the once tiny beings to the size of a human toddler arouses endearing appeal, but as they are posed supine with arms perpendicular to the body, he slices in allusions to a fallen corpse or skeletal crucifixion. Mortality



Figure 23.3 Brandon Ballengée, *RIP Louisiana Parakeet: After John James Audubon*, 2008/14

is accentuated by his designation of his *Malamp* images as reliquaries. Again, as with his excised avians, contrasts or alignment of scale in relation to the size of the human body, and here, anatomical parallels, promote affinities across species toward an empathetic resonance.

Similarly, one of the newest mediums being utilized for art, virtual reality, engenders affiliation with nature and its multiple spheres of actants by engaging the body, but literally so in the movements, sensations, and visual perceptions called up by immersive environments. *We Live in an Ocean of Air* is another assertive claim, but this work's implication of cosmic oneness situates viewers to discover it experientially, thus more memorably, through corporeal interactions. The latest project of the London VR team Marshmallow Laser Feast, *We Live in an Ocean of Air* debuted at The Saatchi Gallery, London, in December 2018 and, due to public demand, had an extended run through spring 2019 (Figure 23.4).

Projections on walls of the modest-size black box room open them to a coastal California forest scene, featuring one of the oldest living things on earth, a giant sequoia. In fifteen-minute sessions, just a half-dozen or so participants at a time don the cumbersome computerized sensors in a HP backpack, on wrists, in a helmet and goggles—something like suiting up for a moon-walk—that monitor a person's biorhythms, and through which one sees physiology not visible to the naked eye.



Figure 23.4 Marshmallow Laser Feast, *Live in an Ocean of Air*, 2018

It's worth it, and the sense of heaviness soon falls away as the apparatuses make the tree appear three-dimensional and branches extend and weave into the middle of the space, or we can explore inside its bark. We hear sounds local to the forest and abstract music, arboreal scent is dispersed, and wind is felt on the skin. The VR headset reveals the bones of one's hands; pulsing along the fingers toward the tips are molecules of red oxygenated blood. Urged by the staff monitoring each of us to inhale deeply, the complementary exhalation is startlingly vivid, surging before us in flumes of neon-hued particles that float off to mix with others' exhalations. Breath made visible merges before our eyes with the forest's simulated release of carbon dioxide, energy, and water into the atmosphere. We're undergoing what psychologists call a social "contagion," an affective resonance of experiencing the same affect in response to viewing a display of that affect by another person. Akin to the thrill of a dense group "rave" at a dance club or the communality at a church service, the effect—and affect—is euphoric. The installation appears as high-tech play, but in engendering wonderment, incites affects that give energy. Technology's immersive simulation of atmospheric mutuality profoundly persuades a biophilic engagement in earth care, in turn stimulating cognitive environmentalism.

The ongoing challenge of environmentalist art is devising forms effective in altering public consciousness—and conscience—about climate change. The inventive works of art analyzed in this essay, among others, exemplify sensitivity to the ways that visual and material qualities engender affects and create intimacy with urgent subject matter. Powerful as both advocacy and art, they offer compelling models of persuasion.

Notes

- 1 Rasheed Araeen, "Ecoaesthetics: A Manifesto for the Twenty-First Century," *Third Text* October 2009, www.tandfonline.com/loi/tte20
- 2 Clement Greenberg, *Art and Culture, Critical Essays* (Boston: Beacon Press, 1961), 5–6. This quote is from "Avant-Garde and Kitsch," which was first published in *Partisan Review* in 1939.
- 3 Paul Crowther, "Artistic Creativity: Illusions, Realities, Futures," in Francis Halsall, Julia Jansen, and Tony O'Connor, *Rediscovering Aesthetics, Transdisciplinary Voices from Art History, Philosophy, and Art Practice* (Stanford: Stanford University Press, 2009), 133, 135.

- 4 Félix Guattari, *Chaosmosis: An Ethico-Aesthetic Paradigm* (Bloomington and Indianapolis: Indiana University Press, 1995), 131.
- 5 That absence, and the subject-dominated discussion of environmentalist art in an art periodical, is exemplified in an article that illustrates Bon's sign. Hettie Judah, "There's a Flood of Climate Change-Related Art at the Venice Biennale. Can It Make a Difference – Or Is It Adding to the Problem?" *Artnet*, May 6, 2019, <https://news.artnet.com/art-world/climate-change-venice-biennale-1532290>
- 6 Araeen, as above.
- 7 The exhibition was initiated by and exhibited from spring 2018 to winter 2020 at Fundação EDP/MAAT (Lisbon, Portugal), Bildmuseet (Umeå, Sweden), HeK (Basel, Switzerland) and LABoral (Gijón, Spain), in collaboration with the Royal Academy of Arts (London, UK) and Matadero Madrid (Madrid, Spain). The curators were Pedro Gadanho, Sabine Himmelsbach, Sofia Johansson, Karin Ohlenschläger, Mariana Pestana and Yvonne Volkart.
- 8 Guattari, *Chaosmosis*, 19.
- 9 Mariana Pestana, "Eco-Visionaries: Art and Architecture After the Anthropocene," *Eco-Visionaries: Art and Architecture After the Anthropocene*, ed. Pedro Gadanho (Berlin: Hatje Cantz, 2018), 75.
- 10 Alternately or additionally, historian Lisa FitzGerald has suggested that the seven plumes may refer to the "Seven Sisters," the common moniker for the seven oil companies that control global oil production and distribution." Lisa FitzGerald. "Black Gold: Digitally-Simulated Environments and the Material Aesthetics of Oil." *Transformations* 32 (2018), 97. www.transformationsjournal.org/wp-content/uploads/2018/11/Trans32_6_fitzgerald.pdf
- 11 The work was commissioned by the British television Station 4 to be screened intermittently – interrupting programs – throughout Earth Day 2017. That did not offer the absorptive experience and neither did its presentation at the "Eco-Visionaries" venues, an indoor LED wall approximately 2m x 3m.
- 12 Alan C. Braddock. "Ecological Art after Humanism," responding to Mark Cheetham, "Ecological Art: What Do We Do Now?," in *Nonsite.Org*. March 2013 issue. <http://nonsite.org/feature/ecological-art-what-do-we-do-now>
- 13 Mark A. Cheetham, *Landscape into Eco Art, Articulations of Nature Since the '60s* (University Park: The Pennsylvania State University Press, 2018), 11.
- 14 Claire Bishop, *Artificial Hells: Participatory Art and the Politics of Spectatorship* (London and New York: Verso, 2012), 7.
- 15 Bishop, *Artificial Hells*, 23, 7, 22, 17, 12.
- 16 Jacques Rancière, *The Politics of Aesthetics* (London, NY: Continuum, 2004), 63.
- 17 Guattari, *Chaosmosis*, 130.
- 18 For an image of this work and more on Burtynsky, see Suzaan Boettger, "The Mirror of our Nature: Edward Burtynsky's Images of the Anthropocene," in Edward Burtynsky, *Anthropocene* (Germany: Steidl Verlag, 2018), 9–16.
- 19 Teresa Brennan, *The Transmission of Affect* (Ithaca: Cornell University Press, 2004), 10.
- 20 Brian Massumi, *Parables for the Virtual, Movement, Affect, Sensation* (Raleigh: Duke University Press, 2002), 27.
- 21 Brennan, *The Transmission of Affect*, 6. This is distinct from the brain's mirror neurons, which more directly promote a person's mimicking of another's sensations—to personally varying extents of affiliation.
- 22 Emily Eliza Scott, "Feeling in the Art: Ecology at the Edges of History," *American Art* 28, no. 3 (2014): 15.
- 23 All quotations are from Zadie Smith, "Elegy for a Country's Seasons," *New York Review of Books* 61, no. 6 (April 3, 2014), 6.
- 24 This discussion draws from my more comprehensive essay, Suzaan Boettger, "Brandon Ballengée: Amphibious," in University of Wyoming Art Museum, *WASTE LAND: A Survey of Works by Brandon Ballengée, 1996–2016* (Laramie: University of Wyoming Press, 2017), 11–17.

SUBLIME AESTHETICS IN THE ERA OF CLIMATE CRISIS?

A Critique

Birgit Schneider

Climate Change Aesthetics

Climate change is seen by many as having a serious perception problem; that is, a problem with regard to the manner in which it is perceived and represented. Individuals living in Western cities, in particular, often do not consider themselves to be directly dependent on nature, nor do they perceive nature as the basis of their lives. This problem is also present in the perception of climate.¹ Indeed, the artificial “climate capsules” formed by the interiors of houses, shopping malls, cars, and airplanes, which are usually regulated at around 19–24° Celsius, have become second skins with which inhabitants seal themselves off from the outside climate for a large amount of their lives.² And, for its part, the weather is only important when planning leisure activities and in its function as a topic of conversation in social situations. Even in the era of abnormally hot and dry summers, talking about the weather remains a popular pastime. Either way, one thing is certain: a direct perception and awareness of weather and climate often plays a subordinate and rarely noticeably existential role in the everyday lives of most people in industrial nations.

Even if this is the prevailing paradigm at present, it excludes other experiences outside the metrological (relating to meteorological measurements) paradigm. The devaluation of a phenomenology of the climate beyond scientific-technical approaches is the result of a particular and predominant form of access to the world—a form of access firmly anchored in the tradition of people in Western industrial nations. From this follows a further, more fundamental argument. It speaks against a direct perception of the climate: the inability to perceive the climate is closely related to the scientific definition of the climate. Due to the fact that people are aware of daily weather events rather than the climate—which, in its modern definition, is a statistically generated, abstract research object stretching over a long-term period of several days to decades—the transformations associated with climate change, which threaten a large part of the Earth’s population, are withdrawn from their everyday and/or direct perception. What is perceptible in a certain place at a certain time is the concrete weather; the climate, however, is an average measurement, an object of knowledge that is beyond direct perception. This average only reveals itself after procedures involving measuring and calculating: nobody can *feel* average temperatures any more than global citizens can feel the global average temperature of 14° Celsius on their own bodies.

As seen from this perspective, the climate cannot be the *aesthetic* object of a phenomenal, i.e. bodily experience. Instead, it is the object of an instrumental experience of nature—an object of

measurements, observations, and data produced by means of instruments. The numerous diagrams found in the Intergovernmental Panel on Climate Change (IPCC)'s reports can serve as an example here. Scientific curve graphs such as the "Hockey Stick," for which the temperatures of the past centuries have been reconstructed by using tree ring archives, or maps and curve drawings present temperatures as possible scenarios into the future—these are the visual currency predominantly used to talk about climate change. The climate—which today is primarily the subject of climate research, media reporting and politics—emerges at the intersection of global and metrological networks that collect climate data and merge it into an abstract concept.

These general remarks about the aesthetics of climate and climate change are political: it makes a difference whether we leave it to people to sense the changing climate or leave it to research alone. On the other hand, art—and art's approach to aesthetics—can make this and other ways of perceiving the climate crisis possible.

Artistic Imagination and the Hopes Placed on Art by Museums

Thanks to their aesthetic and non-linguistic character, works of art enable additional levels of perceiving and imagining the climate. With their help, the boundaries, contradictions, and frictions of scientific findings—especially visualizations of climate research—can be kept in limbo, since they are not already in the context of instrumental thought. In this way, the pictorial acts of art create a counterweight to the speech acts of words and the purposeful images of research, ultimately enabling a different view of the same themes.

Romantics such as August Wilhelm Schlegel (1767–1845) already hoped that the arts could transfer "the unimaginable" of the sciences into comprehensible forms. In recent years, in fiction, documentary films, computer games, and literature, questions and strategies regarding what philosopher Gernot Böhme calls an "ecologically motivated aesthetics" have been developed into significant positions with which the indissoluble tensions between morality and knowledge can be placed into relation to one another. However, the "project of a general theory of sensual knowledge" and aesthetics as "part of a new philosophy of nature" also becomes highly significant in this account. "The basic question of every philosophy of nature, 'What is nature?'," wrote Böhme in the early 1990s, is today "motivated by the so-called environmental problem, i.e. by the fact that man has again become aware that he himself is inevitably nature and must live with and in nature,"³ whereby *man* must mean Homo Faber, man the maker, who controls his environment with the help of technological progress. In order to be able to better question the limits of the purely scientific framing of climate and climate change, works of art are therefore an irreplaceable foil for the perception and imagination of climate crisis.

Such hopes and appeals to art that it does something to remedy the problems associated with the perception and representation of climate change—in other words, the fact that art is capable of transforming the unimaginable into comprehensible forms—is emerging once again today. Such positions can be found in increasing numbers in texts written by curators who've organized exhibitions on the subjects of ecology and climate change since 2007. For example, the programmatic catalogue contributions to the exhibition *RETHINK: Contemporary Art & Climate Change*, which took place simultaneously in several museums on the occasion of the Climate Summit 2009 in Copenhagen,⁴ serve as examples of these hopes for art, as can the now innumerable art exhibitions focusing on the issue of climate change and ecological crises. Early examples include *Ecomedia*⁵ and *Apokalypse Now*,⁶ which took place in Germany, *Weather Report* in Boulder, Colorado (2007) and *Sensing Climate Change* in Philadelphia in 2013, and the exhibition *Carbon 14: Climate is Culture* by the Cape Farewell Foundation at the Royal Ontario Museum's Centre for Contemporary Culture in 2014. More recent exhibitions took place at

The Climate Museum in New York City and during the “ART+CLIMATE=CHANGE 2019” festival, which included various exhibition sites in Melbourne, Australia, organized by the charity *CLIMARTE*. Most of these exhibitions have taken place in Western countries.⁷

A quote from the curator Sabine Himmelsbach provides a perfect example: in 2009, she wrote that the “political, social and economic debate [...] is extended by the voice of art, which questions our behavior, calls on us to treat our environment and our natural resources with respect, and shows how change is possible.”⁸ On the other hand, in 2007, curator Vera Tollmann identified the role of art as providing a disturbance, in making visible, in conveying urgency as well as in the aesthetic experience of complex contexts in relation to climate change.⁹ In the contributions to the catalogue for the *RETHINK* exhibition, the curators emphasized the ability of art to change perception in order to question more deeply categories and phenomena that are otherwise taken for granted. They also hinted at the vague hope that the reflections triggered by art could possibly lead to actions, with art playing the role of a seismograph for the future, since latent social questions are brought to the surface almost prophetically in art. Moreover, art was seen as offering alternatives to the prevailing scientific and political views.¹⁰ The independent charity and alliance of art organizations known as *CLIMARTE: Arts for a Safe Climate* states the following as their mission:

The arts can not only *show* but indeed they can make us *feel* the very problems that we are facing. They can inspire us to acknowledge that we are part of nature and not separate from it. [...] As key interpreters of this wondrous experience, we believe the arts have a major role and responsibility to encourage the transformational thinking required to move us away from our current destructive practices, and towards the environmental sustainability that we need to protect life on our planet.¹¹

Art and artists are seen here as having the potential not only to change perceptions, but also to initiate transformations.

Everyone agrees, however, that art does not (need to) offer solutions, since art stands outside of application-oriented contexts. Andrew Brown emphasizes this in his catalogue on ecological art: “[...] artistic projects are able to withstand a far higher level of risk than typical scientific experiments, which often come with expectations of tangible results or even profit for their funders.”¹²

As is so often the case in socially difficult situations, art is intended to compensate for the deficit in communication and knowledge about climate change by its own means.¹³ This is how the expectation placed on artists as demiurges manifests itself, at least as curators and funding committees see it: artists have the repertoire and the ability, they argue, to create more vivid and culturally understandable images than scientists. This reveals the extent to which the burned-down torch of knowledge is passed on to artists and cultural practitioners in the hopes that *they* will be able to formulate more successfully what the scientific findings of climate change mean for human culture and its future. In this scenario, artists are the ones who are expected to elucidate the very things that scientists, journalists, and politicians are no longer able to communicate. In the best outcome, the recipients of such works of art would experience an inner change, which would not only lead to a greater awareness of the themes, but also to new everyday practices. In other words, art would be given the responsibility not only for explaining but also for concretely changing something; and, even if art does not ultimately find solutions, it is still expected to exemplify practicable proposals for solutions. As a result, artists have mostly looked at climate change in relation to research, basing their art on the statements, maps and insights of scientists.

Many of the artworks motivated by climate change involve a combination of art and research. Art historian Kathrin Busch has divided this field into three categories: she identifies artists who make art *about* research in contrast to artists who do art *with* research and *as* research.¹⁴ Many works of art in the context of the climate crisis belong to the first category in that they take climate research and its findings as a starting point to follow, or they create artistic works about these findings.

Artistic Expeditions to Climate Hot Spots

For about two decades, the examination of the “hot spots” of climate change has been quite significant. These are places—such as the Arctic poles, coral reefs and glaciers—where climatic transformation occurs in extreme and comparatively visible ways. But these places are also significant because they allow us to see a future that is just beginning to unfold. Kate Manzo has classified images of these places as harbingers.¹⁵ The attraction of these places has led to the justification of art programs that trigger worldwide climate tourism to remote areas, due to the special expectations of art to improve climate perception. Cape Farewell, founded by the artist David Buckland in 2001 in the UK, was one of the first art programs that systematically related artists to climate research expeditions. The program “embeds” artists in Arctic and other research expeditions, because they value artists for “their ability to evolve and amplify a creative language, communicating on a human scale the urgency of the global climate challenge.”¹⁶ After that, in 2017, the hot spot of global warming—the Antarctic pole—was again turned into an exhibition site, this time for the *1st Antarctic Biennale: Mobilis in Mobile*, curated by Alexander Ponomarev and Nadim Samman. As part of the biennale, 65 artists travelled 2,000 nautical miles from the port of Ushuaia, Argentina, to twelve sites in the Antarctic Archipelago, where they carried out installations and performances in each location. With similar goals, some years ago, an Austrian arts patron named Francesca Habsburg launched the eco initiative, “TBA21 Academy,” in which artists and scientists are invited to sail on her yacht, the *Dardanella*, so that they can witness the global changing of the oceans in situ. In such ambitious endeavors, the hope takes shape that the experience of climate change in heroic and spectacular landscapes will, in a first step, change the perception of the artists themselves and then, in a second step, change the perception of recipients at home. At the same time, these journeys can also be seen to be following in the footsteps of colonizers and explorers on the hunt for the feeling of the sublime; the difference this time is that it’s not the sublimity of “untouched nature” that is at stake, but nature changed by humans, or, more precisely, by the lifestyle of industrial nations that brought forth the idea of world travel in the first place.

Even though not all artists return from these world trips with photographic artworks, this medium makes the aesthetics of the sublime particularly clear as a problem connected to the climate crisis. The artist duo known as the Canary Project has long been concerned with the climate crisis, often operating at the intersection between aesthetics and action. Their oeuvre is exemplary of numerous works on the climate crisis that frame it using a sublime, often photographic or cinematic aesthetic, be it in the form of landscape portraits or the effects of the Anthropocene on the face of the Earth (e.g., Edward Burtynsky’s famous “Anthropocene” series, Julian Charrière’s *As We Used To Float*, Armin Linke’s “Anthropocene Project”). By keeping the pictorial language of these works connected to the Romantic scheme of paintings like the *Arctic Sea* (1823/24) by Caspar David Friedrich, they cannot overcome the pathos and rigidity of action inherent in such images, despite their impressive aesthetics.

Here we have to ask whether, in times of the Anthropocene, we might actually need other pictorial strategies that assign a different role to viewers and focus less on pathos and more on

ethos, logos, and maybe even on the aesthetics of dissonance? The question that arises here is precisely which changes—if not which natural disasters, that can be considered as “acts of God” because they are completely beyond human control—threaten mankind. Natural disasters have been joined by those that are “acts of humans,” i.e. human-made disasters such as climate change as a result of industrialization.

Sublime Aesthetics as a Barrier to Imagination and Action

Susan Sayler and Edward Morris, two US-based photographers, artists, and activists, have been working on climate change for more than ten years under the name Canary Project. The project is named after the canaries that miners used to take underground, as these birds stop singing as soon as carbon monoxide (or CO₂) levels in the air began to rise. The birds were therefore the involuntary companions of the miners as indicators, or harbingers, of fatal events. For an elaborate photo series entitled “A History of the Future” in 2008, the artists travelled to so-called hot spots of climate change. For another photographic series, they continued in this vein, recording areas devastated after Hurricane Katrina in 2005 (Figure 24.1).

Thanks to their strategies of aestheticization, the pictures can satisfy all demands for an aesthetically sophisticated representation of the landscape as a result of landscape paintings of Romanticism or Ansel Adams’ majestic photographs of US national parks. But it was precisely because of these qualities that, over time, the images began to become uncanny to the artists. They found that the combination of pathos, sublimity, and photography, which their images also featured, was paradoxical for their own theme—harbingers of climate change. They saw the



Figure 24.1 Canary Project (Susan Sayler and Edward Morris), *Cordillera Blanca, Peru*, from the series “A History of the Future,” 2008

reason for this in Roland Barthes' definition of photography as a medium of dying and melancholy, which leads to a problem in connection with the theme of anthropogenic climate change. For those who aim to persuade people to act, effects such as sublimity and pathos are counter-productive. Both effects are disempowering, because both present their own powerlessness in the face of an unimaginable force of nature. In extreme cases, this leads to the mode of perception Vera Tollmann refers to as "nature snuff," such as when tourists undertake long and expensive journeys to places like the Arctic to witness disappearing glaciers (with their cameras):

Tourists whose connection to the environment seems to have gone missing after days on the deck of an Arctic cruise ship, call out "Oh my goodness, wow, fantastic" as the ice breaks apart in movie-worthy fashion. Not a word about global warming; instead they record themselves and their enthusiasm for the collapse of nature: "nature snuff."¹⁷

Such experiences lead to astonishment, mouths agape, but nothing meaningful follows; and with the photographs of Sayler and Morris, this seems the same.

The conclusion the artists drew was no less pathetic, but they steered the pathos in a new direction. Under the title, *Double Blind*, they showed their photographs in 2010 at the Illges Gallery of Columbus State University (Figure 24.2).

In this case, the expensive photographs were covered with black cloth. The effect was reminiscent of a funeral: the concealed images of disappearing landscapes seemed like a public display of the dead for a last farewell, only, in this case, leave is being taken of a nature that will never be the same again. The longing to see the sublime images, i.e. to look death directly in the eye, is only granted in the museum by a partial lifting of the cloths. However, the pictures were actually still available to the inhabitants of Columbus, Georgia; parallel to the exhibition, Sayler and Morris had them mounted on rented, illuminated billboards, which are a regular part of street scenes in many American cities (Figure 24.3).



Figure 24.2 Canary Project (Susan Sayler and Edward Morris), installation view of *Double Blind*, Illges Gallery, Columbus State University, Columbus, GA, 2010



Figure 24.3 Canary Project (Susan Sayler and Edward Morris), billboard containing photography from the series, “A History of the Future,” Columbus, GA, 2010

On billboards in public spaces, their pictures seemed better able to send out appeals that had been silenced in the “musealizing” rooms of the gallery. Indeed, the museum is the place that helps produce the aura of sublime pathos.

When the old idea of the sublime returns today in the face of a changing Earth in the Anthropocene, the aesthetics of this strategy must be considered more closely. Friedrich Schiller conceived of the “pathetic-sublime” as the human freedom with which one could overcome suffering by means of art. In this sense, sublime climate change art might also overcome an experience of suffering. Schiller calls it “the embarrassing feeling of our limits,” which the sublime object brings to life:

The sublime object is of a double nature. We either relate it to our grasping power and fall prey to trying to form an image or concept of it; or we relate it to our life force and regard it as a power against which ours disappears into nothingness. But whether we receive the embarrassing feeling of our limits in one case as in the other by his instigation, we do not flee it, but are rather attracted by it with irresistible force. Would this probably be possible if the limits of our imagination were at the same time the limits of our power of comprehension?¹⁸

The limits of our own power of comprehension in view of the possibility of death at any time—i.e. (continuing) life despite and in view of the catastrophe—are raised to a universally valid level. In addition, the photographs stylize the hot spots of climate change as a warning figure for all living beings who want to believe that they are making things permanent, even though everything is perishable. And so the journeys of many artists to remote places become a metaphor for how the isolated catastrophe “has become the symbol of a state of life.”¹⁹ Especially in modern societies, catastrophes are permanent. They now slumber dangerously forever in the present, so

that every future can only be imagined as a catastrophe.²⁰ But another thing that is transported further in the traditional concept of the sublime is the viewer's point of view, which is important for the feeling of the sublime. The thing necessary to feel the sublime, at least according to Immanuel Kant, is that it can only be viewed from the position of one's own security, from a safe place. But is this security still even possible in times of climate crisis?

In view of climate change, is there any art form that offers a different approach than an imposing and overly emotionalized one? In my opinion, works that choose the "seismic form" of disaster (Jean Baudrillard) can be characterized as belonging to a different approach.²¹ They use the dry and aesthetically uninteresting lines created by scientists and enter them directly into reality. One example would be the lines marking future rising sea levels as used by the German-Norwegian artist Björn Melhus and the American artist Eve Mosher. On the occasion of the 2009 Biennale, Melhus proposed to install several helium balloons in the urban space of Venice. The proposal was entitled, *99 Balloons for the 98th Biennale di Venezia, 2099*. The balloons were colored blue in the lower third. This line marked the predicted sea level rise of the "sinking city" at the 98th installment of the Art Biennale in Venice, which would be held in the year 2099. Eve Mosher used a similar data set for her art action, *High Water Line* (2007). It was also essential for her work that she left the museum. Mosher procured a chalk cart normally used to mark baseball fields and instead used it to transfer the predicted lines of a rising sea level directly onto the landscape of her own residential area. Although the data were theoretically accessible to everyone in the form of maps, they had so far only been published without any concrete connection to specific present-day geographies. Mosher transferred the lines to the streets of Brooklyn, New York (and, later, also in Miami and Philadelphia), so that citizens could relate their own place of residence to the lines, i.e. so they could know who would be particularly endangered by the rising water. In those places where the lines appeared, the houses were only very slightly above sea level. In 2014, Hurricane Sandy tragically revealed the reality of Mosher's work by flooding exactly those streets she had previously marked with her lines.

Works such as those by Melhus and Mosher follow from the seismic form of catastrophe as outlined by Baudrillard. When the seismic lines are filled with ideas beyond the present, one faces the problem of

measuring the capacity and elasticity of our imagination and feeling against the dimensions of our own products and the incalculable extent of what we can do [...], to bring the imagining and feeling into line with us as the makers.²²

This is what Günther Anders called "apocalypse blindness." But can apocalypse blindness be addressed by means of pathetic, aestheticizing strategies alone? The following answer can be given based on the above observations: Artistic works that currently comprise documentary film and photographic material on climate change must reckon with the dramatic build-up and collapse associated with pathos and impotence. Often, they cannot avoid reaching the level of "nature snuff"—the pathos of "watching s.b. dying." They are involved in writing the original story of the tragedy, but a new actor has joined the violence of nature or God. The powerlessness against the force of nature depicted in previous catastrophes has been replaced by the powerlessness against human-induced violence, because it is the CO₂-intensive lifestyle of people in industrial nations that is causing the current climate change. The fact that this insight comes at a time when the consequences can no longer be averted prompted climate researcher Hans-Joachim Schellnhuber to assess the findings of climate research in 2009 as a "tragic triumph."²³ The triumph refers to the success of science in recognizing climate change. But this success is tragic. The Greek tragedy brought human suffering to the stage, and the spectators felt a certain desire to

watch. This feeling opened them up to their later catharsis. In the case of climate research, however, the researchers play the role of Cassandra, whose warnings went unheeded. Catharsis simply does not take place. Indeed, it is doubtful whether anyone will feel a pleasant shiver in the face of the tragedy that the climate researchers show on the stage of their publications and PowerPoint lectures, since there is no escape, no safe place from which to watch the spectacle.

Assembly and Collage—The Tactics of Protests

Christine Würmell is a Berlin-based artist who works on the precarious and uncontrollable content of even the most controlled images, such as those of the IPCC. In her work, she combines and superimposes various narratives and contexts, critiquing different pictorial logics. In 2009, she showed a work entitled *Dissonance Reduction* at the temporary Berlin Kunsthalle. The multi-part work contains a diptych entitled *Futures*, which shows several curves and is hung on the middle wall of the exhibition space, but she also colored the grey walls of the wardrobe white by throwing color bombs at the back wall of the room. For a third part of the exhibition, the artist used a poorly reproduced press photo that showed Arnold Schwarzenegger in 2006 in his capacity as governor of California. He confidently signs the “Global Warming Solution Act,” while the caption to this photo in the form of a light blue sign titled, “Californian Leadership Ending Global Warming,” is already hanging on the table. Würmell sprayed over the press photo with a graffiti quote she had discovered in a pedestrian underpass: “All cars to Antarctica.” In the combination of affirmation and protest, Würmell thus exposed the imperative power rhetoric of political images against climate change as a sign of actual impotence: in fact, these are often merely expressions of moral intent, rather than decisions or actions that change reality (Figure 24.4).

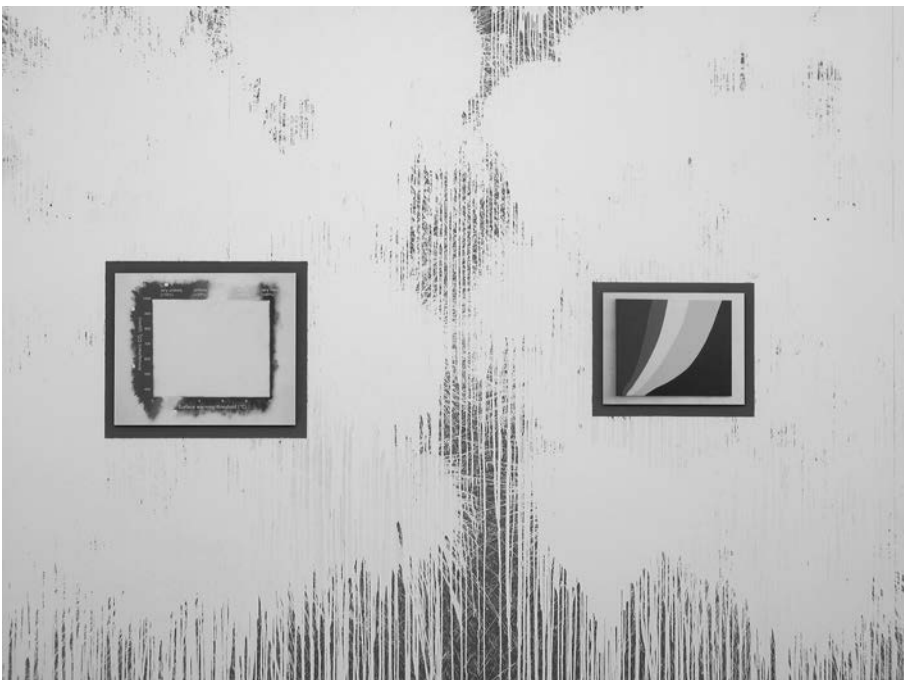


Figure 24.4 Christine Würmell: *Dissonanzproduktion*, 2009

Würmell mentions Jacques Rancière as an important reference point for her work. She refers to the two principles of artistic montage, which he categorized as “dialectical montage” and “symbolic montage,” in reference to Theodor W. Adorno.²⁴ Irrespective of Rancière’s other definitions of terms and theory, these terms can be used here, since they aptly name two of the potential elements in montage and collage since Modernism. They illustrate how the “fragments of reality,”²⁵ with its respective semantics and claims to truth, can be brought into an abysmal relation by means of principles of montage. The collage is able to connect what actually repels itself massively and to separate what attracts. Through strategies of recombination, Würmell reveals this general tendency of popularized expert graphics on climate change after they enter into the press carousel of eternal reproduction: the effect is to “alert without informing.”²⁶ In this way, the images themselves produce a reality in the logic of form and color that unquestioningly stands up as reality, but has no effect beyond sounding the alarm. In the combination of affirmation and protest, Würmell—in the tradition of protest art and guerilla communication tactics²⁷—thus exposes the imperative power rhetoric of political images against climate change as a sign of actual powerlessness; in fact, these are often merely expressions of moral intent, but not decisions or actions that change reality.

In conclusion, works of art that follow the line of the sublime may offer new paths to climate change perception, but they remain within the logic of the spectacle. In fact, they might even obstruct climate change action, because they immobilize observers and put them in a state of sublime amazement. Art practices that instead overcome such classical and hierarchical paradigms hold the potential to open up different perceptions and perhaps even encourage action. They clarify the many ineluctable dissonances that we experience every day as we lead our CO₂-intensive lives even while worrying about the climate crisis. Moving beyond the frame of individual consumer subjects, they can pave the way toward joint political actions outside of museums, where art and protest meet; one example would be the current Extinction Rebellion movement. Sublime strategies of perceiving the climate crisis don’t play a primary role in activism, because they represent climate change so overwhelmingly that they disempower and immobilize. Viewers may change their perception, but at the cost of becoming passive spectators. For this reason, I would argue that the dramatic build-up and fall-out associated with the sublime aesthetic should be examined closely and subjected to rigorous criticism in our current era.

Notes

- 1 Peter Rudiak-Gould, “We have seen it with our own eyes. Why we disagree on climate change visibility,” in *Weather Climate Society*, 5, 2013, pp. 120–132.
- 2 See also Thomas Macho, “Wetter machen,” in: Petra Lutz and Thomas Macho (eds), 2°. *Das Wetter, der Mensch und sein Klima* (Göttingen, 2008), pp. 132–137, p. 134. See also Julien Knebusch, “Art and Climate (Change) Perception: Outline of a Phenomenology of Climate” in *Sustainability: A New Frontier for the Arts and Cultures*, edited by Sasha Kagan/Volker Kirchberg (Frankfurt am Main, 2008), pp. 242–261, p. 3; Lutz/Macho: 2°; Peter Sloterdijk: *Sphären. 2. Globen* (Frankfurt am Main, 2004).
- 3 Gernot Böhme, *Für eine ökologische Naturästhetik* (Frankfurt am Main, 1993), p. 8. Translated by the author.
- 4 From the catalogues Witzke, *Rethink*; Florian Waldvogel et al. (eds), *Apokalypse now. Kunst zur Klimakatastrophe*, Kunstverein Hamburg (Hamburg, 2010); Sabine Himmelsbach (ed.), *Ökomedien-Ecomedia. Ökologische Strategien in der Kunst heute*, Edith-Russ-Haus für Medienkunst (Ostfildern-Ruit, 2007); Andrew Brown (ed.): *Art & Ecology Now* (London, 2014).
- 5 Sabine Himmelsbach and Yvonne Volkart (eds), *Ökomedien – Ecomedia: Ökologische Strategien in der Kunst heute – Ecological Strategies in Today’s Art* (Ostfildern, 2009).
- 6 Florian Waldvogel (ed.), *Apokalypse now: Kunst zur Klimakatastrophe* (Hamburg, 2010).
- 7 A list of climate art and science related exhibitions, mainly in English-speaking countries, can be found here: <https://mccnetwork.org>.

- 8 Sabine Himmelsbach: "Veränderung ist möglich," in: Sabine Himmelsbach and Yvonne Oldenburg (eds), *Ecomedia. Ecological Strategies in Today's Art* (Ostfildern Ruit, 2007), pp. 11–21, p. 21.
- 9 Vera Tollmann, "Der Vorteil der Kunst," in: Waldvogel, *Apokalypse now*, p. 35. "Kunst muss keine Lösungen liefern. Mit der künstlerischen Praxis kann Sichtbarkeit hergestellt werden für ein Thema, das gewöhnlich in dramatischen Katastrophenbildern oder Datenkurven zum Bild wird. Ihr Publikum kann die Kunst mit kritischen Aussagen stören, mit auf Umwegen gefundenen neuen Gedanken oder unangenehmen Informationen konfrontieren, einen schwer greifbaren Komplex wie den Klimawandel zu einer ästhetischen Erfahrung machen und Dringlichkeit vermitteln."
- 10 Quotations from the catalogue by Witzke, *Rethink*: "[...] we need to change our perception of our environment in order to better understand and deal with it. In other words, it is a cultural, epistemological challenge" (Soren Pold, p. 30); "The artists do not offer solutions to the problems, but images which can be employed as tools for reflection, discussion, insight – and possibly action." (Elisabeth Delin Hansen, p. 12); "Art is a field where changes and altered premises for our existence are often recorded and implemented faster than in other parts of society." (Marianne Torp, p. 10). "[...] artists also got involved in the discussion, providing an alternative to the authority of scientific expertise and political systems. The exhibition presents works by prominent artist from the Nordic countries and from the rest of the world, each in its own way formulating strategies for how we must rethink categories and phenomena that we usually take for granted." (Anne Sophie Witzke, p. 9).
- 11 Quoted from the website of CLIMARTE, <https://climarte.org/more-about-climarte/>. See also Guy Abrahams, Kelly Gellatly, Bronwyn Johnson, *Climate + Art = Change* (Melbourne University Publishing, 2017).
- 12 Andrew Brown, *Ecology and Art Now* (London, 2014), p. 8.
- 13 See also Vera Tollmann, "Der Vorteil der Kunst," in Waldvogel, *Apokalypse now*, pp. 35–36, p. 35.
- 14 Kathrin Busch, "Künstlerische Forschung – Potentialität des Unbedingten," in Viktor Kittlausz, Gabriele Mackert, and Winfried Pauleit (eds), *Blind Date. Zeitgenossenschaft als Herausforderung* (Nürnberg, 2008), pp. 88–97.
- 15 Kate Manzo, "Imaging Vulnerability: The Iconography of Climate Change," *Area* (2010), 42, 1, pp. 96–107.
- 16 <https://capefarewell.com/about.html>
- 17 Vera Tollmann, "The Uncanny Polar Bear: Activists Visually Attack an Overly Emotionalized Image Clone," in Birgit Schneider and Thomas Nocke (eds), *Image Politics of Climate Change* (Bielefeld, 2014), pp. 249–272, p. 268.
- 18 "Der erhabene Gegenstand ist von doppelter Art. Wir beziehen ihn entweder auf unsere *Fassungskraft* und erliegen bei dem Versuch, uns ein Bild oder einen Begriff von ihm zu bilden; oder wir beziehen ihn auf unsere *Lebenskraft* und betrachten ihn als eine Macht, gegen welche die unsrige in Nichts verwindet. Aber ob wir gleich in dem einen wie in dem andern Fall durch seine Veranlassung das peinliche Gefühl unserer Grenzen erhalten, so fliehen wir ihn doch nicht, sondern werden vielmehr mit unwiderstehlicher Gewalt von ihm angezogen. Würde dieses wohl möglich sein, wenn die Grenzen unsrer Phantasie zugleich die Grenzen unsrer Fassungskraft wären?" Friedrich Schiller, "Über das Erhabene," in *Schillers Werke*, Vierter Band (Frankfurt am Main, 1966), pp. 123–124.
- 19 Peter Weiss, "Ästhetik des Widerstands," quoted from Jörg Trempler, *Katastrophen. Ihre Entstehung aus dem Bild* (Berlin, 2013), p. 21. Translated by the author.
- 20 Eva Horn, *The Future as Catastrophe. Imagining Disaster in the Modern Age* (Columbia University Press, 2018).
- 21 Baudrillard, "Die seismische Form," in: *Lasst Euch nicht verführen!* (Berlin, 1983), pp. 65–71.
- 22 Günther Anders, *Die Antiquiertheit des Menschen 1. Über die Seele im Zeitalter der zweiten industriellen Revolution* (München 1987 [1956]), p. 273. Translated by the author.
- 23 Hans-Jörg Schnellhuber, "Tragic Triumph," *Climatic Change*, 2010, vol. 100, pp. 229–238.
- 24 Jacques Rancière, *Politik der Bilder* (Berlin, 2005), p. 68ff.
- 25 Adorno, "Indem das Werk buchstäbliche, scheinlose Trümmer der Empirie in sich einläßt, den Bruch einbekennt und in ästhetische Wirkung umfunktioniert," in Theodor W. Adorno, *Ästhetische Theorie* (Frankfurt am Main, 1972), p. 232.
- 26 Christine Würmell, "Vom Dissonieren der Zeichen. Ein Gespräch mit Raimar Stange," in *Existenz am Limit*, Kunstforum, 2009, Bd. 199, p. 198–207, p. 205.
- 27 For a collection of such tactics and principles, see <https://beautifultrouble.org/>.

25

INSIDE OUT

Creative Response Beyond Periphery and Peril

Julie Decker

Alaska is a geographic anomaly, the most northern, western, and eastern state in the US. Maps reveal that the tip of the Alaskan Aleutian Islands lays beyond the 180° meridian longitude, which is measured from Greenwich, placing part of the chain in the Eastern Hemisphere. Typical maps of the US dissect the continent, and place Alaska as an island off California. More accurate maps show the scale and strategic location of America's largest, and only, Arctic state. Stanley Kubrick featured this view in his black-comedy response to the apocalyptic, Cold War fears of the 1950s, with a top-secret Doomsday Machine constructed in the Arctic that could reduce the world to nothingness.

Today, climate change poses the apocalyptic scenario for audiences, the worldwide experiment with survival. Change occurs first, most, and fastest in the world's Arctic regions. Cold War politics have given way to Cold War melting. In Greenland, toxic waste once thought contained has begun to rise from a once-buried and frozen Camp Century, a US Cold War military base. Tunneled half a century ago into an ice cap, powered by a mobile nuclear generator and housing 200 soldiers, the abandoned base is no longer under ice. As it warms, the North reveals the secrets of its soil, its past politics and geologies. As it warms, the North becomes present again also in the collective imagination, at the center of creative visions, speculation, and scientific observation. The consequences of what happens in the North is global. The Arctic is on the frontline of a new battle and the fate of the North will shape the future of the planet.

The Circumpolar North has long been a place of geographical significance. Alaska's westernmost distinction placed it into the path of war in 1943. Russia laid a flag at the bottom of the floor of the Arctic Ocean, seeing economic and strategic opportunity at the top of the world. Russia continues military buildup in the Arctic. Associated with cold, distance, and war, the North continually tests mettle, man, politics, and power.

Beginning in the fifteenth century, explorers searched for the Northwest Passage, a famed sea route anticipated since the second century AD and the Ottoman Empire, from the Atlantic Ocean to the Pacific Ocean through the Arctic Archipelago, seeking not just a trade route, but also fame, fortune, and glory. Historically, traversing the frozen Northwest Passage required a dangerous journey through massive icebergs and sea ice that could seal the passage and trap ships for months and even years.

Sir John Franklin and his men couldn't survive for one year where Inuit had lived for millennia. For the Inuit, life is on this land and ice, not the nothingness assumed by explorers. It is a land long inhabited and long mythologized, but the current mythology has urgent consequences as Northern landscape and communities experience rapid change.

Today's North is the canary, a spectacular image for what may come to other, more southern, places. This place-in-peril narrative has ignited a new, large-scale interest in the Arctic. As Northern territories are measured by science, the outside reference is of a vulnerable, uninhabited natural landscape—with extracted resources and melting sea ice offering strategic opportunity for more extraction and exploitation. This view focuses on land over people. From the inside, however, the view is of a place not discovered, not of settlers, not unpopulated, not of destruction, but a home to Indigenous people who have thrived, and home to people who anticipate a future, however more complex it may be.¹

The North of the imagination has been defined remotely and this definition ignores the nuances of place, where environment is not equal to a wild wilderness, but where land is in a reciprocal relationship with its people and where people have agency for the future.² Indigenous peoples in Alaska and other Northern places have sustained their knowledge systems for millennia even while undergoing social and environmental upheaval. The survival of these values and practices are finally being recognized for their compelling adaptive integrity.

Still, all Northerners face an unrecognizable form of the environment with the shifting climate paired with rapid globalization, urbanization, land-use issues, speculative trade routes, new migration, and threatened livelihoods. *Solastalgia* is a term mentioned more frequently, to describe the loss of the known relationship with the landscape. The North is at the center, no longer perceived to exist beyond the known world, though still mythologized in its remoteness. Its landscape, its oceans are at the center of an academic, scientific and political ecology, placing it not at the margin and not at the periphery, but at the heart of the debate.

In 2015, President Barack Obama became the first sitting president to set foot above the Arctic Circle, visiting Kotzebue on Alaska's northwest coast, a Native village on a gravel peninsula roughly ten feet above an increasingly destructive Chukchi Sea. During the same visit, he filmed a television episode with Bear Grylls on a melting Alaska glacier. The Anchorage Museum featured a large-scale message on its façade in the Dena'ina language: *Chin'an Gu Ninyu*, or, "Welcome, you came here."

While Alaska's geography was mapped for its natural resources, it was actually at the time one of the most poorly mapped places of the globe, with coastal charts using data from Captain Cook. Better topographic maps of Mars and the moon existed than of the state. With melting sea ice and permafrost, Alaska sees a new kind of map. The National Science Foundation and the National Geospatial Intelligence Agency have released digital elevation maps from satellite data, with details sharp enough to detect the rapid changes to the topography caused by warming. Mapping is now a dynamic practice—printed maps and decorative globes cannot keep up with the pace of melting and data collection. The Arctic and Antarctic at our poles can no longer simply be colored the white of ice.

In 1996, the spoof *Bio-Dome*, starring Pauly Shore and Stephen Baldwin, offered comedy as a response to the greenhouse gases, high CO₂, nitrous oxide, and methane affecting Earth's atmosphere. Dumped by their eco-conscious girlfriends, the main characters end up in Biosphere 2, a real-life project meant to lay groundwork for future space colonization missions and act as an environmental and social experiment. In true Hollywood style, Steve Bannon, who at the time ran an investment banking firm called Bannon & Co., was hired to help make the project viable, as eight scientists were locked into a three-acre dome containing five different earthly biomes for two years, from September 1991 to September 1993. The goal was to see if humans

could survive and become self-sufficient in a closed system with no supplies coming in or out. The project failed, due more to human flaws than science. But the idea of inventing systems of sustainability for humans is no longer far-fetched.

Humankind has attempted other bold experiments and propositions to respond to changing ecologies. Frei Otto's proposal to house 40,000 people in a mile-wide dome in the Arctic Circle reflected the zeitgeist of the 1970s, when a concern about the ecological future prompted architects and other creatives to combine concern with the promise of a better tomorrow. Otto's inflatable Arctic City was to be sited on an estuary, built in tandem with a nuclear power station for energy and for heating the air for the city and the water of the harbor to keep it perpetually ice-free. The weather would not be static—it would change with the climate outside and never drop below freezing. Moveable sails would screen the continuous sunlight of the polar summer to maintain a rhythm, while, in winter, a heavy duty "artificial sun" lamp could be driven along suspended tracks for the same purpose.

Russia proposed special Arctic cities, too, such as Umka, a Siberian island, which would be fitted to house 5,000 residents underneath a huge dome, living in a sealed, luxury environment, with such amenities as parks, swimming pools, hotels, schools, and a cathedral. Outside of the fantastic, the Russians were the first to really prefabricate the Arctic, creating a new vernacular. Many prisoners of the gulag died building Arctic structures on the permafrost. In 2015, Putin issued an appeal to the UN to annex hundreds of thousands of square miles of Arctic seabed due to the existence of oil and gas.

Some fifty years beyond Frei Otto's vision, we still are talking a lot about sustainability in the Arctic and ways to be resilient. What is often neglected in future visions is the understanding that these have been resilient places for thousands of years. Indigenous knowledge is deeply rooted, gained from a long, rich arc of inhabitation of a particular place. Such knowledge offers lessons of benefit far beyond the region, as we search for a more satisfying and sustainable way to live on this planet.

As the sun grows warmer in Alaska, rapidly melting permafrost unquestionably changes how people live. Residents of Shishmaref, an Inupiat community of about 600 people, voted to relocate their community from the barrier island that has been steadily disappearing due to erosion and flooding attributed to climate change, at enormous financial and social cost. The village faces moving to the Alaska mainland, about five miles away. The island north of the Bering Strait, about one-quarter mile wide and two and a half miles long, has been grappling since the late 1960s with the loss of buildings and infrastructure caused by storm surges, continually shrinking as the shoreline is eaten away. In October 2019, a group of residents from the Yup-ik of Newtok in Alaska near the Bering Sea began settling into a new village, after spending more than two decades preparing to move. Thawing permafrost and erosion caused flooding risk as the land around homes was crumbling and sinking. In the process of moving, these Arctic residents have become some of North America's earliest climate change transplants.

These are communities that were once more mobile and nomadic, based on the seasons and food sources. Permanent infrastructure was not an asset. For Indigenous people, some of the best architecture has existed in the clothing, like the Unangan waterproof "raincoats" women sewed using the gut (intestine) of large sea mammals. This kind of thinking and architecture was sustainable, and its ability to sustain humans might be applied to future "constructions."

Indigenous technology poses relevant questions for today's visionaries and futurists. Western and more southern ideas have long been imported as models for the North, most with limited success. The North of the future is mostly likely about invention rather than imitation, about continuum over a discarding of what came before. How we live in our environment will be less

about giving things up and more about figuring out how to what we might otherwise discard—the by-products of our existence—a value and practice rooted in Indigenous cultures.

This romantic view of the North—untouched, barely inhabitable, a rugged place for rugged people and pioneers—has always only been romantic. Documentary filmmaker Ric Burns called Alaska America's unconscious³—that place of the last wilderness, our dream of a place preserved, unchanging, wild. This nostalgia for wild, remote places has prompted a new kind of frontier and pioneer, one place that romantically beckons last-chance tourists—cruise ship passengers, artists, scientists, filmmakers and others who now flock North to document the plight of place and its icons—from polar bears to eroding coastlines and those aboriginal to the land. Today a voyage to the North is trendy and boutique. The Arctic has become sexy—the place to go to, a place to assume the role of voyeur. Locals become the subject of interviews and stereotypes of perceived catastrophe.⁴ Sociologist John Urry defined the “tourist gaze” as a dangerous tendency for visitors to seek out predetermined sights deemed authentic, and to view them as elements disassociated from their local historical and physical contexts.⁵ Such is our North.

It is unarguably compelling. Alaska is host to all of the world's key issues, from post-oil economies, to immigration and equity, climate change, forest fires, and food security. Its visual qualities are epic, from its aurora to its seas to the soaring heights of its summits, but the portrayals of the Alaska landscape today are not the Romantic views of artists like Thomas Hill, but a different kind of nostalgia and longing—for the landscape of our past. Remote places host a new kind of activism and, in many ways, it is art that first responds.

In Judith Schalanisky's *Atlas of Remote Islands*, she writes, “Paradise is an island, so is Hell.” In the Arctic, Uyedineniya Island sits at 77 degrees latitude. It is also referred to as Lonely Island or Solitude Island.⁶ While the lore of the Arctic is that of a place empty and remote, places constructed as peripheral are not passive recipients of global processes and issues. Instead, these places of political and geographical isolation become centers of transformation, adaptation, and creativity—sometimes by necessity. Creative and Indigenous voices represent place and resilience. Here, the artistic response is more often to the environment or social change, rather than a response to art itself. Thinking about art for art's sake is a luxury ill-afforded in peripheral places.

The periphery of the North has become a center and, in that process, is born a method of decolonization, empowering the voices of Indigenous communities, acknowledging language and the land, and affecting traditional definitions of creativity, research, scholarship, and knowledge. These “islands” embody histories, highlight spiritual and environmental wisdom, serve as boundary markers between home and outsiders, convey information and senses of local topography and memory, embrace natural and social connections, link present to past, and outline a much more nuanced and dynamic understanding of place.

In 2018, Danish-Icelandic artist Olafur Eliasson placed 30 blocks of glacial ice from the waters surrounding Greenland in public spaces of London (including outside Tate Modern and the Bloomberg headquarters) and left them to melt, as part of a temporary installation he called *Ice Watch*, which was intended to serve as a visual reminder of the impact of climate change. Though on a grand scale, it is not atypical of the body of artwork most often produced about climate change—the repetitive chime of the warning bell and chirp of the canary. It is likely that the transformative art of our time and place is not the art of spectacle but, instead, the art of bearing witness—an art of observation and the art of envisioning the how we best respond to our futures.

Indigenous photographer Brian Adams of Alaska visits Arctic villages, highlighting place and people in a time of change, often uploading the results to social media in real time (not unlike Brandon Stanton's “Humans of New York”). He has documented the eroding edge of the

Chukchi Sea as he takes care not to represent the environment as separate from human inhabitation. Images depict men taking saunas, boys playing basketball, and a woman standing over the day's harvest of muktuk. The images are not of hardship nor voyeurism. They convey authenticity, presenting the subsistence lifeways of the Inuit as reciprocity with the environment. Indigenous artists bring the politics of peril into the politics of knowledge. Connections to popular culture provide provocative voices with platforms of relevance, such as Inupiaq artist Allison Warden, who wrote Twitter poems and who raps about past and future, a hip-hop entry into Arctic language and identity.

In Mary Shelley's *Frankenstein*, the Arctic is a symbol of isolation and escape. For Jules Verne, the Arctic was a sci-fi hidden utopia. The current imagination, however, calls upon the Northern landscape as something more than fiction. Ever more relevant and pivotal, the North today transforms centuries and successive layers of discourse and visual representation by artists and writers of the Western and Southern worlds. The North of the imagination was cumulative; creating new views, then, takes time as well as radical disruption. At the 2019 Venice Biennale, Nunavut filmmaker Zacharias Kunuk and Norman Cohn, of the collective Isuma, webcast footage from Igloolik in Arctic Canada to the exhibition's Canadian pavilion in Italy, marking the first time an Inuit artist or group has been selected for this international stage of the art world. The project, *Silakut: Live From the Floe Edge*, featured live interviews with Inuit and views of the Arctic, highlighting both the tradition of oral histories, but also making the Arctic contemporary and bringing the periphery to the center—and the center of art. *Silakut* highlights the impact mining on the Inuit and walrus breeding grounds, but also the empowered agency of Northerners. Isuma marks a moment, a shift, as the perceived center looks North.

The familiar portrayal of the North is an outside one made up of Western images, a simplification of forms and colors and lifeways—a place of pale white and blue, a dark and cold beyond, while representations of the North from the inside, of Northern Indigenous cultures, continue to be profound, despite the outside neglect. Western Europe and American views seldom distinguish the different cultural spaces of the North; instead it is one Arctic, one pole. Indigenous cultures have long been marginalized, including in the imagery of place, left out of the depictions, and substituted with an uninhabited and uninhabitable Arctic, both pure and dangerous. As places governed by the capitals of the South; the art has been similarly governed—the outsider view more dominant.

The North is a place now in need of solutions and art is part of the collective response, helping to envision and prototype possible futures. In his *Arctic Dreams*, Barry Lopez wrote:

Once in his life a man ought to concentrate his mind upon the remembered earth. He ought to give himself up to a particular landscape in his experience; to look at it from as many angles as he can, to wonder upon it, to dwell upon it. He ought to imagine that he touches it with his hands at every season and listens to the sounds that are made upon it. He ought to imagine the creatures there and all the faintest motions of the wind. He ought to recollect the glare of the moon and the colors of the dawn and dusk.⁷

To understand the North, we have to re-complexify it, move away from the simplicity, the black-and-white and the only-Western ways of knowing. Artists can choose to simplify, or they can choose to authenticate. They can react or they can respond.

Daniel Chartier, director of the International Laboratory for the Comparative Multidisciplinary Study of Representations of the North, calls the richness and variety of the North and the constant interaction of culture to human and human to land the “ecology of the real.”⁸ The art of

the North is often activist, to counter Southern views, colonialism, and marginalization. In the 2019 Whitney Biennial, Nicholas Galanin's work *White Noise, American Prayer Rug* (2018) confronted viewers' preconceived notions of Indigenous art, using the medium of tapestry to represent a mechanistic television screen on static, juxtaposing the traditional medium and the TV image and idea of what's "real." The snow that fills the woven screen distorts everything else, a metaphor for white supremacy. Today's North is Indigenized. Contrasting with the narratives of fragile economies, Indigenous artists across the North radicalize and feminize and offer a more empowered notion of territory—based on places of knowledge, identity, spirituality, and life.

Artists continue to come to the North like the explorers of the last centuries—imagining that they are discoverers of a place still undefined and uncharted. David Buckland's Cape Farewell project exemplifies the tactics of the last decades—import artists to the North, then exhibit the imagery and responses to the exploration in places further south—perpetuating the romantic depictions of the remote, the periphery in peril. Buckland's own projection, *Burning Ice*, was created as he sailed in and around Svalbard, a far North of Norway, casting a familiar narrative of a land of ice at risk. Artists like Nicholas Galanin demonstrate that art is not an import to the North. Arctic Indigenous artists such as Sonya Kelliher-Combs (US) and Maureen Gruben (Canada) offer a compelling visual language that forms links between Indigenous life in the Arctic and global concerns—both environmental and cultural. Their use of materials, such as fur, intestines, and skin, combined with resin and vinyl, link traditional knowledge and lifeways, and a tacit knowledge of the land, with narratives of human rights, geography, and culture—embodying a new kind of explicit activism and feminism, with intimate materials and personal narratives extending outward to bring new understanding to the acts of hunting, gathering, communal preparation, and sharing as well as to the acts of colonialism (Figure 25.1).

New ways of understanding (and "exploring") the North are a conversation in architecture and design as well. BIG (Bjarke Ingels Group) speaks of designing and building for the world that we want to inhabit, picking up where our ancestors left off and advocating for an

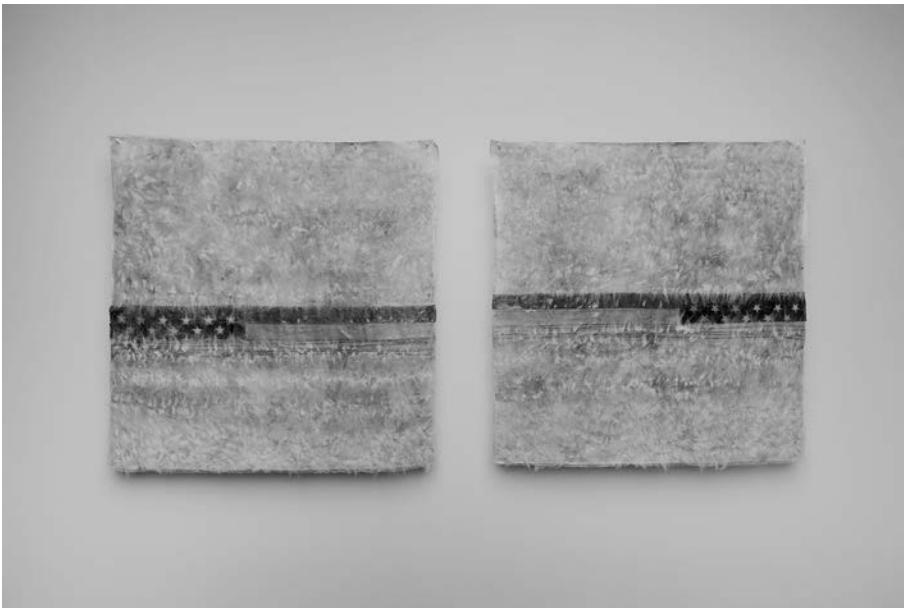


Figure 25.1 Sonya Kelliher-Combs, *Mark, Polar Bear*, 2018

aspirational architecture, embedded with knowledge from the past. BIG cites Mediterranean Greek villages, with building façades coated in white to reflect heat, and igloos of the Arctic, designed using the highly insulating properties of packed snow to create a minimum surface area of thermal exposure within a maximum contained volume. BIG proposes not that we return to old vernacular styles, but that we make use of our new tools and our continuum of knowledge as we travel from one extreme climate to its opposite, that architecture is in a symbiotic relationship with its surrounds. The harsher the climate gets, the more intense its impact on the architecture.⁹ The contemporary Arctic attracts designers, architects, and students who envision a Modern North—practicality married to the aesthetics of everywhere. But constructing this “new” Arctic must consider the extremes of materials, logistics, and histories in addition to the extremes of landscape. Rather than importing the new, the solutions for the future need to buy into a hybrid of local knowledge and new technology, past and future.

In 2014, the architecture firm Lateral Office represented Canada at the Venice Biennale in Architecture. Their exhibition included models of Nunavut buildings, carved from soapstone, and speculative architectural prototypes and animations for the future. Mason White and Lola Sheppard formed the speculative design collaboration as an experimental design practice that has consistently focused on the role of architecture in the Arctic, stressing culturally responsive and sustainable design principles of adaptability, multi-functionality and responsiveness to energy, geography, climate and culture. Their work has included Ice Road Truck Stops, Health Hangars and a Northern Food Network, each of which preserves existing contexts and evolved infrastructures—a practice based on listening, observing, and respecting the knowledge of place. Their latest publication, *Many Norths: Spatial Practice in a Polar Territory*, charts Canada’s Arctic region and its dramatic transformations in sovereignty, Indigeneity, resources, and trade, seeking to empower a distinct Northern vernacular.

From Scotland, design collaborative Lateral North speculates about a future North fueled by migration and tourism, with landscapes connected via a hyperloop and hyper-networked tourist locations. American art critic Lucy Lippard advocated for design practices that are place-specific and locally based, which include people and consider the social and environmental agency of the local.¹⁰ Matthew Jull and Leena Cho, founders of the Arctic Design Group, engage Arctic issues via design studios, research, and creative practice. Their work urges reflection and recognition of the Arctic region as a lived place that is both animated by and actively sculpting its physical and material landscapes. While many of these designers examine the North from the South, they reinforce the notion that the Arctic is a catalyst for rethinking the built environment from the scale of buildings and infrastructures to that of cities. The Arctic is, again, a testing ground, and this time for every discipline (Figure 25.2).

Seattle-based artist John Grade’s used salvaged Alaskan yellow cedar to create *Murmur: Arctic Realities*, a sculptural representation of a pingo—a hill of ice that grows over centuries in the Arctic’s highest latitudes, then collapses, pockmarking the tundra. Grade simulated a pingo in Alaska’s Noatak National Preserve at 80 degrees latitude through photogrammetry mapping. The sculpture opens and closes, mimicking the pingo’s life cycle at a time when this is accelerating due to unprecedented environmental change. Pingos are ever more frequent in the Arctic, opening up holes in the landscape. In the forests of Eastern Siberia these craters are swallowing thousands of trees and revealing geographical strata dating back hundreds of thousands of years, hinting at a vast underworld. Retreating glaciers in areas like the Himalayas are revealing bodies that had been lost to ice in previous ages.¹¹

Darkening, a 2019 exhibition of Lorna Simpson’s glacial paintings, featured large-scale landscapes thick with icebergs in dark blue tones, some with superimposed faces of black women. Dark times mean dark paintings, Simpson suggests. Here, landscape becomes body, politics, and



Figure 25.2 John Grade, *Murmur: Arctic Realities*, installation view, Anchorage Museum, AK, 2018

poetry. With a poem by Robin Coste Lewis as an introduction, Lewis suggests we may only see the surface: “... so much believed to be white is actually—strikingly—blue.”¹² Simpson’s Arctic darkness doubles for tones of racism and justice. The Arctic is a symbol of depth and despair, a need to look beyond what we think we see and know.

We are no longer anticipating the epoch once declared the future apocalypse; we are living in it. Ancient methane deposits are being released from melting permafrost; anthrax spores released from thawing reindeer corpses. The long arc of geological time—deep time—is contrasted with the unprecedented pace of the crisis of climate change. In his book *Underland: A Deep Time Journey*, Robert MacFarlane writes, “Things (geography) endures, outlive us. Deep time is measured in units that humble the human instant: epochs and eons, instead of minutes and years... We stand with our toes, as well as our heels, on a brink.” MacFarlane proposes deep time as a radical perspective to provoke us to action beyond apathy.

The Northern landscape is best understood through a narrative of renewed nostalgia and now-manufactured landscapes, contrasted and intertwined with a continuum of Indigenous knowledge and new visions for human lifeways in an inevitably changed world. The North is increasingly the indicator of the future for all places. It is contemporary and global; close rather than remote, no longer segregated to the politics of anticipation. Humans have been the most powerful geomorphological force on Earth for the last 1000 years. Only through radical creative response will we adapt to what lies ahead.

Notes

- 1 Maria Sháa Tláa Williams, *Alaska Native Reader: History, Culture, Politics* (Durham, NC: Duke University Press, 2009), 1.
- 2 Salma Monani and Joni Adamson, *Ecocriticism and Indigenous Studies* (New York and Abingdon: Routledge, 2016); Banerjee, 71.
- 3 Lecture by Ric Burns at the Anchorage Museum, October 13, 2017.

- 4 John W. Kress, Jeffrey K. Stine, Edward O. Wilson, Elizabeth Kolbert, Thomas E. Lovejoy, *Living in the Anthropocene: Earth in the Age of Humans* (Washington, DC: Smithsonian Books, 2017); Banerjee, “Why Polar Bear? Seeing the Arctic Anew.”
- 5 John Urry, September 2001, Cityscapes Conference, Graz.
- 6 Judith Schalansky, *Atlas of Remote Islands: Fifty Islands I Have Not Visited and Never Will* (Penguin Books, 2009), 21.
- 7 Barry Lopez, *Arctic Dreams* (New York: Penguin Random House, 1986), 45.
- 8 Daniel Chartier, *What Is the Imagined North? Ethical Principles*, Arctic Arts Summit, Harstad (Norway), Arctic Arts Summit and Montréal (Canada), Imaginaire | Nord, “Isberg,” 2018.
- 9 Bjarke Ingels, BIG. *HOTTO COLD. An Odyssey of Architectural Adaptation* (Taschen, 2019), 39.
- 10 Lucy Lippard, *The Lure of the Local: Senses of Place in a Multicentered Society* (New York: The New Press, 2007).
- 11 Robert Macfarlane, *Underland: A Deep Time Journey* (New York: W. W. Norton & Company, 2019), 14.
- 12 Robin Coste Lewis, *Using Black to Paint Light: Walking Through a Matisse Exhibit Thinking about the Arctic and Matthew Henson* (New York: Hauser & Wirth, 2019).

CAPTURING NATURE

Eco-Justice in African Art

Nomusa Makhubu

Introduction: “Those who captured us also captured nature”

Each year, the low-lying Cape Flats in Cape Town—home to the majority of working-class black South Africans—experiences seasonal floods in the winter months. In the 1950s, the Apartheid government forcibly moved black people from the city centre to these ecologically fragile areas through the notorious Group Areas Act, reserving more habitable areas around Table Mountain and the Atlantic Seaboard for whites.¹ While flooding and fires in the Cape Flats are commonplace, the 2017 storms were particularly devastating. In June that year, eight people died, one hundred and thirty-five schools were damaged, and six hundred homes were destroyed.²

In response, Andile Mngxitama, a South African politician and founder of the organization *Black First Land First* (BLF), controversially blamed the Cape storms on white monopoly capital. He argued:

What we see today is the ecological costs of capitalism and racism. [...] As long as we didn't disrupt nature, mother nature gave in abundance. [...] When we lost the battle against colonialism in (South Africa) SA apartheid, it meant loss of capacity to protect the ecosystem. Those who captured us also captured nature. Those who assaulted us also assaulted nature. [...] Africa pays the highest ecological cost for the pollution of earth caused by whites. There are no more natural disasters. We only have white made disasters. [...] They have eaten the earth dead!³

These assertions were dismissed by commentators as “verbal diarrhoea” that should not be taken “too seriously.”⁴ Others labelled him an “African fascist,” and a “common-or-garden crazy person.”⁵ Visceral tensions like these in the South African media have become increasingly common, revealing the simultaneous politicization of nature and the deepening divisions between those who are claim to be its “caretakers,” those who exploit and commodify it, and those who are victims of that exploitation and its subsequent disasters.

How does art fit into this? There are perhaps three ways to frame an answer which I explore by analyzing three African artists. Through a selection of artworks by artists, Maurice Mbikayi (Democratic Republic of Congo), Lungiswa Gqunta (South Africa) and Jelili Atiku (Nigeria), I analyse some of the ways in which nature representations unmask the complexities of colonialisms

that have created an specific relationship with “nature in Africa”. By engaging with primitivism—the estrangement of Africans that paradoxically pervaded negritude’s nationalist ideology—I discuss *retrofuturist* depictions of nature during the emergence of postcolonial African nation-states. Pseudo-scientific primitivism peculiarized Africa and Africans as “dangerous.” Danger is explored by the selected artists as part of the ruthless pragmatism of imperialism.

Nature is conflictual. As a produced site of struggle, it is the articulation of “fixed” and fluid identities (Smith, 2007). In modern and contemporary African art it is entrenched in narratives of colonial violence. The naturalized crimes of accumulation by dispossession by colonialists and monopoly capitalists are buttressed against the portrayal of Africans as either naively nature-bound, absent from “nature” or posing an ecological threat. Locating “nature” as both an *assault* and as a curative resource for holistic indigenous knowledge, transgressive artists show the predicament, not only in representing nature but also in how it is used in waging continuing race and class wars. It is an affective sphere that is not only seen but also deeply felt.

Lesley Green suggests tapping into intuitive modes of talking about nature as socio-political dynamic. She warns about the importance to “rethink the relationship between “scientific nature” and its alternatives” without reducing the latter to “cultural construction,” “religion,” “indigeneity,” or “superstition.”⁷ Drawing from this, I propose that the inter-related, necessarily “messy” affective politics is central to racial and class disparities in eco-justice.

Painting the Picture: The Racialization of Nature

In *How Europe Underdeveloped Africa*, Walter Rodney observes that “[b]y the fifteenth century Africans everywhere had arrived at a considerable understanding of the total ecology—of the soils, climate, animals, plants and their multiple interrelationships.”⁸ That relationship, regarded by colonialists as primitive, was severed through colonial exploits, the extraction of minerals and introduction of plant and animal species from Europe. Nature became fundamental in the colonial fantasy of Africa as a vast “wilderness.”

While Africa was fashioned as a “nature spectacle”—an image-mediated kind of nature—Africans were imagined to be absent from it (empty landscapes) or dangerous to it.⁹ Vigdis Broch-Due and Richard Schroeder point out that “Western audiences have long been accustomed to a particular version of Africa that casts it as ‘nature’ writ large in all its primordial splendor.”¹⁰

The mass media invite us to watch as Africans go about destroying forests and mountainsides with axes and machetes, depleting the fish stocks of lakes and rivers with poison and undersized nets, destroying endangered wildlife and plant species and spreading desertification by means of oversized herds.¹¹

Cast as either dangerous or wilfully ignorant destroyers of nature, Africans are positioned as an ecological threat and as self-destructive people. This characterization continues to haunt the global imaginary.

This social imaginary has also influenced how eco-justice is approached and designated as a Western and specifically “white” concern. That is, the racialization of nature becomes the racialization of eco-justice and its related forms of activism. Gabrielle Hecht draws attention to this systematic racialization of green politics and argues that “the Anthropocene feels different depending on where you are—too often, the “we” of the world is white and Western.”¹² Using hard-hitting examples such as the impact of mining on labouring African men and the deliberate re-sale of toxic fuel with high sulphur levels to African countries, Hecht not only shows how Africa(ns) have been overlooked in discourses of eco-justice but also how “greening” the

well-oiled West is founded on the demise of Africans.¹³ Imagining Africans as absent from nature or dangerous to it, it can be argued, forms part of imperialist *genocidal natures*. The predicament lies in the relationship with “nature” as historical symbol of the alienation and abjection of Africa and Africans, which simultaneously defines the sense of belonging, human rights, and dignity.

In visual arts, specifically the landscape genre, these tensions are sometimes clandestine—concealed in ideological representations of territory, property, and nativism in the guise of neutral “natural” scenery. Landscape art, W.J.T. Mitchell argues, is the “‘dreamwork’ of imperialism,” “a social hieroglyph that conceals the actual basis of value” and screens off “the violence perpetrated there.”¹⁶ Such sanitized violence becomes apparent in con-temporary art illustrating environmental racism, extractive industries, toxic waste dumping, as well as deep-rooted colonial and neo-colonial dispossession.

Echoing what Marxist geographer David Harvey calls “uneven geographical development,” modern and contemporary artists negotiate geographical difference and transmuting values and meanings of nature.¹⁴ Harvey points out that “concerns about social justice [...] intertwine with the question of how to understand foundational geographical concepts.”¹⁵ Likewise, Greg Ruiters argues that socio-ecological justice should address the question of spatial organization.¹⁶ Politics of space: spatial segregation, mobility, migration, settler-colonialism, the global flow of commodities and identities is central to the creative arts tackling eco-politics. This chapter explores the intertwining of the image of “nature” with that of the racialized African, which is at the heart of the eco-political predicament. The sentiment that “those who captured us also captured nature” aligns colonial and postcolonial injustice and neoliberal state capture with senses of belonging, constructions of the “native” and formulations of nationalist conscientiousness.

It asks that we position the question to the nature of justice itself, probing the social construction of criminality. T.J. Demos’ call to “decolonize our research methodologies” aptly positions ecology as “a method of intersectionality.”¹⁷ It is through these junctures that the artificial divide becomes less visible, and what we are left with are the messy, entangled relations intersecting through the concept of nature—more than it is a narrative about devastation, it is a concatenation of narratives reproducing each other, revealing complicity.

Retrofuturist Nature(s): Modernism, Nationalism, and the Native

The Senegalese poet and politician Sedar Senghor once remarked

The Negro is a man of nature. He traditionally lives off and with the earth, in and by the cosmos, [...] he is sound, smell, rhythm, forms and colours; unlike the white man [...]. He feels more than he sees.¹⁸

The difference between races based on the relationship to nature in Senghor’s view is that the European reasons, “tames and exploits nature” while the African, *feels* and “cohabits with it.”¹⁹ These essentialist ideas would find visual expression in Senghor’s cultural policy, which shaped national art in Senegal from the 1960s and was based on the broader philosophy of *negritude*. It coincided with the emergence of postcolonial, independent African nation-states, the rise of nationalism as an anti-colonial stance and, more profoundly, the re-conceptualization of the African from being an alienated native to being a cosmopolitan citizen through what I argue could be defined as a retrofuturist aesthetic – the idealisation of the past to articulate present and future social conditions.

Senghor’s cultural policy established a visual aesthetic of African “essence” as akin to nature, reflecting the ubiquity of primitivist styles. Curiously, however, primitivism was mainly a European

invention that decontextualized African art in fashioning Euro-American Modern art. Seen as self-primitivizing, negritude's African artists and writers seemed to "return to a land which existed in the collective imagination of the West."²⁰ The "primitivist tropes of African sensuality and harmony with nature" were used by "African and Caribbean founders of the Negritude movement [...] to critique Western modernity and valorize the distinct contribution of Africa to world culture."²¹

Moreover, primitivism in the broader negritude movement and philosophy conversely affirmed senses of belonging and anti-colonial reclamation in "returning to one's native land," to use the title of Aimé Césaire's poem "Cahier d'un retour au pays natal" (Notebook of a Return to a Native Land). Textured with metaphors of nature, the poem addresses the alienating condition of colonialism and defines negritude as an ideology of cultural nationalism. The metaphors of the violence staged on "nature" are juxtaposed with the significance of nature in understanding "rootedness" and cultural nationalist consciousness. As Abiola Irele observes, "[t]he fundamental proposition of a relation between self and environment" leads "the idea of Césaire's Caribbean nationalism," and represents "a growing with and into the natural environment."²² It recalls "the devastating wash of history over the land" as the "determination to implant the memory of this history in collective awareness."²³ In mirroring "nature" with "self," nature is evoked as a sentient being.

This paradox split artists between those who espoused negritude and those who rejected it.²⁴ Artists such as the Senegalese artist, Iba Ndiaye, saw primitivist negritude as regressive. He warned his students to

be on guard against those who insist that you must be "Africans" before being painters or sculptors, for those who, in the name of authenticity, which remains to be defined, continue to want to preserve you in an *exotic garden*.

[own emphasis]²⁵

The primitivist aesthetic annihilated particularities and generalized African art.

Pierre Lods, founder of the Poto Poto school in Congo-Brazzaville, who was invited by Senghor to teach at the Ecole des Arts du Senegal, regarded primitivism as a necessary step in distinguishing African art. He advocated for caricatured nature as a methodology—African artists should "naturally" possess distinct ways of creating art. In defining his encounter with one of the artists who were part of the Poto Poto school, Felix Ossali, he stated:

I will never forget my servant Ossali's pleasure when I found him [...] painting blue birds on an old navigation chart from Oubangui. They were disturbing and comical, these birds, shaped like knives being thrown [...] they were *unquestionably negro*—by the effectiveness of their impact, and the sense of greatness and magic that emanated from them. The next day Ossali painted a scarlet mountain against a black background, in oils. Above, five red lines represented a palm tree, like an open hand [...] Our ambition [...] is merely a phase [...] for the possibility in store of a *future return to their roots* [own emphasis].²⁶

Lods' encounter divulges the retrofuturist sensibilities in which the African seems *misplaced* in future-time and it is only through the affinity with nature—a one-ness that "emanates magic"—that he can return to his "rightful" place in a mythic past. In that same speech, however, Lods discusses this aesthetic as a way to condemn the racist rhetoric defining the African as barbaric.

Likewise, Pierre-Romain Desfossés, who established Le Hangar (The Warehouse) also known as the Académie d'Art Populaire d'Elizabéthville in 1946 in the Democratic Republic of Congo, encouraged African artists to paint nature scenes. For example, the paintings of artists such as Pili-Pili Mulongoy and Mwenze Kibwanga are mostly of "nature" and wildlife. Mulongoy's paintings depicted antelopes, snakes, birds, guinea fowl and leopards in patterned leafy

landscapes. Similarly representing hunting and harvesting, Kibwanga used short brushstrokes, rendering nature and human figures as fragmented, evoking the brutal mutilation and enslavement of the Congolese by Belgium in the late 1880s for the exploitative extraction of rubber.

Nature scenes, argues the philosopher V.Y. Mudimbe, “might seem to spring from nature but they do not: it is in the gaze of the observer that African animals in their spaces are transmuted into aesthetic objects and take on semiotic status, becoming narratives of the natural.”²⁷ Mudimbe therefore suggests that nature scenes could be interpreted and “read” as text. They become, in other words, value-laden as signs for displacement, detachment, alienation, and violence, even when they appear pristine, idealistic and sanitized, marking the experience of the colonial “native” and the postcolonial citizen in relation to the settler. The historian William Cronon points out that “nature” as a “profoundly human construction” is “not nearly so natural as it seems.”²⁸ Our uses of it are “so entangled with our own values and assumptions” such that it “says as much about ourselves as about the things we label with that word.”²⁹ In re-fashioning the “colonial native” anew, the postcolonial citizen seems to face a perpetual entanglement with the settler, located in racializing ideologies of nature.

The Eco-Politics of Dandyism, Self-Fashioning, and Technology

Technological, futurist capitalist developments are seen as part of the annihilation and devouring of “nature.” Portraying technology as a disruptive force but also as integral to “nature-as-culture,” the Congolese contemporary artist Maurice Mbikayi conceptualized the techno-dandy—a roaming hermetical figure, a dandy revealing the effects of electronic waste dumping.

The photograph titled *Bilele* (2016) depicts Mbikayi posing elegantly in front of two rows of shacks lining a polluted canal in Masiphumelele, a black township in the Western Cape, South Africa, that was built on wetlands (Figure 26.1). Mbikayi wears a suit made from computer



Figure 26.1 Maurice Mbikayi, *Bilele*, 2016
Source: Photograph by Ashley Walters

keyboards. The techno-dandy is fashioned after the Congolese SAPEURS (*Société des Ambianceurs et des Personnes Elegantes* or the Society of Tastemakers and Elegant People)—a phenomenon of young dandies in the Congo who were influenced by the flamboyant musician Papa Wemba. Juxtaposing the image of the dandy with the ecologically disastrous context of the Masiphumelele, *Bilele* stages eco-violence as systemic violence, through environmental racism.

Although this particular work is located in a South African township, Mbikayi's oeuvre is a response to the dumping of electronic waste in African countries, specifically the DRC, by international companies. He not only points to the disastrous effects of toxic e-waste but to the injustice in the exploitative extraction of Coltan (Columban-Tantalite)—“a mineral that is used to make all the technological devices we use—airplanes, rockets, TVs, cars, mobile phones, computers, guns.”³⁰ He asserts that his work addresses “rampant capitalism,” which is “expressed in mining wealth, dumping zones and the war business on the African continent.” At the core of the meaning of nature is the sense of colonial injustice.

Bilele, states Mbikayi, “is a Lingala slang from the word *Bilamba* which means clothing or garments.”³¹ It refers to “designed and expensive garments” and to showing off. When I interviewed Mbikayi, he explained: “I wanted to portray how most of the SAPEURS (or *skhothane* in South Africa) come from poor backgrounds; however, the skill of dressing up has been used as a weapon, it is a subversive strategy.” While performing *Bilele*, Mbikayi states that most bystanders associated the techno-dandy with *skhothane*, but it was the material, that was interpreted as a subversion of conspicuous consumption.

The *skhothanes* (an isiZulu word for “those who lick each other” or “lick their fingers to count money”) are young South African urban youth from poor families in black townships who purchase expensive clothes, food, and alcohol which they show off and then burn publicly. Some see the public burning as wasteful and unfair to their working-class parents who are pressured to take out loans.³² Skhothanes often declare that they do not take money from their parents but hustle to make money for clothing. Through destroying commodities, they seek to gain respect, but this reflects the destructive nature of capitalism. Connecting the devastating environment of townships with the flow of commodities (and land as commodity), this dandyism does not represent ostentatious wealth but rather how young people from poor townships appropriate, in order to subvert, the propensity of the middle class and bourgeoisie for conspicuous consumption and dispensing of excess. During Apartheid, black people “wore clothes [they] received as domestic workers” from white families.³³ The “dumping of excess” on black people was similar to the ways in which black people were dumped in ecologically fragile areas near dumps and factories. Mbikayi's work illuminates the vicious cycle in which the poor are dispensable surplus.

Embodied by *skhothane* and the SAPEUR, the dandy is a tragic figure. While the dandy connotes emancipatory black subjectivity, it is entwined in the flow of commodities associated with, but subverting, white wealth. The *skhothane*, specifically, is embroiled in the futility of excess. Since the expensive commodities are burnt soon after they are bought, the *skhothane* recuperates the primitivist idea of the African while parodying the destructive nature of capitalist excess, evoking what Njabulo Ndebele calls “spectacle of excess” where black South Africans face “mass economic exploitation the ultimate symbol of which is the mining industry,” and “the luxurious life-style of whites” and “high commodity consumption.”³⁴ These contrasts allude to the commodification of nature by international corporations, which produce, destroy, and re-create nature in the accumulation of capital. This evokes Neil Smith's notion of the financialization of nature or “nature as accumulation strategy,” shifting the first nature–second nature thesis where “first nature comes to be produced from within and as a part of this second nature itself.”³⁵

Highlighting these disparities, Mbikayi places the dandy within the ecological tragedy in Masiphumelele. The name of the township—a Xhosa phrase for “let us succeed”—is “significant to the meaning of [this] work,” Mbikayi explains. Masiphumelele is regarded by the provincial government as a “illegal occupation” since it is located on wetlands, it represents government failure.³⁶ The City of Cape Town and South African National Parks (SANParks) have “long-standing interdicts in place to protect the wetlands” from what they see as an overcrowded “invasion.”³⁷

Not far from Masiphumelele, there are luxurious, exclusive “eco-estates” on the slopes of the mountain with the view of the sea. Bruce Baigrie and Henrik Ernstson point out that these eco-estates exploit “‘green’ arguments of sustainability” and omit “the destruction of vegetation and animal habitat that their design requires.”³⁸ This juxtaposition of extreme wealth with devastating poverty is bolstered by the differentiation between black occupants who are seen as illegal invaders and white residents who are fashioned as caretakers for nature. In creating what Baigrie and Ernstson (2017) term “settler public spheres,” exclusive, racialized estates conceal what they destroy and

tap into a settler colonial mentality [...]. Back then, the private garden—and, later, botanical gardens and game reserves—displayed settler identity and evoked a sense of accomplishment and home with the planting of European species imported to domesticate the “wild” African landscape. Fast forward to today’s “eco-estates,” where indigenous landscaping has become popular and replaced European “exotic plants” and which offer a tempting life-style choice for the rich: You are not simply buying a house, but you also protect nature.³⁹

Conversely, Mbikayi positions the techno-dandy as an eco-activist *in* black townships. Utilizing the metaphors of struggle, he declares that the techno-dandy “expresses the concept of rebirth, linking the past, present and future: from a techno trash-man, exposed to e-waste dangers, to a stylish dandy. He’s a warrior.” *Bilele* “proposes liberation of the black body as a racially degrading location.”

For Mbikayi, images linked to eco-politics are “ironic” in that they “normalise the crisis of waste management.” The ironies of the “resource curse” are illustrated by continued mineral extraction in creating “green” technologies, and philanthrocapitalism where “investments” in the Green Revolution in Africa are part of monetizing nature, sustaining internal conflicts and leading to the deaths of many. Mbikayi explains that “there are realities pertaining to the disposing of electronic waste” in his work and “the impact on people and the environment [in] particular zones of Africa.” The paradox that Mbikayi identifies is that the very source of mining wealth is also “a dumping zone for developed worlds in their quest for higher technology.” He likens the “mining [of] resources and the collection of e-waste in Africa” to “slave labour,” arguing that his work is “intended to simultaneously symbolize the pain of a continent that grapples with e-waste, the detritus of obsolete technology, and the narcissism of keeping up with technological fashions.”

It is not surprising, therefore, that in his performances, Mbikayi often wears a bandage covering his body beneath the computer keyboard suit. The bandage signifies the continued assault but also “the process of healing, the duality of strength and fragility” and contrasts the obsolete technology costume which denotes “strength as armour—the resistance against socio-political and environmental crisis.” Mbikayi’s work questions the relationship between the African and “nature” by locating the destructive flow of commodities at the crux of the predicament of nature as a site of struggle.

Conflictual Nature—Danger and the Environment

South African artist Lungiswa Gqunta participated in the exhibition *Garden of Earthly Delights* (2019) at Gropius Bau in Berlin, Germany. The exhibition uses “the space of the garden as a metaphor for the state of the world.” It is “defined by radical climate change and migratory flows” and “can be seen as a place of paradise and exile, reflecting [...] the anthropocene, seed politics, the legacies of colonialism and historical segregation.”⁴⁰ Gqunta’s installation, *Lawn I* (2019), is a large lawn made using 3330 upside down broken bottles (Figure 26.2). In each bottle is a fluid made “from water, two different types of ink and unleaded petrol.”⁴¹ To resemble grass, two types of green ink were used.

In this remarkable installation, the lawn is untouchable and dangerous—each shard is like a weapon and the petrol smell is dizzying. The lawn is a “no go zone” connoting how broken glass is used atop urban residential fences to keep trespassers out. It is the quintessential privatization of nature. This method of securitizing private property signals the psychosocial paranoia in South Africa that is often aimed at, specifically, black trespassers. Placed on the perimeter of the garden, the broken glass marks the violence of private property entrenched in the politics of land dispossession, inequality and the fear of what the apartheid government referred to as *Swart Gevaar* (*Black Danger*)—the perception that criminalized black people as a threat to white people, even as workers in white households. The garden, writes Kathryn O’Regan, “is far from a safe haven here, but a ferocious battle ground.”⁴²

In *Civilising Grass*, Jonathan Cane argues that the lawn is political and should be “denaturalised.”⁴³ He also proposes that the South African lawn “conceptually, aesthetically, materially and ecologically [...] comes from somewhere else,” it signifies racialized labour, desires family and represents failure as “a temporary victory” over “wildness.”⁴⁴ In South African black townships, however, lawns are very small, reflecting the lack of spaces for the enjoyment of “nature.”



Figure 26.2 Lungiswa Gqunta, *Lawn I*, 2016/2017

Often located in heavily polluted areas near factories and mines, local dumps, mine dumps and open sewers, the maintenance of township lawns is more taxing.

Gqunta, notes that “Lawns in the suburbs are everything the lawns in townships are not—green all year round, large and seemingly boundless, well-nurtured and most importantly they are unoccupied.” Further, she remarks that they “are markers of wealth as opposed to places of communal gatherings like I know them to be” because “when you don’t have much space and you’re raising a family in your RDP house, a lawn is simply a patch of grass that if not occupied by kids playing, it’s also where your clothes hang.”⁴⁵ It is different to the “large, even and untouched area behind bulky metal gates and electric fences” in suburbs.

In my interview with Gqunta, she states that the “role of the petrol was to cause a discomfort (headaches) and an extreme sense of self-awareness in the space so people were cautious.” It alludes to the typical warning on manicured lawns to KEEP OFF THE GRASS so as to sustain its aesthetic. The petrol in broken bottles also connotes petrol bombs, making the lawn combustible. The possible explosion signifies a crisis in which the privatization of nature spurs cyclical violence.

In a different, but equally dangerous artwork, Nigerian-born artist Jelili Atiku uses crude oil to reflect on extractive oil industries in Nigeria. The performance *Let Me Clutch Thee* (2017) was a collaboration with Tasme Pillay. The two performed as a couple getting married. Leading a procession, Atiku carries a bouquet of flowers and a basket of grapes while Pillay struggles to pull empty oil cans. The performance takes place in the Company Gardens—the garden that was established in 1652 by the Dutch East India Company who used it as a refreshment station. It became a founding place for European Settlers.

Atiku and Pillay walk from the garden into the South African National Art Gallery where the remainder of the performance takes place. During the performance, Pillay pours buckets of black crude oil on Atiku. The smell of the oil overwhelms the space. As Atiku tries to walk, he slips and falls into more oil. His white wedding dress stains black in the oil sludge. He takes off the dress to reveal the oil that covers his skin. The couple struggle to move through the slippery oil, making their movements futile. Atiku portrays the relentless extractive relationship as a “colonial marriage”—a violent relationship that cripples the other partner.

In an interview Atiku states: “[t]housands of people continue to live in abject poverty and die every day due to the effects of oil spillage and clashes over the land. The earth in the Niger Delta has been destroyed completely.”⁴⁶ Oil in Nigeria has been at the root of internal and international conflict. British oil interests exacerbated the situation, leading to the secession of Biafra and civil war from 1967 to 1970. Since the 1990s, there has been ongoing conflict between ethnic groups in the Niger Delta which is fuelled by international oil corporations.

Atiku explains that the toxic nature of the oil attracted several warnings. In response, he stated:

I’m going to pour the oil directly onto my body and when I get back to Nigeria, I will need to be on medication for this exposure. I will feel the damage done by this contact which is part of the post-performance experience for me. When Saro-Wiwa was killed, he laid down his life for his community, who continue to feel the effects of the oil. In that you can see the consequences and inhumanity of the industry.⁴⁷

For Atiku, the risk is palpable as part of ordinary everyday life in the Niger Delta. His work poses a question pertaining to the normalization of ecological risk by staging a customary ritual such as “white wedding” in order to show how grotesque petro-capitalism is. Geographer Michael Watts theorized petroculturalism in understanding the oil complex through which the presence of oil

companies in places like the Niger Delta alter “customary forms of community, inter-ethnic relations and local state institutions, principally through the property and land disputes” by “offering oil concessions.”⁴⁸ The perpetual state of conflict created by oil interests and systematic extermination of African life through the re-sale of toxic fuel, is reflected in this work through the interaction of the couple as they continuously fall, revealing the hidden crimes of international corporations.⁴⁹

Conclusion: Nature and Justice

The image is powerful. It shapes ideas and turns them into reality. It persuades, deceives, and reveals. How we perceive the world is mostly informed by the images we see. Engaging with how conflictual difference is produced through nature important in eco-justice. Ruiters’ view that “perceptions of the physical world and nature are bound up with the creation of meaningful social identities and how these are reconfigured when the politics of nature changes,” is apt.⁵⁰ But it also necessitates bold confrontation of the racialization of nature and justice.

The contradictions entrenched in the relationship to nature informs the kinds of eco-activism. While artists are not always part of environmentalist movements or partaking in advocacy, they play an important role in showing how affect points to “justice” as question and not a given. In threading together historical narratives, colonial violence, continued conflicts, and reclamations of dignity, they uncover the processes of racialization and environmental racism. For some, self-fashioning becomes a way to change the primitivizing image of the African in the “exotic garden” or as an ecological threat. The criminalizing image has shaped how we think about “justice.” Ruiters suggests that “justice is [...] not merely about the equitable and class-neutral implementation of laws.”⁵¹ It is, as I have shown, about conflict and bias. Modern and contemporary African art illuminates the changing modes of relating nature and justice. It poses pressing questions about the feeling of injustice and the production of difference.

Notes

- 1 The term black is used as an inclusive term, defining African, Indian, and Coloured (mixed race) people in South Africa or the groups which the South African government defined as ‘non-white’ but classified each separately.
- 2 “Cape storm damages 135 schools across Western Cape,” *The Citizen*, June 9, 2017. Accessed April 16, 2019, <https://citizen.co.za/news/south-africa/1535283/live-capestorm/>.
- 3 Siphso Kings, “Cape storms the fault of ‘white monopoly capital’ – Andile Mngxitama,” *PoliticsWeb*, June 10, 2017. Accessed April 16, 2019, www.politicsweb.co.za/politics/cape-storms-the-fault-of-white-monopoly-capital--a.
- 4 Ezra Claymore, “White Monopoly Capital to blame for storms. Black First Land First leader,” *The South African*, June 9, 2017. Accessed April 16, 2019, www.thesouthafrican.com/lifestyle/white-monopoly-capital-to-blame-for-storms-black-first-land-first/.
- 5 John Ellis, “Andile Mngxitama: An African Fascist in the Making?,” *Johnelliswords*, August 25, 2017. Accessed April 16, 2019 <https://johnelliswords.wordpress.com/2017/08/25/andile-mngxitama-a-black-fascist-in-the-making/>.
- 6 W.J.T. Mitchell, *Landscape and Power* (Chicago and London: University of Chicago Press, 1994), 5–10.
- 7 Lesley Green, *Contested Ecologies: Dialogues in the South on Nature and Knowledge* (Cape Town: HSRC Press, 2013), 1–2.
- 8 Walter Rodney, *How Europe Underdeveloped Africa* (Nairobi, Kampala, Dar Es Salaam: East African Educational Publishers, 1972), 44.
- 9 Jim Igoe, *The Nature of Spectacle: On Images, Money, and Conserving Capitalism* (Tucson: The University of Arizona Press, 2017).
- 10 Vigdis Broch-Due and Richard A. Schroeder, *Producing Nature and Poverty in Africa* (Stockholm: Nordiska Africainstitutet, 2000), 11.
- 11 Broch-Due and Schroeder, *Producing Nature*, 22

- 12 Gabrielle Hecht, "The African Anthropocene," *Aeon*, February 6, 2018. Accessed October 9, 2019, <https://aeon.co/essays/if-we-talk-about-hurting-our-planet-who-exactly-is-the-we>.
- 13 Hecht, "The African Anthropocene."
- 14 David Harvey, *Justice, Nature and the Geography of Difference* (Cambridge, MA: Blackwell Publishers, 1996), 6.
- 15 Harvey, *Justice*, 6.
- 16 Greg Ruiters, "Environmental Racism and Justice in South Africa's Transition," *Politikon: South African Journal of Political Studies* 28, no. 1 (2001): 98.
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PART V

Multispecies Justice

“Human societies have experienced many pandemics like the one we are experiencing today,” noted historian Angelos Chaniotis wrote in the midst of the 2020 coronavirus outbreak, preceded by others across history from the 430 B.C.E. plague that caused widespread death and devastation in Greece, and the 1918 Spanish flu, to post-WWII viruses and diseases like HIV/AIDS that first appeared in the Congo in 1959, Ebola that emerged in 1976 in South Sudan and the Congo, and SARS that surfaced in China in 2002.¹ Understanding the social impacts of, and responses to, previous pandemics is essential in guiding public health policy today, particularly at a time when their zoonotic varieties may be on the rise owing to increased human incursions into previously undisturbed habitats.² COVID-19, however, is noteworthy in terms of its ecological etiology, symptomatic of the escalating, global biodiversity crisis.³ The pandemic has brought the unsustainable, but often unquestioned, anthropocentrism ordering contemporary capitalist society—the fundamental belief that human life is both extricable from, and superior to, other life—into clear resolution. The relegation of the non-human to object and/or commodity, as enacted in deforestation and extractive projects, has likely led to the present pandemic in the first place, insofar as such ecosystem destruction opens novel pathways for non-human animal-originated viruses. While vaccine researchers rush to save human lives (and some cash in on their pharmaceutical innovations, which in turn grants calls for free, open-access vaccine technology a climate-justice priority), the emergency nonetheless tends to hide the pandemic’s toll on more-than-human communities. Considering the incalculable profusion of sanitizers and other chemicals, latex gloves and disposable masks in recent months, a multispecies justice perspective generates sensitivity to the entanglements of those disproportionately affected, potentially sickened and killed, by the hazardous medical waste and their resulting toxic environments: both frontline human communities and particularly those in the Global South, and manifold insects, plants, and animals.

It is thus clear why the biodiversity crisis matters to this volume on climate breakdown and its diverse modalities of visibility: because the two are integrally connected. As it turns out, the historic United Nations 1992 Earth Summit in Rio de Janeiro gave rise to both the United Nations Framework Convention on Climate Change (UNFCCC) for addressing the climate crisis, and the Convention on Biological Diversity (CBD) for addressing the biodiversity crisis. While the UNFCCC was successful in getting the Paris (Climate) Agreement drafted and signed by 196 nations (although the U.S., under the Trump Administration, has ceased all

participation in the accord), the CBD has been slower in gathering support. In the last few years, however, the latter organization has gained momentum with the establishment of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). No doubt that momentum owes to the increasing recognition of the severity of the mounting crisis. In May 2019, the IPBES issued a grim warning: one million animal and plant species are threatened with extinction, many within decades, all due to human—and, more precisely, modern, industrial, corporate, and extractive—activities.⁴

The two crises—climate change and biodiversity loss—are equally significant, each carrying its own set of drivers, even while both also contribute to the escalation of the other in significant ways. The IPBES assessment listed the central drivers of the biodiversity crisis as follows: (1) changes in land and sea use; (2) direct exploitation of organisms; (3) climate change; (4) pollution; and (5) invasive alien species. Against such seemingly clear delineations, we as editors of the present volume are determined to highlight climate's irrepressibly entangled and expansive nature; in turn, we are committed to an inclusive, life-affirming, and multispecies justice-based ethics. It is therefore crucial, in highlighting the current perils to non-human lives and ecosystems, to amplify the important role of grassroots activists and artists, especially where they connect with humanities and social-science research, in mitigating and resisting biological annihilation—including human-caused species extinctions, mass die-offs, and massacres—that owes to a complex, multi-vectored causality.⁵ These concerns also connect to widespread criticism of industrial animal agriculture and intensive animal farming, ethically posed in the articulations of animal rights philosophy and environmental- and climate-justice activism alike.

Given these mounting concerns, it is not surprising that the arts, humanities, and social sciences have increasingly engaged the biodiversity crisis over the past two decades, joining a growing field of academic inquiry now called multispecies studies. The primary interdisciplinary engagements have included multispecies ethnography, post-human anthropology, feminist science studies, and, more broadly, environmental humanities research (including critical animal studies).⁶ Ecocriticism, art history, visual culture, and social-movement research have also joined the fray.⁷ Scholars have invoked the term “multispecies justice” to bring more-than-human ecology into conversation with ethics and politics, even while there is neither an agreed-upon definition of multispecies justice (a term tellingly missing from *Keywords for Environment Studies*, the closest in the 2016 volume being “biodiversity,” “conservation preservation,” and “political ecology”⁸), nor agreed-upon principles (the phrase being absent, for instance, from the landmark *Principles of Environmental Justice* formulated by the First National People of Color Environmental Leadership Summit held in 1991 in Washington D.C.⁹).

While it may take some time before a definition and a set of principles are clearly established, multispecies justice discourse remains a vital space for interdisciplinary research appropriate to the expansive intersections of the Anthropocene, or what Donna Haraway, in a critique of the latter's unrepentant anthropocentrism, terms the Chthulucene—the age of multispecies being and its infinite relationalities.¹⁰ It is clearly of use as well to more specific interrogations of the Plantationocene, a term of multispecies ethnography and related disciplines that investigate the variegated modern history of the plantation as an organizing matrix for the multispecies disciplining of labor, plants, and animals.¹¹ It also creates a crucial arena for bringing concepts of justice and legal protections—normally contained within the socially differentiated human realm—to the wider web of life and its diverse inhabitants according to new paradigms of post-anthropocentric legality. Most directly exemplifying this latter conjuncture is the ecocentric juridico-political revolution currently unfolding under the name Rights of Nature, which seeks to bring legal subjecthood and protections to nonhuman beings, and establish the criminality of ecocide on the same international level of recognition as genocide against humans.¹²

If multispecies justice materializes within and through social movements, including their visual, sensible politics that is a key focus of this volume, its founding might be dated to 1962 with the publication of Rachel Carson's *Silent Spring*. Carson's book represents a turning point that expanded and popularized environmental justice concerns beyond those focused largely on land and species conservation. It also sounded the alarm on the perils of industrial pollution to non-human lives (even though long-known to Indigenous peoples suffering the multispecies violence of colonial land transformations and environmental destruction). Deservedly, journalism and scholarship have dedicated substantial attention to Carson's seminal book, which catalyzed the social movements that helped establish Earth Day and the many environmental protections adopted in the U.S. during the 1970s. But, in 1962, another significant ecological event transpired: the shelving of "Project Chariot," a plan by the US government to establish a deepwater test site in which to detonate several thermonuclear bombs about thirty miles southeast of the Iñupiat village of Point Hope on the Chukchi Sea coastline in northwest Alaska. If executed, the combined radiation from the blasts would have equaled 160 times the radiation released by the infamous Hiroshima bombing, with massive environmental destruction unleashed on the region's Indigenous peoples, marine animals, and plants. Remarkably, about three hundred Iñupiat people of Point Hope, joined by a handful of scientists and environmentalists, organized and defeated the most powerful federal government agency of its time, the U.S. Atomic Energy Commission. The project notably produced the first bioenvironmental study—an early example of the modern environmental impact statement—which raised alarm about



Figure P5.1 Arctic Refuge—Defend the Sacred Alaska rally, Fairbanks, AK, March 7, 2018
Source: Photo by Pamela A. Miller

the potential effects on Indigenous people and non-human biotic life, life that native people also rely on for nutritional, cultural and spiritual sustenance.¹³

The campaign to stop Project Chariot was arguably the first major grassroots multispecies justice campaign in the United States—and it was led by Indigenous people of Arctic Alaska. One integral figure was Howard Rock, an Iñupiaq artist of Point Hope. In 1962, Rock also founded an Indigenous-run newspaper, *Tundra Times*, which over the next three decades produced moving stories and images that advocated for and successfully secured important socio-environment rights for Alaska's Indigenous peoples. The remarkable story of Project Chariot testifies to the power and leadership of grassroots social movements and activist visual culture in successful mobilizations for multispecies justice, which is also integral to climate justice. As exemplified by *Arctic Refuge—Defend the Sacred Alaska Rally*, a photograph taken by conservationist Pamela A. Miller on March 7, 2018, in Fairbanks, Alaska, visual depictions of social-movement struggle have been instrumental in crystalizing and commemorating multispecies justice campaigns, showing how the long-term and ongoing struggle to protect a biological nursery of global significance is at once interspecies, intersectional, and intergenerational.¹⁴ Along similar lines, the contributors to this section and elsewhere in this volume—working within related contact zones of multispecies entanglements and justice-based practice—are committed to highlighting how art and visual culture are essential to addressing and advancing similarly expansive terms (Figure P5.1).

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DOING DIFFERENCE DIFFERENTLY AS WETLANDS DISAPPEAR (A CALIFORNIA STORY)

Elaine Gan

The loss of wetlands in the Central Valley of California is nearly complete. Of two million hectares known to have existed before European invasion, little more than 50,000 hectares—less than 3%—remain in the twenty-first century.¹ Over 90% were already gone by the early twentieth century when farms, irrigation districts, and reclamation agencies transformed the valley into one of the most intensely managed landscapes in the world.² A topographic map will show you that the Central Valley today covers 47,000 km² defined by three major waterways: the Sacramento River in the north, the San Joaquin River in the south, and, in between, the Delta, where the Sacramento and San Joaquin rivers meet. The map will also show you that the valley is bordered by mountain ranges: the Cascades in the north, the Tehachapi in the south, the Pacific Coast Range in the west, and the Sierra Nevadas in the east. Melting snowpack from these mountains, along with rainfall and river flows, used to fill marshes and ponds. Brimming with all sorts of life, they have been dammed and diverted to irrigate farms and service fast-growing cities.³ This valley is one of the most industrialized farm regions in the United States, producing most of the vegetables, fruits, and nuts consumed in the country and earning billions of dollars in farm revenues.⁴

At the same time, the Central Valley is home to the largest group of wintering waterfowl in the US, and serves as overwintering and breeding grounds for millions more that migrate between the Arctic tundra and South America every year. So many birds move through this particular north-south route called the Pacific Flyway⁵ because so much of their habitat is gone; there just aren't that many places for the birds to go anymore.⁶ The seasonality and scale of these migrations persist because of small patches of wetlands that are maintained by farmers, scientists, and park managers. Within massive agrotechnological grids, this stunning phenomenon recurs: once every year, rice farmers collectively flood their fields after harvest to help birds make their way through the winter (Figure 27.1). These critical holdouts for multispecies survival were made possible in the 1920s when the US Bureau of Biological Survey (later renamed the Fish & Wildlife Service) conceived of a network of wildlife refuges to protect highly threatened birds. Making the flyway visible allowed the Bureau to negotiate collaborations with farmers, hunters, and communities of bird lovers.⁷

Economy and ecology are deeply interwoven in the Central Valley. They carry, contain, and enable each other. But faced with fast-growing human populations and escalating environmental crises, a key challenge is how to maintain food supply and housing for people, while



Figure 27.1 Migrating shorebirds take over rice fields in between planting seasons at the Cosumnes River Preserve

Source: Photo by Elaine Gan, July 2018

simultaneously protecting species and their habitats. Calls for economic development are pitted against environmental concerns, as if one can be disentangled from the other. Survival is framed as a choice between humans vs. non-humans, natives vs. aliens, lives that count vs. bodies that don't belong. In the Central Valley, crops and real estate take precedence. You and I know that this is not an isolated case. We also know that this is dangerously unsustainable. So, what then is the work of critical-creative practice in urgent and troubled times? As an artist-theorist who works in the fields of feminist science and technology studies, digital media, and environmental anthropology, I offer the case of rice agriculture in the Central Valley to argue that critical-creative practice brings not only new imaginaries or new things but new methods.

A political problem has an aesthetic problem at its core.⁸ We can say the same for ecological crises. We cannot fight for what we cannot see. I use the verb “see” broadly and I follow theorist Bruno Latour in considering aesthetic practice as an opening up of sensitivities, an ability to compose, to gather up radical differences and possible shared futures. The political-ecological-aesthetic problem cannot be resolved entirely by adding those considered “Other” as yet another character or colored data point on existing metrics or forms of representation. The problem is not how to fit more humans and non-humans into the same old *conquistadores*’ map or the next new digital screen. The challenge, as I see it, is how to cultivate sensitivities (Latour’s term), how to become attuned to what Donna Haraway has theorized as cyborgs, companion species, and compost—the lively, hybrid, monstrously messy, non-pure, and non-innocent ways of being and belonging that call for new kinds of transdisciplinary thinking and situated practice.⁹ In other words, the challenge is not only to multiply *what* we see, but to change *how* and *with whom* we design and build material-semiotic apparatuses.¹⁰ The verb “see” means *seeing-with*, which is always and already a process of *becoming-with*.¹¹ Helen Verran, feminist philosopher of science who has long worked with decolonizing knowledge practices among the Yoruba in Nigeria and the Yolngu in Australia, said it best: what matters is “doing difference differently.”¹²

The Central Valley is good to see-with. In this essay, I attend to a trio that comes together in rice fields: a convivial little blackbird called the *bobolink*; a forgotten rice variety named



Figure 27.2 Calrose rice varieties were released in 1948 by the Biggs Rice Experiment Station, which continues to support rice growers today

Sourec: Photo by Elaine Gan, July 2018

Wataribune; and water where wild birds and commercial rice co-exist. This trio opens up ways of doing difference differently because each emerges from unruly yet interweaving trajectories. Certainly, there are many other things that exist in rice fields, such as weeds, soil, and insects for example. I have made a choice to present you, dear reader, with these three in particular, singling them out as my lead figures, not to obscure ongoing endangerments but to make apparent specific exclusions. My choice isn't arbitrary; it draws from artistic research, a practice that combines empirical, theoretical, and creative experimental approaches to articulate more-than-human perspectives. I like to think of artistic research as a kind of multispecies worlding, a term that I love to borrow from Haraway. Worlding, for Haraway, is the kind of theorizing and storytelling that is rooted in the historical materialities of meetings between human and other-than-human kin. Worlding shifts my focus away from the problem of *accounting-for-difference* and gestures toward methods for *doing-difference-differently*. It is with the latter in mind that I begin with birds.

Birds That Amuse, Then Get In The Way

An appetite for seeds and insects in rice fields has earned bobolinks the nickname “rice bird.” Bobolinks are New World blackbirds that thrive in grasslands, overgrown fields, and marshes. They fly one of the longest migrations among the passerines, or perching songbirds, the largest avian group on earth. Weighing about an ounce and growing up to 18 cm long, adult males are mostly black with white backs and creamy yellow napes, while adult females are mostly light brown with deep amber streaks on their backs and heads. Males sing gleefully in flight; like other songbirds, they have evolved their distinctive calls to mark territory, find mates, and stay in touch with their flocks which may include 400 to 5,000 birds.¹³

Every summer, bobolinks breed in North America (ranging from British Columbia, Manitoba, and Newfoundland to northern California, Colorado, and Pennsylvania); as the weather cools, they travel south to winter in South America (ranging from Argentina, Paraguay and Brazil). Bobolinks were such a familiar sight and sound in summertime fields that they

appear in a few literary works from the nineteenth century. American writer Edgar Allan Poe (1809–1849) mentions the birds in his final piece of prose, “Landor’s Cottage” (1845). American poet Emily Dickinson (1830–1886) was particularly fond of them. Bobolinks appear in more than twenty of her poems, most prominently in “The Way to Know the Bobolink” and “The Bobolink is Gone.” William Cullen Bryant (1794–1878), longtime editor of the *New York Evening Post* and key advocate for the creation of Central Park and the Metropolitan Museum of Art in New York, wrote “Robert of Lincoln,” a poem that some consider to be one of the best natural history bird poems because Bryant took the forms, sounds, and lifeways of bobolinks seriously, even as he projected nineteenth-century gender roles onto male and female bobolinks.

For writers like Poe, Dickinson, and Bryant, bobolinks were delightful summertime birds, singing, mating, nesting in meadows, then taking leave till the following year. But bobolinks today are considered a nuisance in rice fields, one of many “rice pests.” Instead of eating wild grasses and insects, bobolinks now eat farmers’ crops, ingesting pesticides, herbicides, and other chemical inputs of commercial grain. Instead of nests made among flowers and hay as Bryant’s poem describes, they build their nests and lay eggs between rice stalks, and get pulverized when heavy machinery like tractors and combine harvesters work the fields.

My point is that bobolinks have not changed to encroach on farms; it is agriculture that has, over the last 200 years, encroached on the birds’ flyways. Bobolinks breed in places that are similar to places they travel to. Migration is their coping mechanism for changing conditions; they migrate in order to find food that becomes abundant in different areas at different seasons.¹⁴ In one day, bobolinks can travel up to 1,800 km; in a year, they might cover 20,000 km in their roundtrip journey between breeding and wintering grounds; and in a lifetime (which may reach nine human years), they can travel the equivalent of up to four or five times around the circumference of the earth. They do these in part because they have a capacity for magnetoreception, an ability to detect the geomagnetic field of the earth and extract information about their position and direction of travel. The geomagnetic field serves as a kind of compass or global positioning system, orienting bobolinks during flight—for centuries. It is the land that has changed.

A closer look at who reworked the land is in order. They were migrants of a different kind.

Aliens Who Work The Land, Then Get Thrown Out

The fields that bobolinks forage are part of 180,000 hectares of California land that are seeded to commercial rice crops. The annual report for 2017–2018 from the California Department of Food and Agriculture shows that rice brought in \$677.9 million in 2017, contributing to the \$50 billion in total cash receipts that the state’s network of farms and ranches earned that year.¹⁵ Historians note that what distinguishes California agriculture is its dependence from the very start on large-scale industrial capitalism or the “factory farm,”¹⁶ and irrigation and waterworks that configured what historian Donald Worster called a “hydraulic society.”¹⁷ Indeed, there were no small peasant farms that were displaced by factory farms. But a closer look at rice leads to transcontinental histories of migrants and seasonal workers from China and Japan, and Indigenous Miwok farmers and fishers, all of whom preceded industrial capitalism.

From 1912 to 1970, three varieties dominated rice fields and were registered as California rice: Caloro, Colusa, and Calrose.¹⁸ They offer us multiple trails to follow. In the early 1900s, the US Bureau of Plant Industry established the Rice Experiment Station at Biggs to test whether rice could be grown commercially in the soils of Sacramento.¹⁹ It was later joined by the University of California and a growers’ cooperative to develop high-yielding seed. Early

tests proved that short-grain varieties from Japan were most suitable.²⁰ A variety called *Wataribune* (or good traveler; “*watari*” in Japanese translates to migration and “*bune*” translates to good) was introduced from Japan in 1913 and soon became known as the best-performing seed. Selections of early, mid-season, and late-planted Wataribune were propagated. 6,000 pounds of early Wataribune were named Caloro (“*oro*” in Spanish translates to gold) and distributed to growers in 1921. By 1924, Caloro was known as the leading variety and by 1957, when improved rice varieties were first registered with the US Department of Agriculture, Caloro was being planted in more than 80% of California rice acreage, as well as in Missouri, Louisiana, Texas, and Arkansas. Colusa was a Chinese variety from Italy that was introduced in 1909, renamed after Colusa county in the Central Valley, and distributed to growers in 1917.²¹ Calrose, now the market trade name for all California medium-grain varieties, was developed by crossing Caloro with a variety from Louisiana called Lady Wright (also renamed Calady). Calrose was released to growers in 1948. By 1975, Calrose varieties were being grown on 70% of California rice acreage. Calrose became known as *the* founding variety of California rice,²² leaving out connections to migrants from across the Pacific who cultivated the fields (Figure 27.2). Whose histories and futurities were erased in the naming of Calrose? This question calls for a wider lens.

You see, only a few of the people who arrived in the new state of California during the Gold Rush were from Japan. The first surge came from China: in 1849, there were a reported 54 “Chinamen” and, by 1876, the figure had climbed to a staggering 116,000 in California alone.²³ As more fortune-seekers arrived, and less and less gold could be mined, racist sentiments intensified, singling out Chinese communities as inferior and unclean. From the 1850s to the official signing of the Chinese Exclusion Act in 1882, immigrants from China were demonized as “coolies” (or unskilled labor for hire; “*koo*” in Chinese translates to rent and “*lee*” translates to muscle). They were banned from California and eventually the US. But as capitalism would have it, someone had to keep working the fields. The “Chinamen” were replaced by the next labor pool available for exploitation: new arrivals from Japan.

1868 was a pivotal year in the making of modern Japan. The Tokugawa shogunate, seat of military power since 1636, had imposed policies of national isolation for nearly two hundred years and was under threat of European colonization. The shogunate was replaced by the Meiji Empire, a turn to imperial rule that aimed to strengthen Japan through rapid modernization and industrial revolution using Western technoscience, education, and international expansion.²⁴ New passports were issued; migration increased exponentially. From 1868 to 1884, emigration from Japan into the United States was recorded at an annual average of 900, consisting mostly of students. From 1885 to 1907, the annual average climbed to 23,000. From 1908 to 1924, there were 33,000 newcomers arriving every year.²⁵ By 1910, there were 72,000 Japanese immigrants in total, known as first-generation *Issei*. More than 50% were employed in California farms during the summer crop-growing months. By 1919, Japanese immigrants were the dominant rice farmers.²⁶ The connection between people and specific varieties of plants is hard to find in historical records, so I can only hazard this guess: Japanese farms and farmers played a contributing, if not a key role in the test plantings and selections of Wataribune at the Biggs Rice Experiment Station when it opened in 1912.

Meanwhile, racist sentiments that began with the Chinese Exclusion Act continued to spread, metastasizing into the California Alien Land Laws of 1913 and 1920, and the Immigration Act of 1924 that marked Japanese farmers as “aliens ineligible for citizenship,” which meant ineligible for owning the lands they cultivated, the seeds they planted, the right to equal protection under law.²⁷ Migrant labor—racialized, hired seasonally, restricted to short-term land leases—became a structural feature of California agriculture.²⁸

Water That Conditions Change and the Possibilities of Coexistence

While water covers 70% of our planet, only 3% of that is freshwater. And much of that 3% is ice. Well, melting ice. All life as we know it, however unevenly, depends on the connections enabled by how that water flows, falls, and evaporates. Irrigation, the ability to harness water and redirect its energy towards the production of food, has been critical in California, “an underlying structure out of which social relations grew.”²⁹ The California Constitution of 1879 that limited land ownership to aliens of “white race or African descent”³⁰ was the same constitution that brought irrigation to the Central Valley. John Wesley Powell, director of the US Geological Survey from 1881–1894, called for reconfiguring Western lands, arguing that the creation of self-managed watershed-defined communities would improve conditions for settlement and social equality. By 1886, advocates were declaring that “the more land that was irrigated, the more wealth it produced, the nearer the state would come to realizing democratic ideals.”³¹ Federal funds were made available to reclaim lands for the unprecedented buildup of irrigation projects in twenty states, including California. By the 1920s, California had one-fifth of the nation’s irrigated acreage and, by far, the largest amount of capital invested in farm water systems designed to irrigate over 200 crops.

Embedded within this, one river remains undammed and free-flowing, and it is where the unlikely meeting of irrigated water, commercial rice, and migrating birds takes place. The river was registered under the name “Cosumnes” by the US Board of Geographic Names in 1909. Rainfall still feeds its flow from the western slopes of the Sierra Nevadas to the Sacramento–San Joaquin Delta. It is a flow that is haunted by natives and migrants. The word “Cosumnes” translates to “people of salmon,” its prefix derived from the Indigenous Miwok word “*kos*” meaning “salmon” and its suffix “*umne*” meaning “people of.” While the river persists, both the Miwok and salmon have dwindled.

The name Miwok is a native word for “people,” the plural of *miwü* or “person.” Rather than distinct tribes with essentialized identities, Miwok affiliations were based on geographic territories in which they settled, ranging from the Cosumnes River in the north, down to Merced and the Fresno River, on the east “as far up into the Sierra as its heavy winter snows permitted” and on the west, the lower San Joaquin valley. Groups included Coast Miwok, Lake Miwok, Interior/Bay Miwok, and the Plains and Sierra Miwok.³² By the time test plantings of Wataribune were being carried out at Biggs in the early 1900s, the Miwok had already been displaced. The 1910 Census counted only 671 Miwok—a devastating loss from 9,000 to 17,800 estimated in 1770³³ when Spanish colonizers brought Catholic missions, *presidios* (forts), *pueblos* (towns), and pathogens. By the time anthropologist Arthur Kroeber’s *Handbook of Indians of California* was published in 1919, the Miwok were nearly extinct.³⁴

Salmon runs along the Cosumnes were collapsing too. Like birds, some species of fish have evolved a capacity for migration; salmon is one of them. Salmon spawn in freshwater rivers and streams, then migrate out to the ocean where food is more abundant. Unlike the seasonal migrations of birds such as the bobolink, salmon spend much of their lives out at sea (which may span up to eight human years), then return once to their natal streams to spawn. Extended droughts and groundwater depletion, both features of anthropogenic climate change, leave parts of rivers dry, thus fragmenting flows of water that salmon need to swim around. Dams and reservoirs, the backbone of irrigation, block movement between spawning grounds and the sea.³⁵

Alternatives exist. In 1987, the Nature Conservancy designated a 190 km² area of the lower river as the Cosumnes River Preserve. Natural flooding and alluvial soils of the undammed river maintained some of the best-remaining stands of valley oaks and riparian woodlands. The conservancy realized that to preserve the native oaks whose acorns used to feed Miwok groups, they

had to protect the soils, the seasonal flooding, and ecological processes of the watershed, an area significantly larger than the preserve. The conservancy also realized the significance of their location along the Pacific Flyway, and explored ways of collaborating with neighboring farmlands to create “surrogate marshland,” temporary breeding and wintering areas for migrating birds.³⁶ Rather than protecting a single species, the conservancy chose a landscape approach, which called for cultivating multiple partnerships with farmers and local communities of Sacramento, and sharing ownership with state agencies such as the Bureau of Land Management and the Department of Water Resources, as well as private organizations like Ducks Unlimited.

Presently, the Cosumnes River Preserve runs one of the largest conservation efforts undertaken at a watershed scale, maintaining woodlands, grasslands, and wetlands that serve as habitats for at least 442 species of plants, 247 species of birds, 30 species of mammals, as well as insects, amphibians, and reptiles.³⁷ The unlikely coexistence of crops, native trees, and wild species has become possible, at least for the time being. Two family farms lease land from the preserve to plant rice; one has been farming the area for over a hundred years, pre-dating the preserve. From March to September, the farms grow commercial rice seeds called M-105, a Calrose variety that was developed at the Biggs Rice Experiment Station and released in 2011.³⁸ After harvest, farmers flood their fields and prepare them for the arrival of wintering birds that will take over their farmlands from October till February. Profits from rice sales support the preserve and the cultivation of weedy plants that make up avian diets, including that of bobolinks.

Also underway are experiments aimed at bringing back native salmon and steelhead to the valley. North of Cosumnes, the Nigiri Project (a collaboration between University of California Davis, California Department of Water Resources, and a nonprofit organization called California Trout) is using off-season rice fields as surrogate floodplains and spawning grounds for endangered salmon whose migratory channels have been cut off by farms and suburbs.³⁹ These emerging multispecies hybridities do not sit or sort out neatly.

Doing Difference Differently, Collectively

My first visit to rice fields north of Sacramento was in 2010, the beginning of a five-year drought. I started drafting this essay as wildfires burned through Southern California in 2018, and I am making my last few edits in December 2020, a record-breaking year for wildfires that have consumed more than four million acres of California lands and many of the lives, human and nonhuman, that they carried. I remember my long drives through featureless freeways, emerald green fields, and bumpy dirt roads, and conversations with growers, field managers, breeders, and biologists. My research also included reading environmental and political histories, production manuals and grower newsletters, scientific publications, old maps at Chico State University archives, and watching countless YouTube videos about rice farming. I learned the feel and scent of grains, water, machines, and hard sunlight that can reach over 37.8°C or 100°F in July and August. Things have changed significantly since my first visit and so have I.

When I see California rice fields today, disappearing wetlands are no longer invisible to me. And when I start to see the wetlands, I also see the interminglings of migratory birds and fish; rice growers and breeders, water and wildlife managers; as well as Chinese “coolies” and the Chinese Exclusion Act; Japanese migrants, Wataribune rice, and the Alien Land Laws; Miwok and their valley oaks and salmon; Spanish colonial settlers, their pueblos, presidios, and pathogens; Calrose, Colusa, and Caloro rice and their carriers, traders, and farmers. Connections and contingencies abound.

But multiplicity for multiplicity’s sake is not my point. The important point I want to close with is that these relations do not work as a single chain of associations, where one comes neatly

before, after, or next to another in place or time, and where one may be detached or disarticulated without affecting the rest. Relations carry, embody, and enable each other. They are nested within one another, mingling and metabolizing together. Within agrotechnological grids is the Cosumnes River Preserve; and within the preserve are farmers of commercial rice. Within the Calrose M-105 seeds they plant are the genes of Wataribune seeds from Japan. And within both M-105 and Wataribune are traces of transcontinental histories and technoscientific practices, simultaneously precious and violent. Within bodies, states, and continents are the flyways, the long distances traveled by wild birds whose bellies now contain industrial chemicals, plastics, and waste, even as they try to find their way through the few remaining wetlands. Economy and ecology are deeply interwoven.

I've chosen to tell you this story about migrants and aliens, affiliations and fragmentations, grains and ghosts. My California story does not have a Hollywood ending where heroes at the Cosumnes River Preserve get to ride, fly, or swim off into a breathtaking California sunset. This is hard, unresolved, and ongoing work. So I end here by returning to the political-ecological-aesthetic challenge that calls for new methods: how might we do difference differently? For whom is difference done differently? Who do we mean when we say "we" and what kinds of critical-creative figurations, biocultural connections, and provisional affiliations might "we" imagine and enact? I turn to you, dear reader, for further openings to these questions. There are many stories waiting to be told, many erasures waiting to be remembered. To keep wetlands alive, we need to cultivate ways of seeing-with and becoming-with, beyond grids, binaries, and chains. When so many of those who came before are no longer around, and those who remain may not belong in ways dictated by laws, codes, and markets, you and I will need the power of our collective practices—the transdisciplinary arts, humanities, and sciences of doing difference differently.

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Notes

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- 24 *Meiji* in Japanese means “enlightenment” or “enlightened rule” in English. The Meiji government combined a hybrid monarchy with industrial revolution, bringing profound changes to Japanese society.
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- 26 Iwata, *Planted in Good Soil*; Yuji Ichioka, *The Issei: The World of the First Generation Japanese Immigrants, 1885–1924* (New York: The Free Press, 1988).
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- 28 When World War 2 created labor shortages, a new group of migrant workers emerged. Under the *bracero* program from 1942–1964, about 200,000 Mexicans entered every year, replacing Japanese farm workers. Like the term *coolie*, the term *bracero* signified cheap manual labor; *bracero* in Spanish translates to a person with strong arms.
- 29 Worster, “Hydraulic Society,” 504.
- 30 It is worth noting that “people of African descent” were only afforded naturalization rights nine years earlier, with passage of the Naturalization Act of 1870. Until then, citizenship was restricted to “whites only.”
- 31 Worster, *Rivers of Empire*, 106.
- 32 In his *Handbook of Indians of California* (1919), Kroeber articulated the Miwok relation to land and identity:

A group of people as a unit possessing an existence and therefore a name of its own is a concept that has not dawned on the Miwok. Humanity must appear to them like a uniform sheet spread over an endless earth, differentiable only with reference to one’s own location in the whole.

- 33 There is wide variation in these figures: Kroeber (1919) estimated that there were “9,000 Interior Miwok in ancient times.” In a 1978 publication for the Smithsonian, Richard Levy estimated that there were 17,800 Miwok in total. See Levy’s entry in *Eastern Miwok*, edited by Robert F. Heizer (Washington, DC: Smithsonian Institution, 1978), 398–413.
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“WITH APPLIED CREATIVITY, WE CAN HEAL”

Permaculture and Indigenous Futurism at Santa Clara Pueblo

Rose B. Simpson in Conversation with Jessica L. Horton

JLH: A scholar of modern and contemporary Native North American art, I am writing from a place of renewed commitment to Earth care and environmental justice. Rose B. Simpson (b. 1983), a multimedia artist, creative writer, and citizen of Santa Clara Pueblo, shared her words and experiences with me to generate this conversational essay. Rose holds a BFA in Studio Arts from the Institute of American Indian Arts (IAIA) and a MFA in Ceramics from the Rhode Island School of Design, studied for three years in the Automotive Science Program at Northern New Mexico College, and is currently enrolled in the Low Rez Creative Writing MFA program at IAIA. Behind these institutional markers lies a more fundamental education that has shaped Rose’s creative formulation of a climate-changed futurism: Her upbringing at Flowering Tree Permaculture Institute, co-founded by her mother, sculptor and architect Roxanne Swentzell (b. 1962), at Santa Clara Pueblo in 1987. This collaboration begins with an intimate narrative by Rose, then opens into a conversation about ancestral Indigenous lifeways, the decolonial politics of permaculture and “climate grief,” the spiritual and ecological resonances of leather, clay, and metal, and the role of post-apocalyptic theory in her work.

RBS: My two-year-old daughter talks in her sleep. She says things like “My puppy!!!” and “Don’t put that there!!!” and then passes back out. I am her only parent. She goes with me to the studio, asks for clay, helps me sand, tries to wrench on my street rod, knows which berries are edible.

I cover her legs with a blanket. It is 45 degrees at night in June in New Mexico. Our corn kernels don’t want to leave the warmth of the dirt. There was no winter during her first year of life. I laid her fresh body outside in the hot sun in January. When I was eighteen I had cancer and was told I would never have kids. I was grateful. I never wanted to watch a child experience the end of our world. My Nugget is a miracle.

My four grandparents were all non-conformists who met at St. John’s College in Santa Fe. My grandma Rina Swentzell was an architect, a philosopher, a weaver, a potter. My grandpa Ralph Swentzell was developing computer programs that he built specifically to translate Chinese poetry in the 1970s. My grandma Skip Simpson was a painter, a weaver, a poet. My other grandpa, Thomas K. Simpson, wrote books about the fourth dimension. The four of them

would sit around the home-made dinner table with a bottle of wine and argue theories late into the night. My grandma Rina would sit those men down, her hand balancing the wine glass, softened by the rounded adobe walls of the house she designed and built.

My parents both inherited their own flavors of singularity. My father rock climbed on the building past the window of the St. John's seminar he was ditching, welded and steamed wood, built boats. My mother learned to question, to innovate, to study the past to inform her future. During the two years they were together, they rebuilt a VW hatchback engine on the kitchen table while living near the treeline in the Sangre de Cristo mountains.

One of my first memories was watching the blurry road go by through the holes in the floor of the cab of my dad's '52 Dodge dump truck, the rabbit-shaped metal heater exposed where the dash might have been, the fake flowers stuffed into the ceiling braces shivering as we trundled through mountain passes to home.

They separated and my mother became homeless on the reservation at the age of 21. We lived in a tent. My great-grandmother gave my mother a chunk of family driveway and a shed for us to make a home in the canyon of Santa Clara Pueblo. My mother sold her ceramic figures to buy adobe bricks. My older brother Porter and I were placed in a hosewater-filled depression in a dirt pile, and through our play, we mixed the mortar for our mother to lay another row of blocks onto the two-story house she had begun to build for her babies.

My mother married the long-haired white man we found pruning my great-aunt's trees. This was the mid-80s, and the word "permaculture" was new. This man, Joel, had just finished studying with Bill Mollison, who had, along with David Holmgren, invented the term to refer to the study of agriculture in sustainable living systems. Joel and my mother started the non-profit Flowering Tree Permaculture Institute, where Porter and I were homeschooled until high school (Figure 28.1).

Joel wanted to incorporate permaculture ideologies and create a test-site for the concepts that he had learned. I believe my mother saw it as cultural preservation, living the way our Indigenous Pueblo ancestors did before colonization.



Figure 28.1 Rose B. Simpson holding a chicken at Flowering Tree Permaculture Institute, Santa Clara Pueblo, NM, 1989

They finished the house together and turned the 1/8th of an acre of bare-dirt driveway into a food jungle. They supported our small family off that land. We turned off the electricity and made candles from our beehives. We washed our clothes by hand. We scavenged the dump for bicycle parts, old tires to make shoes, and even a gallon tub of commodity peanut butter that lasted a year. Our pets became meat: chickens, turkeys, pigs, goats. When the grasshoppers ate our crops in summer, we ate the grasshoppers. We grew wheat just once, and I hated the only loaf of bread made from that field of wheat. Instead of going to school, we irrigated fields and pulled weeds and played in the ditches. Instead of standardized tests, we chopped wood and went to the library and read aloud to my mom as she worked on her clay sculptures. We stayed with our great-grandma one night a week in the old Pueblo to help care for her and watched her TV. We participated in ceremonies and went to Tewa language classes that my mom organized for our community. By the light of our fancy kerosene lamp, my stepdad sat and read articles about permaculture and the state of our environment. I did the math. The year 2000 I would be 16 years old. I prepared to die at 16.

My cousins next door had plastic toys and McDonalds and new clothes and shoes. They had MTV and tapes and CDs. They went to school and I sat by the road waiting every day for the bus to drop them off and learn what they had: cigarettes and cusswords.

While attending high school in Santa Fe in the 1990s, I ran away from home to party with bandanaed xolos in lowriders. I sang in a hip-hop group called Natay and the Tru Native Thugz. In college at the University of New Mexico I was in the Garbage Pail Kidz. I felt the brutal histories of my heritage and oppression around the world. At night, in Albuquerque, I chased after my friends and painted billboards, overpasses, walls, concrete ditches, trains, even the fuselage of a crashed airplane on a stack of bombshell casings at a metal scrapyard in the rain. We painted our lives bright on public spaces, claiming and empowering our youth aesthetic with stolen paint on illegal surfaces.

The year 2000 came and went and I was still alive.

I saw the destruction of our Earth Mother everywhere: the xylene and acetone and ethylbenzene released into the air as I painted a train in the early morning, the plastic garbage lining the streets, the gasoline I used to drive back home from the city to the rez. After growing up without it, I could hear the electricity squeaking through the air, filling up rooms. I was shocked by the blatant waste of food. Meat was a rare thing in my childhood, a hard thing. And here in the big world it was everywhere, easy, without tears or memories. I ate everything I could get. I waited at restaurants for the patrons to leave and finished off their plates. I found buddies who wanted to build lowriders that ran on biodiesel, tried to gorilla harvest water from the streets, made hip-hop about what we eat. I tried to make it all fit together.

Denial felt rampant. As a child, it was a denial to not want to eat fast food when I saw everyone else doing it, to not want new clothes, to not want to know the lines from TV shows. But I couldn't deny that eating my pet was a painful thing, that I knew how food came to be, that I knew what it took to create the things of our modern human life. It seemed that no-one else chose to know—or if they knew, they chose to deny those hard feelings. It is a lot of responsibility to carry—better to be relieved of it.

I started sculpting and drawing. Through my creative process, I looked as deep as I could at myself. I tried to understand why we, as modern humans, and as colonized Indigenous people, choose denial. To be aware of ourselves, and to notice the damage we cause every minute of every day, is a lot to feel. Shame. Fear. Hopelessness. We are not taught to look at these feelings, to hold ourselves accountable. Being a feeling thing is complex. We are not taught how to hold complexity. We like good and bad, and bad is not an option.

My car broke down, so I figured out how to fix it. I worked construction. I skateboarded to work. I began to despise the blatant consumerism I saw in most of my hip-hop community. I found release in hardcore punk. I let my clothes tear. I pierced my nose and didn't get new clothes, just fixed the ones I had, creatively. I fell in love with that freedom. I had a release for my frustration and rage. I moshed it out. I skated it. I knew DIY so deeply. It made sense. I began to focus my art on the environmental apocalypse that I was denied in the year 2000, and the cultural apocalypse I had inherited.

In permaculture, one of the main ways of comprehending sustainable living systems is through "pattern understanding." Patterns are the natural movements found in nature, from the ways that branches form, to the manner in which water flows. Understanding how life on Earth naturally finds the path of least resistance, permaculturists adapt their agricultural techniques in sustainable ways to different landscapes through observation and biomimicry.

I realized that permaculture existed within. Pattern understanding was also our psychological states, the ways we treat each other, the waves of denial and self-hatred, the addiction to the high of romance. Our shared biosphere reflects our collective internal psycho-sphere. I realized that, if I wanted to change the world, I had to understand the intricacies of my actions and where my agency lay. I had to understand what we had all done with our magic.

While at graduate school at the Rhode Island School of Design, I pushed deeper into my psycho-creative work. I studied in Japan to put myself entirely out of my comfort zone, to enter fear and find humanity without being able to communicate with language. I studied relational aesthetics and performance art, and took a seminar on the "Aesthetics of the Everyday" with Yuriko Saito. I needed to explain what I believed permaculture was: an applied aesthetics, an awareness of HOW to be in the world as opposed to compartmentalizing creativity to white cubes and controlled spaces that keep us from an empowered emotional state. The separation of art and life is our demise. Applied creativity means innovation in every walk of life, from what we eat, to how we move through each day, to the way we control our thoughts. With applied creativity, anything is possible. With applied creativity, we can heal. With applied creativity, we are magic.

After graduate school I didn't move to NYC to get famous. I went home to grow food, to remember that I don't need money to survive. To feel empowered. To break down on the side of the road and activate the muscle of innovation. To enter into a difficult emotional situation and use that same innovation to evolve instead of to avoid. I went to school for Automotive Science in Auto Body. I found old cars and loved them back to functioning and got behind the wheel and felt the engine turn, smelled the gas burn, pushed the clutch and tugged the shift into gear. I made driving an aesthetic experience again, as I watched everyone else on the roads turn to spaceships that are about to drive for us.

The human world as we know it is ending. There are no bugs smashed on the windshield. That's not ok. Growing up with permaculture, I am critical and inspired. I eagerly await the challenge and innovative freedom of being released from our capitalistic greed. When we don't have screens telling us what we need to own, what we should look like, what we should eat, what do we do? We make what we need. We figure it out. And that may be more psychological and spiritual than agricultural and conservative. This is where Indigenous cultural knowledge may save us.

JLH: Rose, thank you for generously sharing so much of your story with myself and our readers. Your last comment connects to your mother's view of permaculture as a portal to Indigenous ancestral lifeways, and I wonder if we might begin by exploring this idea in more depth. After doing some homework, I understand that permaculture was developed

by two white men in a settler colonial context in Australia in response to the destruction wrought by industrial agriculture on Indigenous land. For our readers' sake, I'll mention that Bill Mollison was a lecturer in Environmental Psychology at the University of Tasmania and David Holmgren was a graduate student in Environmental Design at the Tasmanian College of Advanced Education when they co-authored the foundation text, *Permaculture One: A Perennial Agricultural System for Human Settlements*, in 1978.¹ Mollison described a philosophy of working with, rather than against nature; of protracted and thoughtful observation rather than protracted and thoughtless action; of looking at systems and people in all their functions, rather than asking only one yield of them, and of allowing systems to demonstrate their own evolutions.²

Mollison is credited with spreading these ideas throughout Asia, the Americas, and elsewhere—often in contexts where Indigenous land-based practices are continuously practiced or collectively remembered across the violent upheavals of colonialism. He specifically encouraged his followers to “adopt sophisticated aboriginal belief systems and learn respect for all life.”³

In 2014, a self-organized People of Color Caucus at the North America Permaculture Convergence issued a series of formal requests, including that “the permaculture movement acknowledge the historical rights of Indigenous peoples to the land on which we gather” and “affirm the ways in which ‘permaculture design’ is drawn directly from the wisdom of indigenous cultures,” noting in particular that Holmgren and Mollison “codified knowledge drawn largely from observing and learning directly from Aboriginal and indigenous peoples.”⁴ In 2015, *Permaculture Magazine* editor Maddy Harland similarly observed,

[N]o one actually “invented” permaculture. Good ideas and good practices have been borrowed from indigenous cultures. These have been mixed with appropriately scaled renewable technologies and low embodied energy materials to try and design the most ecologically elegant solutions to our current problems: pollution, excessive consumption of resources, tools and practices that rely on mechanisation driven by fossil fuels.⁵

I would love to hear more about how Pueblo lifeways inform your mother's initiatives at Flowering Tree, as well as your own creative work. How did her approach differ from your stepfather's encounters with Mollison's theories? Did you experience your permaculture education as a means of Indigenous cultural preservation?

RBS: I absolutely agree that Mollison and Holmgren did not “invent” permaculture. Indigenous peoples around the world have adapted to varying climates through processes of observation, experience, and spirituality. We are all indigenous to this planet, but some humans have been more destructive and extractive than others. I also know that the exploitation of Indigenous cultures and beliefs has been destructive—yet another extracted resource. So I must be careful with what I share, as it has been our experience that this knowledge is taken without respect or consideration.

My Jewish stepdad came with the knowledge of permaculture, and, I have to admit, a dose of the “It's so cool I'm living with Indians” syndrome. My mom saw him as someone who was daring enough to try doing things differently. His approach was to apply “permaculture” as he was taught, to support the family off the land as much as possible, truly sustainably, and to share

those learned techniques with others. My mother saw it as an opportunity to remember how we, as Pueblo people, used to live in the area before contact, before colonization. We had done very well in the area for thousands of years before modern amenities. They both applied their techniques. My stepdad researched beneficial plants from around the world and how to build and create guilds and food-forests, while my mom focused on collecting the seeds of our ancestral foods and saving them from genetic modification and loss. Many of our fields and gardens centered on what seeds needed to be refreshed, rather than what we needed to eat. We then learned to use what we had grown. She also made sure that my brother and I were active in our traditional culture, from participating in ceremonies, to creating the ceremonial attire, to speaking the Tewa language so that we may understand and contribute to the prayers. To her, spiritual dedication was as important to the livelihood of our plants, animals, and environment as pulling weeds and irrigating.

JLH: This resonates with your point that permaculture lies within, and that the biosphere can mirror acculturated patterns of thinking and feeling. Recently, the United Nations Intergovernmental Panel on Climate Change, the American Psychological Association, and others have diagnosed increasing rates of “climate grief” and “eco-anxiety,” including “feelings of vulnerability, helplessness, mourning . . . and despair,” in those who are confronting the dire prognosis for the planet.⁶ I have encountered fear, frustration, and hopelessness in my students when I teach about art and climate change at the University of Delaware, and I have personally processed grief with my family after California wildfires devastated the community where I grew up. You addressed a similar range of emotions in your narrative, but I’m struck most of all by your optimism that the immanent the collapse of capitalism could be intellectually, emotionally, and creatively freeing.

Is “climate grief” the outcome of a limited cultural imagination, a capitalist addiction, a fear of lost privileges? What other affective relationships to Earth can be cultivated by living apart from capitalism’s destructive logics of extraction, expansion, and accumulation?

RBS: I feel that “climate grief” is directly linked to lack of culture and spirituality. If I don’t believe in the power of prayer, or of creation stories, or have never been in conversation with the planet herself, I will feel very uneasy because science tells me that it’s all going to end, and that ending is going to have very specific outcomes. I can feel my own fear about the “end of the world” and it is mostly grief about the unknown. In my spiritual belief, I have faith that gives the power back to the natural elements. If I forget that I am also a natural element, I am at risk—I am an enemy to the Earth, the wind, the sun, the mountains, the water, because I have been so disrespectful. A counter-attack will be my demise. But I know that I am also a part of this place, that it will be beneficial for us all (meaning all aspects of life on Earth) if we trust that Big Mama is going to do what is best for human children to heal our disease.

There’s that. There is also an answer that is about handing humans back our agency, by remembering that innovation resides in many dimensions, such as figuring out what plants are edible, how to clean our water, how to ask for rain when we are thirsty. Our dependency on everything from our morning coffee to our own bodies is limiting. That must end, too. Our responsibility is not only present but timeless.

In the end, I feel guilt, I feel fear, I feel hopelessness, I feel heartbreak, I feel rage, and I also know that our modern society does not teach us how to properly accept these feelings, so they



Figure 28.2 Rose B. Simpson, *Directed Center*, 2015, installation from the exhibition *LIT: The Work of Rose B. Simpson*, Wheelwright Museum of the American Indian, NM, 2019

sit in our bodies and begin to rot, instead of moving through to teach us something important about ourselves and our lived experiences.

JLH: Your point that human responsibility is both immediate and timeless seems powerfully expressed in *Directed*, an installation of your clay sculptures featured in the exhibition *LIT: The Work of Rose B. Simpson* at the Wheelwright Museum in Santa Fe in 2019 (Figure 28.2).⁷ A ceramic infant lay curled on a deerskin pillow at the center of the gallery, surrounded by life-sized busts of warrior-like figures representing the four cardinal directions. Their fired clay skin is rough and layered, retaining the charge of Earth origins. They are wrapped in leather straps and strung with clay discs, vessels, and other appendages. They seem at once to be ancestors that protect and guide the infant, and future manifestations of that fragile new life.

The installation also brings to my mind the words of Potawatomi scholar Kyle Powys Whyte, who insists that Indigenous people often experience the supposedly future apocalypse of climate change as “colonial déjà vu.”⁸ For Whyte, to acknowledge past dystopias brought about by settler colonial violence is to resist climate despair, reopening the future to longstanding Indigenous strategies of resilience. He suggests that creative engagements with climate change might follow the spiraled time that connects ancestors and descendants, rather the linear time of apocalypse. You’ve mentioned your interest in post-apocalyptic theory and art, from Cormac McCarthy’s novel *The Road* to films such as *Mad Max* (1979) and the *Book of Eli* (2010). I’d love to hear more about how your own creative engagement with futurism—apocalyptic or otherwise—is affected by Pueblo cultural knowledge and experiences of settler colonialism.

RBS :I try not to share too much cultural knowledge through my artmaking. I try to harness what I feel is pan-human—our connection to our own empowerment, deconstructing

stereotypes, presenting ourselves in vulnerable ways, embracing apocalyptic theories both internally and externally. I want to build the capacity to handle complex environmental, internal, and spiritual situations. And to be consciousness of material use, so that when I use leather, I am reminded that I am cutting through someone's skin. The sober awareness and care that I must hold as I complete the action grounds me in the importance of art as a form of social change.

And yes, I believe that the Indigenous peoples of North America have gone through a very recent apocalypse. We are still trying to adapt to a genocide that we have endured. This makes us, in ways, incredibly weakened, but also, like an immunization shot, we have already survived an apocalypse, and hopefully the power that helped us during the hardest of it will be the medicine that will guide us through the next worldwide apocalypse. According to our creation stories, we have survived several of these world-changes, and through our belief systems and remembering our relationships and place within this process, we have survived, and will survive—whether in body or spirit, it doesn't matter.

JLH: I would love to talk a bit about the spiritual and ecological associations of your main sculptural material, clay. Your grandmother Rina Swentzell (1935–2015) has written eloquently about ancestral Puebloan pottery-making and the Tewa concept of *po-wa-ha*:

For the Mimbres, as for the modern Pueblo Indians, the creation of worlds, or of pots, was a way to give life meaning. Life was about doing, about creating. But it was also about dying. Creation and degeneration were complementary sides of the whole of existence. If pots or other created things were made to last forever—not to die—the world would get filled up, and the purpose of living would disappear. Life would become meaningless. Movement of life into death was necessary... Movement is intimately connected with the notion of the breath of the cosmos, which gives expression to everybody and everything and to which it all returns.

These beliefs endured almost a thousand years, into the lives of modern Pueblo people. In the Tewa language of the Northern Rio Grande Pueblos, the word for breath is *po-wa-ha*, or water, wind, breath. *Po-wa-ha* is the breath that gives and distinguishes form but it is also the indistinct element from which everything and everybody issue. It is the immaterial giving form to the material and reclaiming it upon death. It is the creative life force that expresses itself in humans, plants, wind, and water. All these life expressions, then, return into the cosmic breath by means of death.

The breath flows in and around the hills and the mountains and through the valleys, infusing all space. We modern Pueblo people still believe that acknowledgement of that flow between sky and Earth, between mountains and valleys, between plants and animals is not only essential but it is also life-giving.⁹

You use clay very differently than your mother and grandmother, but, it seems to me, with a similar reverence for its fundamental liveness, creative power, and connection to all else. Does clay have something to teach people about weathering climate change?

RBS: My grandmother explained this very beautifully. I am young and have inherited some very high expectations, and in response, have felt extremely bubbly, sloppy and loud in my approach to life. But I also believe in the power of spirituality, and its effect on all things, internally and externally. Clay is material that is the direct flesh of our mother, what grows

our food, becomes the dishes that nourish us, becomes the walls of the houses that protect us. It is personified, and when I use it, I ask it what it wants to become. When I try to control the clay, I find myself struggling. It is teaching me to love myself, and to try to listen more than I speak. It is teaching observation and mimicry of the things in the world that are working, and have been working—for there is a reason. And there is also a reason to end. Accepting that is also a very important part of the process.

JLH: It is tempting to see the metal that is prevalent in your work as the opposite of clay: one is soft, pliable, fragile, earthy, and maternally inherited; the other is hard, sharp, industrial, and sometimes associated with heroic white male minimalist sculptors in the history of modern art. I understand that metal is an artistic material that you inherited from your father, a sculptor, and practiced through a lifetime of honing your automotive skills. Yet the gendered binaries typically associated with these materials are undone in *Maria* (2014), the 1985 El Camino that you lovingly customized and named after the potter Maria Martinez (1887–1980) of San Ildefonso Pueblo (Figure 28.3).

I'll clarify for our readers that Martinez, in collaboration with her husband, the painter Julian Martinez, reinvented an ancestral pottery technique of firing clay vessels in a low-oxygen environment to produce the distinctive black-on-black pottery designs for which she became famous in the first decades of the twentieth century. While on a residency in Denver in 2013, you customized *Maria* and painted her with Tewa designs in high gloss and matte black, inspired by the Pueblo pottery revival and the low-rider culture you grew up with in New Mexico. When you debuted the work in Denver, you invited an ensemble of queer and Indigenous



Figure 28.3 Rose B. Simpson and family performing with *Maria* (2014) at *Untitled #66 (Rebel Rebel)*, Denver Art Museum, CO, April 2014



Figure 28.4 Rose B. Simpson and Roxanne Swentzell at Flowering Tree Permaculture Institute, June 2020

performers dressed in *Mad Max*-inspired warrior ensemble to parade through the streets with *Maria* while she emitted the soundtrack of a human heartbeat.¹⁰ I'm struck by the unapologetic manner in which you have reclaimed car culture, typically an emblem of the fossil-fuel-driven Anthropocene, for a queer Indigenous futurism. There is no romantic purity on view here, no simple return to a precolonial way of living with the land, even as you pay homage to creative ancestors. What is at stake for you in this choice?

RBS: Because *Maria* the El Camino is a car, she is a utilitarian object. The Western split between art and craft is problematic because it disengages humans from life, from creation, from the creative act involved in every aspect of our lives. *Maria* presented me with the opportunity to reclaim my present identity, my present moment, in order to apply creativity to the everyday, which I believe is the agency that we are lacking. I must deconstruct any denial that I hold in the present, any whisper of self-hatred or judgment or shame or stereotype, so that I can begin to learn who I am. Innately. Deeply. Not by some standards that are based on colonization, media, or mass-social indoctrination. From there, I am a natural thing. With heightened senses, I can make decisions that are more spiritually, psychologically, and environmentally informed. This, I believe, is the current work I must do to dance with any kind of apocalypse (Figure 28.4).

Notes

- 1 Bill Mollison and David Holmgren, *Permaculture One: A Perennial Agricultural System for Human Settlements* (London: Transworld Publishers, 1978); Russ Grayson and Steven Payne, "Tasmanian Roots," *New Internationalist*, July 2007, <https://newint.org/features/2007/07/01/history/>.
- 2 Bill Mollison, *Permaculture: A Designer's Manual* (Tyalgum, New South Wales: Tagari Publications, 1988), 3.
- 3 Mollison, *Permaculture*, 2.
- 4 "People of Color Statement from the North American Permaculture Convergence," *Permaculture Design* 98 special issue, "Decolonizing Permaculture" (Winter 2015): 3–4.
- 5 Maddy Harland, "Permaculture & Indigenous Cultures," *Permaculture Magazine*, May 21, 2015, www.permaculture.co.uk/articles/permaculture-indigenous-cultures.
- 6 Susan Clayton et al., *Mental Health and Our Changing Climate: Impacts, Implications, and Guidance* (Washington, DC: American Psychological Association and ecoAmerica, 2017), 23.
- 7 See *LIT: The Work of Rose B. Simpson*, Wheelwright Museum of the American Indian, <https://wheelwright.org/exhibitions/lit/>.
- 8 Whyte, "Indigenous Science (Fiction) for the Anthropocene: Ancestral Dystopias and Fantasies of Climate Change Crises," *Environment and Planning E: Nature and Space* 1 (2018), 227.
- 9 J. J. Brody and Rina Swenzell, *To Touch the Past: The Painted Pottery of the Mimbres People*, 21.
- 10 Sarah Archer, "Power Object: Rose B. Simpson's *Maria*," *American Craft Inquiry* 2, no. 1 (June 2018), <https://craftcouncil.org/post/power-object-rose-b-simpsons-maria>.

DECOLONIZING THE SEED COMMONS

Biocapitalism, Agroecology, and Visual Culture

Ashley Dawson

This essay surveys contemporary visual art which explores the conjunction of mass extinction and habitat destruction. It is this conjunction that is forging the conditions for planetary ecocide. The lineage of this aesthetic work extends back to innovative artists like Helen and Newton Harrison, whose groundbreaking installation piece *An Ecological Nerve Center* (1970–1971) highlighted the destruction of natural habitats and the species that depend on them. Expanding on this seminal work, contemporary artists such as Pilar Mata Dupont and Elaine Gan explore the ways that colonial power and industrial agriculture have plundered the planet and, in the process, destroyed the life worlds upon which humans and other critters depend. But contemporary visual artists are not content to simply investigate ecocide. They also are engaged in efforts to visualize, document, and embody alternative worlds. This essay consequently discusses the work of artists like Jumana Manna and the SeedBroadcast Collective, whose anticapitalist, decolonial art provides hopeful glimpses of human and more-than-human flourishing in an age of planetary ecocide. The work of many of these artists goes beyond critique of the expropriation of land to look at the commodification of seed. This dispossession of the stuff of life itself, a phenomenon central to what I term *biocapitalism*, is the object of investigation, critique, and resistance by visual artists intent on fighting for multispecies justice on a damaged planet. In this essay I follow Stefan Helmreich in defining *biocapital* as a novel kind of capital that arises when “the substances and promises of biological materials, particularly stem cells and genomes, are increasingly inserted into projects of product-making and profit-seeking.”¹ Drawing on work by scholar-activists such as Donna Haraway, Deborah Bird Rose, Ursula Heise, and Subhankar Banerjee, I explore the prospects for movements for multispecies justice, which, in Banerjee’s words, “bring concerns and conservation of biotic life and habitats into alignment with environmental justice and Indigenous rights.”²

While material conditions shape consciousness, so does cultural production. Over the last few decades, the visual arts have increasingly explored the shifting material flows of global capitalism, adopting a mode of inquiry that Emily Eliza Scott calls “investigatory art.”³ In doing so, they help make the environmental emergency tangible, thereby catalyzing empathy and political affiliation with other human and more-than-human communities on the frontlines of planetary ecocide. In the process, the visual arts themselves are radically changed. As the critics Heather Davis and Etienne Turpin put it in their discussion of contemporary art and the environmental crisis,

throughout the twentieth century, the relationship between art, land use, and politics has been highly fraught. Within the context of art and art theory over the last five or six decades, we can detect a significant transition in North American and European visual culture: as the concept and practice of art has moved increasingly to consider the material configuration of the world, thereby bringing the gallery into everyday life, the scale, range, and granularity of artistic production have all undergone notable mutations.⁴

This metamorphosis in visual culture is to be expected: in an age of planetary emergency, cultural production takes a turn toward *irrealism*, towards radically uneven, heterodox, and unexpected forms of expression as it documents the combined and uneven character of ecocide.⁵ In tandem, artists are exploring new modes of activism, forging radical forms of collectivity that bring together multispecies communities to fight the commodification of life that is the driving force of planetary ecocide (Figure 29.1).

Seeds are a particularly fruitful site of inquiry in this regard: as a form of biosocial archive, seeds are sites that bear witness to the entangled relations between humans and the natural world.⁶ But most seed in wealthy nations like the US is produced by multinational chemical companies whose seed divisions have been steadily liquidating local seed varieties that are genetically adapted to specific regional ecosystems. Indeed, it might be said that seeds are a battle zone: during the past half-century, 75% of the genetic base of agricultural crops have been eradicated, according to the United Nations.⁷ Yet while corporate monocultural agriculture is producing more food than ever, 821 million people are still hungry and over 2 billion more people are suffering from nutritional deficiencies.⁸ To make matters worse, climate change represents a growing challenge for agriculture the world over. Although the US Department of Agriculture recommends a more diverse array of crops as a step toward developing greater resilience in the



Figure 29.1 Photograph from the exhibition *Seed: Climate Change Resilience*, 2019

Source: Photo by Jeanette Hart-Mann/Courtesy SeedBroadcast and Acoma Ancestral Lands Farm Corp

face of climate change, official government policies continue to overwhelmingly support the large corporations that are eliminating biodiversity. Thus, as the work of the visual artists surveyed in this essay suggests, seeds are sites where state power, capital's modes of combined and uneven development, and popular resistance converge in often-violent histories of dispossession and rebellion.

Biocapitalism and Extinction

In the spring of 2019, the world learned definitively that species extinction rates are accelerating and that nature's dangerous decline is unprecedented. In the month of May, as daffodils burst into bloom and migrating birds returned to trees and fields in the Northern hemisphere, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) published a global assessment drawing on an extraordinarily wide range of research. The report synthesized findings that had heretofore examined the crisis of biodiversity in relatively isolated and fragmented spheres. The conclusions were nothing short of apocalyptic, not simply for the planet's animals and plants but also for the human populations that depend on them. IPBES chair Sir Robert Watson summarized the landmark report in the following terms: "The health of ecosystems on which we and all other species depend is deteriorating more rapidly than ever. We are eroding the very foundations of our economies, livelihoods, food security, health, and quality of life worldwide."⁹ In the most comprehensive assessment of its kind, the IPBES report found that around 1 million animal and plant species are now threatened with extinction, many within decades. Extinction rates are at their highest in human history, and the problem is not isolated to the total disappearance of particular species. According to the report,

the average abundance of native species in most major land-based habitats has fallen by at least 20%, mostly since 1900. More than 40% of amphibian species, almost 33% of reef-forming corals, and more than a third of all marine mammals are threatened.¹⁰

Summing up the panel's findings in the starkest terms, report co-chair Professor Josef Settele said, "Ecosystems, species, wild populations, local varieties and breeds of domesticated plants and animals are shrinking, deteriorating or vanishing. The essential, interconnected web of life on Earth is getting smaller and increasingly frayed."¹¹

The IPBES report points fingers directly at the culprits for what can only be considered an unprecedented ecocide.¹² Based on a thorough investigation of available evidence, the authors conclude that the five direct drivers of the biodiversity crisis, in ranked order, are: (1) changes in land and sea use; (2) direct exploitation of organisms; (3) climate change; (4) pollution; and (5) invasive alien species. In other words, agriculture and fishing, key contributors to changes in land and sea, are the primary causes of the deterioration of nature. Building on the work of engaged scientists and legal activists such as Richard Falk and Polly Higgins, I term this deadly conjunction *ecocide*.¹³ The IPBES study documents the inexorable destruction of biodiversity as capitalist agribusiness has spread a small range of cash crops and high-value livestock across the planet, consuming forests and other nature-rich ecosystems. The panel notes that food production has increased dramatically since 1970, with 100 million hectares of land having been put into agricultural production between 1980 and 2000, most of which has taken place in the tropical countries of Latin America (in the form of cattle ranching) and in Southeast Asia (mostly in palm oil plantations). Roughly half of this expansion has taken place through the destruction of intact forests. The report also notes that 23% of land areas have seen a reduction in productivity due to land degradation. In addition, since 75% of global food crops rely on animal pollination,

hundreds of billions of dollars of crop output are now at risk due to pollinator loss as insect numbers plummet around the planet. Moreover, despite the planetary spread of capitalist agribusiness and the resulting boom in crop production, over 10% of the world's population remains undernourished, according to the report. The report adduces similar figures for the oceans, over half of which are sites of industrial fishing, leaving more than a third of fish populations overexploited.

The combined and uneven character of the environmental crisis is even more apparent in relation to biodiversity than climate breakdown. For the majority of humanity, the savaging of biodiversity is an issue of grave concern since their daily survival hinges in the most immediate and tangible way on their local environmental commons. The Indian environmentalist and historian Ramachandra Guha called such locally grounded communities *ecosystem people*, and argued that their resistance to the degradation of the environments on which they depend is characterized by forms of direct action that constitute an “environmentalism of the poor.”¹⁴ Ecosystem people resist the destruction of precious natural resources by what Guha calls *omnivores*, individuals and groups with the social power to capture, transform, and use resources from a wide catchment area, sometimes extending to a global scale.¹⁵ In an age of planetary extraction, Guha's distinction makes more sense than ever; what he did not anticipate, however, was the speed with which the exploitative behavior of the omnivores would come to endanger nature's critical life support systems on a planetary scale. Fighting biocapitalism successfully will require the creation of new forms of solidarity between ecosystem people and segments of the omnivores, those relatively affluent, predominantly urban residents of societies in both the Global North and South who recognize that their fate is commingled with that of the ecosystem people. We are all ultimately ecosystem people, and the environmentalism of the poor, their defense of the global environmental commons, holds out the best hope for multispecies justice and survival in these times of planetary emergency.¹⁶ In addition, human communities need to join together with constellations of non-human life, including in this case the life force embodied in land and seed. How might such radical solidarities be forged?¹⁷

Seeding Sovereignty

Palestinian artist Jumana Manna's understated but nonetheless devastating documentary film *Wild Relatives* (2018) began from Manna's intertwined interest in the history of plant taxonomy, on the one hand, and the contemporary uprising and subsequent bloody civil war in Syria, on the other.¹⁸ Searching for contemporary parallels to colonial institutions such as Kew Garden that combined knowledge gathering and support for imperial power grounded in plantation agriculture, Manna turned to the International Center for Agricultural Research in the Dry Areas (ICARDA), an abandoned seed bank in Aleppo. ICARDA was founded in Lebanon as part of the global network of seed banks known as the Consultative Group on International Agricultural Research (CGIAR), transferred to Syria during the Lebanese civil war, and is now based in Lebanon's Beqaa Valley and in Morocco. *Wild Relatives* explores efforts to revive the ICARDA seed bank, in the process uncovering unsettling links between industrialized agriculture, state power, and contemporary imperialism.

ICARDA's story makes for feel-good headlines about the positive impact of international institutions such as seed banks.¹⁹ When the civil war engulfed Aleppo, Syrian agricultural researchers and plant conservationists were forced to abandon their precious seed bank of 155,000 varieties of the region's main crops. The agricultural archive of the Fertile Crescent faced extinction. But as fortune had it the researchers had sent seed samples to Norway, where the Svalbard Global Seed Vault lies burrowed into a mountainside on an island located above the

Arctic Circle. Nicknamed the Doomsday Vault, Svalbard contains copies of all the seeds collected by the CGIAR consortium around the world. Svalbard is intended to provide backup copies of seeds in case one of the thousands of smaller gene banks around the world were to be destroyed in a natural disaster or a human-caused cataclysm such as the Syrian civil war. After Syrian refugee scientists resettled in Lebanon, Svalbard was able to provide them with copies of the seeds they had sent to the vault in previous decades, from which they have begun efforts to recreate the lost seed bank of Aleppo. This story makes for an apparently happy example of Norwegian humanitarianism.

But Manna's film uncovers an altogether less beneficent history. ICARDA and similar seed banks around the world were started in the 1960s under the auspices of nominally philanthropic US-based foundations, groups with longstanding links not simply to fossil capitalism but also to the Cold War American security establishment. The seed banks were developed to "archive" seeds and the genetic crop diversity they embody as the US-supported Green Revolution was pushing countries around the world to adopt a small variety of high-yielding hybrid crop varieties.²⁰ Designed to forestall revolutionary uprisings and land redistribution, Green Revolution hybrid crops required expensive, fossil-fuel-based inputs such as pesticides and fertilizers. This was convenient for the agribusiness and chemical conglomerates that sold hybrid seeds, but it left many farmers deeply in debt since they became dependent on purchased seeds rather than simply freely exchanging and replanting seeds as they had done for millennia. The Green Revolution amounted to a privatization of the seed commons, a dramatic but all too little understood global transition that winnowed down the world's crop varieties dramatically since it meant the abandonment of the local varieties known as landraces.²¹ Despite the rhetoric of progress that animated it, the Green Revolution was thus responsible for a stunning loss of biodiversity and cultural diversity. Seed banks such as ICARDA played a key role in this history as sites where genetic resources developed by peasants over thousands of years could be gathered, stored, and harvested for the corporate gene banks of North America, Europe, and Japan.²² As the capstone of this global capitalist food system, the Svalbard Seed Vault is an example of what Elaine Gan calls "imperialist nostalgia": an institution that mourns the loss of global biodiversity while simultaneously disavowing its complicity in extinction.²³

But didn't the Svalbard vault save the seeds collected in ICARDA from extinction, and thereby help to preserve a legacy of genetic diversity that may save an increasingly hot and arid world from famine? Yes, but Manna's *Wild Relatives* reminds viewers that these seeds are the product of a history of state-backed consolidation of agriculture under Syrian's Baath regime, one that expropriated land and reduced local seed varieties in the name of producing higher-yielding crops cultivated for global markets.²⁴ While this program of agricultural centralization helped make Syria self-sustaining, it prodded the country's farmers to grow varieties of wheat that were unable to withstand the sustained drought of 2007–2010 in Syria.²⁵ The transformation in Syria's agricultural sector thus helped catalyze the uprising in Syria.²⁶ This history of dispossession and extinction must be seen as a prelude to the fragmented lives of the refugees captured so poignantly in Manna's *Wild Relatives*. By juxtaposing the lives of Syrian refugee women in Lebanon's Beqaa Valley, tending traditional crops on someone else's land, Manna's film subtly eviscerates the smug liberal assumptions articulated by officials at the Svalbard seed vault. The impact of capitalist agriculture since the heyday of the Green Revolution, the film reminds us, has been devastating: indeed, during the period from 2008 to 2011, when the Syrian civil war was catalyzed, food price inflation linked to commodity speculation sent 1 billion people into the ranks of the hungry, despite the fact that the world was producing record harvests and agribusiness was making record profits.²⁷

In addition to this critique of the conjoined forces of empire, absolutist state power, and corporate agribusiness, Manna's *Wild Relatives* offers an alternative narrative grounded in grass-roots practices of seed cultivation and dissemination. These alternative practices are embodied in Manna's film in Walid, a Syrian refugee who saves seeds in a small building in the Beqaa Valley. Walid's practice extends beyond seed conservation alone, for he also exchanges the seeds he preserves freely with other farmers. He is thus a living embodiment of the peasant traditions that the Green Revolution and the absolutist Syrian state have helped to imperil in the region. Rather than preserving landrace seeds in order to insure their subsumption within hybrid commercial varieties as do the seed banks of the world, Walid fights against extinction through his practices of seed commoning.

In *Wild Relatives*, Walid's behavior seems like a relatively isolated instance of rebellion against the massive powers arrayed against peasants. It is certainly true that there is a systematic effort to criminalize seed commoning, one that has become particularly entrenched since the formation of the World Trade Organization in the mid-1990s. However, there is also large-scale, transnational resistance to this global legal offensive on the part of farmers.²⁸ Despite centuries of European colonial domination and nearly half a century of dispossession under the capitalist food system spread by the Green Revolution, one-third of the world's people depend on small-holder agriculture, which produces three-quarters of the world's food on only one-quarter of the planet's arable land.²⁹ Organizations like *La Via Campesina* bring together millions of peasants from around the world, fighting for food sovereignty and for sustainable agro-ecological methods of farming in order to roll back the concentration and privatization of land.³⁰

While the capitalist food system is at its most hegemonic in the US, seeds of revolt are apparent even in the belly of the corporate agricultural beast. In the summer of 2019, the SeedBroadcast Collective opened an exhibition at the Albuquerque Museum entitled *Seed: Climate Change Resilience*. Like other work by the collective, the show was not only multimedia but involved community engagement projects exploring what the collective calls "arid-land agri-Culture, resiliency, and climate change."³¹ As collective member Jeanette Hart-Mann puts it,

We tend to work outside the art framework, with communities. This is about recognizing that there's creativity, and voices, that are present in the world around us that are not recognized by popular culture or the contemporary artworld. These tend to be land-based communities, rural communities.³²

The work of the SeedBroadcast Collective opens museums out onto struggles for food justice and resiliency under increasingly difficult climatic and social conditions. It is part of a broader current of radical practice within the visual arts that mobilizes, politicizes, and transforms museums to address the climate emergency, a practice that I elsewhere call the art of articulation (Figure 29.2).³³

The *Seed: Climate Change Resilience* exhibition grew out of collaborative research the collective kicked off in 2016 with a variety of food justice organizations based in New Mexico and the Southwest more broadly: the Native Seeds/SEARCH seed conservation organization, which has been involved in work to support Indigenous efforts to establish gardens for their sustainable food needs for several decades; the Acoma Ancestral Lands program, which engages Native youth and adults in conservation projects on Native lands; and Tewa Women United's Healing Oasis in the town of Espanola, among others. Many of the farmers in these organizations have been marginalized because of racism and classism, and because they practice forms of agri-Culture that challenge the dominant approach to farming using mechanization, pesticides, herbicides, monoculture, bioengineering, and corporate monopoly capitalism. During the initial



Figure 29.2 Photograph from the exhibition *Seed: Climate Change Resilience*, 2019

Source: Photo by Jeanette Hart-Mann/Courtesy SeedBroadcast and Acoma Ancestral Lands Farm Corp

research period, SeedBroadcast worked with partner organizations to document agri-Cultural work in photographs and audio interviews, in the process generating a multimedia timeline of seasonal-environmental happenings. This process recorded community efforts to reclaim heirloom seeds and to revive traditional ecological knowledge (TEK). Through the practice of bioregional agriculture, partner organizations and communities support biodiversity across arid-land ecologies. As the SeedBroadcast Collective puts it, “These interwoven relationships between heritage seeds/crops, wildlife (plants, animals, and insects), watershed, people, and culture hold a significant place in the health and well-being of communities, both human and more, as they respond to the impacts of climate change.”³⁴

The SeedBroadcast Collective presents these collective practices of sustainable and resilient land stewardship and agri-Culture in the museum space through large-scale photo collages, wall murals, a multi-media installation of *Seed Stories* (based on the audio documentation), and a reading space featuring the SeedBroadcast agri-Culture Journal archive. The exhibition also featured a series of public events in which members of the collective’s partner organizations discuss their work to revive traditional ecological knowledge with visitors to the museum. In addition, the collective provides copies of the Journal as a tool kit that museum attendees may take home, with the aim of helping them begin their own practices of seed saving and sustainable agri-Culture. As Jeanette Hart-Mann argues, the SeedBroadcast Collective is thus part of a broader movement in the US to reclaim traditional practices of seed saving and exchange, as well as the extraordinarily variegated and climate-resilient seeds and agri-Cultural practices that capitalist agribusiness nearly extirpated in the US over the last century. Less than a decade ago, a movement germinated in the US to establish seed libraries, most of which were based in public libraries around the country. Unlike seed banks, which are closed archives that are controlled by corporate behemoths, seed libraries allowed members of the public to borrow heirloom seed varieties, as long as they agree to let some of the food they grew with these seeds go to seed,



Figure 29.3 Photograph from the exhibition *Seed: Climate Change Resilience*, 2019

allowing them to return the seeds a year later. The movement aimed to save the immense biodiversity that corporate monocultures are wiping out, a move that seems particularly important given the looming reality of climate change: traditional varieties are far better adapted to local climate conditions and consequently tend to be more resilient to a fast-changing climate. In short order, an online Seed Library Social Network was created, and seed library programs began growing like wild (Figure 29.3).³⁵

But in the summer of 2014, the public library in Mechanicsburg, Pennsylvania received a notice from the Bureau of Plant Industry in the state Department of Agriculture, informing them that their seed library likely violated state laws.³⁶ Libraries in other states such as Minnesota and Nebraska were also threatened by their agricultural authorities, which had clearly been captured by the privatized system of patents that governs corporate agriculture. The assault on seed libraries caused a public furor: a public pressure campaign convinced the newly elected governor of Pennsylvania to rein in the state agricultural authorities. The Sustainable Economies Law Center, a small organization based in Oakland, California, worked with local groups to pass laws in the Minnesota and Nebraska legislatures exempting libraries from seed-registration laws. In 2016, the fight over seed libraries came to a head when the Seed Exchange Democracy Act was introduced into the state legislature in California, which is home to over 60 seed libraries. Antagonistic groups of national prominence lined up on different sides of the legislative fight, including the industry trade group, the California Seed Association, and, on the other side, a coalition of sustainable and organic farming advocates. The eventual victory and passage of the act in 2017 was momentous: according to Neil Thapar, a staff attorney at the Sustainable Economies Law Center, the act not only lets farmers and gardeners off the hook for exchanging seeds, but, even more importantly, legitimates an expanded definition of farmers' relationship with their seeds.³⁷ "We're trying to redefine farmers using seed libraries," Thapar explains. "They're not 'consumers' requiring consumer protection. They're active and engaged participants in giving and using and testing the seeds."³⁸ Farmers, in other words, are not just passive

consumers of seeds engineered, owned, and sold by the corporate seed and chemical companies. Instead, they are stewards of the process of co-creation and evolution that has characterized what the SeedBroadcast Collective calls agri-Culture ever since the Neolithic Revolution.

The work of the SeedBroadcast Collective and their partners in New Mexico might seem diminutive given the power and planet-spanning reach of the capitalist food system. Yet their efforts have been part of a broader, ultimately global effort to challenge the legal framework that has made seed commoning into an outlaw practice. The work of visual artists such as those I have discussed in this essay are a key part of the cultural work necessary to decolonize seed and support practices of seed commoning. These resistant efforts are the kernel of movements around the world intent on recovering and sustaining the wide genetic spectrum that corporate agribusiness has almost obliterated. As the climate emergency worsens, these efforts to sustain seeds, traditional ecological knowledge, and diverse multispecies communities will be increasingly essential to supporting resilient food systems and socially just communities.

Notes

- 1 Stefan Helmreich, "Species of Biocapital," *Science as Culture* 17(4) (December 2008), 463–464.
- 2 Subhankar Banerjee, "Resisting the War on the Alaska's Arctic with Multispecies Justice," *Social Text Online* (June 7, 2018). See also Donna Haraway, "Staying with the Trouble for Multispecies Environmental Justice," *Dialogues in Human Geography* 8(1) (2018); Deborah Bird Rose, *Wild Dog Dreaming: Love and Extinction* (Charlottesville: University of Virginia Press, 2011); Ursula Heise, *Imagining Extinction: The Cultural Meanings of Endangered Species* (Chicago: University of Chicago Press, 2016).
- 3 Emily Eliza Scott, "Artists' Platforms for New Ecologies," *Third Text Online*, www.thirdtext.org.
- 4 Heather Davis and Etienne Turpin, "Art and Death: Lives Between the Fifth Assessment and the Sixth Extinction," in Heather Davis and Etienne Turpin, eds., *Art in the Anthropocene: Encounters among Aesthetics, Politics, Environments and Epistemologies* (Open Humanities Press, 2015).
- 5 Warwick Research Collective (WRcC), *Combined and Uneven Development: Towards a New Theory of World-Literature* (Liverpool: Liverpool University Press, 2015), 35.
- 6 Marijke van der Veen, "The Materiality of Plants: Plant–People Entanglements," *World Archaeology*, 46(5): *Debates in World Archaeology* (2014), 799.
- 7 United Nations, *International Assessment of Agricultural Knowledge, Science, and Technology for Development* (2008).
- 8 "Agriculture at a Crossroads: Findings and Recommendations for Future Farming," www.globalagriculture.org
- 9 Sir Robert Watson. Quoted in "Media Release: Nature Dangerous Decline 'Unprecedented'; Species Extinction Rates 'Accelerating,'" IPBES (May 7, 2019), www.ipbes.net
- 10 "Media Release."
- 11 "Media Release."
- 12 The term "ecocide" was coined by American biologist Arthur Galston, who spoke out against the massive environmental damage caused by the use of the defoliant chemical Agent Orange by US military forces in Vietnam during the 1960s and 1970s. Richard Falk drafted an Ecocide Convention in 1973. The term has recently gained prominent in efforts to criminalize human activities cause extensive damage to, destruction of, or loss of ecosystems in a given territory, and which diminish the health and well-being of species within these ecosystems (including humans).
- 13 Ecocide was proposed as a crime by Richard Falk in the Convention on Ecocidal War in 1973. British lawyer Polly Higgins has recently revived the idea, arguing in 2010 that the Rome Statute be amended to include the crime of Ecocide.
- 14 Ramachandra Guha and Juan Martinez-Alier, *Varieties of Environmentalism: Essays North and South* (Earthscan, 1997), 12.
- 15 Guha and Martinez-Alier, *Varieties of Environmentalism*, 12.
- 16 For extended reflection on this confluence of "unlikely allies," see Subhankar Banerjee, "Long Environmentalism: After the Listening Season," in *Ecocriticism and Indigenous Studies: Conversations from Earth to Cosmos*, Salma Monani and Joni Adamson, eds (New York: Routledge, 2017), 62–81.

- 17 For additional examples and theoretical discussion of this pivotal question, see the catalogue for the exhibition *Species in Peril: Along the Rio Grande*, 516 Contemporary Arts Museum, Albuquerque, NM (September 28–December 28, 2019).
- 18 Hakim Bishara, “Wild Relatives: Jumana Manna Interviewed” *Bomb Magazine* (January 25, 2019).
- 19 For a typical example, see Somini Sengupta, “How a Seed Bank, Almost Lost in the Syrian Civil War, Could Help Feed a Warming Planet,” *The New York Times* (October 13, 2017).
- 20 On the Green Revolution, see Vandana Shiva, *The Violence of the Green Revolution: Third World Agriculture, Ecology, and Politics* (Lexington, KY: University of Kentucky Press, 2015), John H. Perkins, *Geopolitics and the Green Revolution: Wheat, Genes, and the Cold War* (Oxford: Oxford University Press, 1997), as well as the many books of Gary Paul Nabhan, co-founder of the nonprofit conservation organization Native Seeds/SEARCH in Arizona.
- 21 On the global impact of agribusiness and genetic engineering on food, see Vandana Shiva’s *Stolen Harvest: The Hijacking of the Global Food Supply* (Lexington, KY: University of Kentucky Press, 2016).
- 22 On the relation between the seed bank and classic postcolonial questions relating to knowledge and power, see Shela Sheikh, “Planting Seeds/The Fires of War: The Geopolitics of Seed Saving in Jumana Manna’s *Wild Relatives*” *Third Text* 32(2/3) (2018), 200–229.
- 23 Elaine Gan, “Seed Vault: Freezing Life for Doomsday”, in James Brady, ed., *Elemental: An Arts and Ecology Reader* (London: Gaia Project Press, 2016), 119–121.
- 24 Sheikh, “Planting Seeds.”
- 25 Myriam Ababsa, “The End of a World: Drought and Agrarian Transformation in Northeast Syria (2007–2010),” in R. Hinnebusch and T. Zintl, eds., *Syria from Reform to Revolt, Vol. 1: Political Economy and International Relations* (Syracuse: Syracuse University Press, 2015), 199–222.
- 26 On climate change and the Syrian civil war, see Andreas Malm, “Revolution in a Warming World: Lessons from the Russian to the Syrian Revolutions,” *Socialist Register 2017* (New York: Monthly Review Press, 2016) and Suzanne Saleeby, “Sowing the Seeds of Dissent: Economic Grievances and the Syrian Social Contract’s Unraveling,” *Jadaliyya*, February 16, 2012.
- 27 Eric Holt-Giménez, *A Foodie’s Guide to Capitalism: Understanding the Political Economy of What We Eat* (New York: Monthly Review Press, 2017), 54.
- 28 For a discussion of this resistance, see GRAIN, *Seed Laws that Criminalize Farmers: Resistance and Fightback* (Barcelona, 2015).
- 29 Holt-Giménez, *A Foodie’s Guide to Capitalism*, 204.
- 30 See La Via Campesina, “Adoption of the Peasant’s Rights Declaration Enriches the Human Rights System,” (June 28, 2019).
- 31 For a discussion of the exhibition at the Albuquerque Museum, see www.seedbroadcast.org
- 32 Jeanette Hart-Mann, Personal Interview, Jan/January 23, 2019.
- 33 Ashley Dawson, “The Art of Articulation,” *Dispatches Journal* vol. 2, www.dispatchesjournal.org
- 34 SeedBroadcast Collective, *Seed: Climate Change Resilience*, www.seedbroadcast.org
- 35 Katherine Davis-Young, “Why So Many Public Libraries Are Giving Out Seeds,” www.atlasobscure.com (March 27, 2018).
- 36 For details of the legal wrangling over seed libraries, see Mark Shapiro, “Seed Librarians are Fighting to Protect the US’s Resilient and Diverse Food System,” *Pacific Standard* (March 17, 2017).
- 37 On the legal battle over seed libraries, see Ursula Ramsey, “Seed Libraries and Food Justice: Cultivating an Effective Legal and Policy Environment,” *Georgetown Journal on Poverty Law and Policy* 25(2) (Winter 2018), 194–220.
- 38 Quoted in Shapiro, “Seed Librarians are Fighting.”

THE POLITICS AND ECOLOGY OF INVASIVE SPECIES

A Changing Climate for Pioneering Plants

Maja Fowkes and Reuben Fowkes

The divisive politics of populist governments that have come to power in Europe and across the world in the last decade are charged with xenophobic sentiments of hostility toward foreign influence and heightened fear of migrants. Their nationalist and anti-globalist agenda is also transposed onto zoological and botanical realms, where plants with different geographic histories are vilified and labelled as non-native or invasive and subject to public campaigns of eradication, with media coverage further fuelling the atmosphere of intolerance. The myth of native purity has been corroded, however, by climate disruption bringing in its wake the unstoppable resettlement of species across the planet. Ecological crisis has sharpened the critique of Invasion Biology as a subdiscipline with a guiding assumption that foreign species pose a vital threat to the native flora and fauna of local ecosystems, disclosing it as unwittingly echoing populist rhetoric and misconstruing scientific evidence. Intervening in the entangled domains of politics, science, and ecology, artists have challenged the demonization of so-called invasive species, uncovered complex histories of their redistribution and engendered collaborative scenarios in which the agency of non-native pioneers is released to restore and revivify devastated post-industrial environments.

The combative tone resonating in the remark that “an army of invasive plant and animal species is overrunning the United States, causing incalculable economic and ecological costs,” written in 1997 by proponents of Invasion Biology, who also singled out the zebra mussel as a particularly harmful alien conqueror originating in the “former Soviet Union,” exemplifies the militaristic mindset of the discipline.¹ Voiced in the post-1989 era of neo-liberal globalization, this attitude still bears the residue of polarized Cold War thinking in the field, which can be traced to the publication of Charles Elton’s founding *Ecology of Invasions of Animals and Plants* in 1958.² Within scientific circles such rhetoric has since been discredited as “very similar to the anti-globalist movement, which laments the replacement of authentic local culture with a synthetic and homogenised culture.”³ The ecologist Mark A. Davies also took the lead in formulating a programmatic challenge to the xenophobic precepts of Invasion Biology in an article in *Nature* entitled “Don’t judge species on their origins,” demanding with 18 co-signatures the abandonment of the “native-versus-alien species dichotomy.”⁴ They disputed the false claim that “introduced species pose an apocalyptic threat to biodiversity,” since the scientific data actually shows that “the introduction of non-native species has almost always increased the number of species in the region.”⁵ The aggressive and dissimulating agenda of Invasion Biology has been

undermined by rapidly changing ecological circumstances that refute and reverse its prejudicial assumptions about redistributed species.

A new wave of environmental thinking, which goes to the lengths of proposing the term “guest species” to denote those beneficial “non-native species that we welcome into our ecosystem,”⁶ has acknowledged the integral role of newcomer plants in the dynamic response of the natural world to intensifying ecological crisis. Advocates of the “new wild” see signs of natural resilience in the “strength and colonizing abilities of alien species,” who often become, in effect, “the new natives,”⁷ in novel ecosystems that combine introduced and indigenous varieties. The emphasis that Invasion Biology placed on deliberate or accidental “human assistance”⁸ in introducing non-native species to new environments has given way to greater recognition of plant agency in migration. Ecologist Chris D. Thomas has correspondingly observed that in response to climate disruption, “around two-thirds of the species that researchers have studied in recent decades have shifted their distribution,” to become “commoner in those places where the climate has ‘improved’ for them.”⁹ He goes on to predict that “in the long run, it is the species that keep moving and successfully exploit new environments that will survive and prosper and thus ensure the survival of their kin on planet Earth.”¹⁰ Anthropogenic alterations to habitats and climate chaos therefore necessitate the pragmatic embrace of novel assemblages of human and non-human entities to accommodate new forms of coexistence.¹¹

This essay examines artistic practices that investigate changing attitudes to newcomer plants by uncovering the ideological origins of the scientific construct of botanical invasiveness and disclosing cases of the demonization of migrant species from the era of totalitarianism to a discordant present of late liberalism and anti-globalist populism. Distinguishing between arbitrary projections onto resettled species and the ecological evidence of environmental histories in which social and natural processes are intertwined, they challenge the vilification of plant migration in the political imaginary. Artistic projects with non-native species often extend to an activist agenda by creating situations for communities to learn about their ecological function and practical or culinary uses, or entail proposing restorative actions to work with introduced organisms to rewild or restore post-industrial wastelands. They also raise the question of whether the newfound empathy for incoming plants is based on anything more than a pragmatic acknowledgement of their potential use in mitigating climate disorder, testing out a radical and affirmative understanding of more-than-human political realms in which plant metaphors give way to the ecological solidarities and the multispecies convergences of a post-anthropocentric cosmopolitics.¹²

London-based Polish artist Alicja Rogalska uncovered the contradictions of routinely applied distinctions between the notions of native and non-native, as attributed to both plants and people, in her *Alien Species: Jersey Migrant Worker Archive* (2018). The work referred in its title to the Aliens Restriction Act of 1920, which imposed strict conditions on all foreign nationals living in or visiting the island of Jersey in the English Channel, including spouses and children of agricultural workers, who were forced to carry “alien cards” until the 1960s. It engaged specifically with the current wave of migrant laborers from Eastern Europe who pick Jersey’s most important crop – the Royal Jersey potato, the only variety of this transatlantic newcomer to benefit from a European Union Protected Designation of Origin (PDO) trademark. Observing that although migrant workers contribute significantly to the island’s economy, they are largely absent from public representations, the artist initiated a collaboration with the community to create an archive based on personal photographs and mobile phone footage in order to record their seasonal work and everyday life. The work foregrounds the discrepancy between the fact that a plant species that has only been cultivated on the island since the nineteenth century has been accepted into the symbolic pantheon of authenticity and recognition, while migrant workers experience social discrimination and cultural invisibility.

Rogalska's intervention reveals a complex interplay between the politics of civic and botanical classification, a factor that was present already in early discussions of the dichotomy of native and non-native species found in botanical writings of the first half of the nineteenth century, which borrowed from legal terminology for the regulation of citizenship to describe the resettlement of plants. Namely, in an 1835 volume on the *Rarer Plants of Britain*, the common law distinction between native and alien was used to differentiate between plants that are true British flora and foreign species. The author declared that "species originally introduced by human agency," that presently "exist in a wild state," now constitute "a part of the British flora, with just as much claim as the descendants of Saxons or Normans have to be considered a part of the British nation."¹³ National denomination and botanical origin are closely entwined in this pre-Darwinian analysis and, although the writer favours native plants, he does not argue for the suppression or extermination of alien species altogether. The example of the Jersey Royal showed the full adoption of the newcomer species in the culture of its new territory, a gesture that has not been extended to the migrant workers who tend it.

The potato plant was a notable vegetal protagonist in the contested histories of colonial exploitation of people, animals, and plants during the process of global transfers of the sixteenth and seventeenth centuries that are customarily referred to as the "Columbian exchange."¹⁴ The uneasy neutrality of the "so-called exchange in flora and fauna," is, however, starkly at odds with the "directed colonial violence of forced eviction from land [and] enslavement on plantations," that accompanied the European conquest of the Americas.¹⁵ Cultivated over millennia by the Indigenous peoples of the Andes, on their transfer to Europe, potato plants were first stigmatized as the ungodly food of conquered natives and used only as animal fodder or in times of famine. Not only did colonizers repay their appropriation of the Peruvian potato with devastating illnesses that decimated Indigenous populations, but they also projected onto this nutritious newcomer plant their dehumanizing prejudices about non-European peoples and cultures.

The hostile attitude to newcomer species that coloured twentieth-century Invasion Biology, which was galvanised by the rise of political ideologies with an insatiable need for external enemies, had its corollary in the adulation of the purity of national varieties. Vienna-based German artist Christian Kosmas Mayer investigated in his work *The Life Story of Cornelius Johnson's Olympic Oak and Other Matters of Survival* (2017) an extreme case of the instrumentalization of plants as a tool of political propaganda. He took as his starting point the historic curiosity that winners at the 1936 Berlin Olympics were ceremoniously awarded an oak sapling in a pot in addition to their gold medal, researching the fate of the handful of surviving specimens across the world. Upon finding out that when the time came to shake hands with Cornelius Johnson, the African American holder of a new Olympic record in the long jump, the Nazi leader avoided the encounter by heading back into the stadium building, the artist decided to focus on the fate of that particular tree. Mayer traced Johnson's oak to a suburb of Los Angeles now known as Koreatown, making a film of the majestic full-grown tree as it stretches up from the small backyard of a house now owned by a Mexican family that emigrated to California in the 1970s. The artist went on to commission biologists to clone small shoots from the oak, the natural reproduction of which was hindered by the unsuitable climatic conditions in the new habitat. These were then transported back to Europe and exhibited in-vitro as part of a museum installation,¹⁶ with texts and images contextualizing the life of oak and athlete printed on the back of the lab boxes containing the high-tech saplings, while poignantly keeping their future open-ended.

The artist unmasked the racist ideology of Nazism at work in the awarding of oak saplings as prizes to Olympic winners as symbols of racial purity and Aryan supremacy, despite the fact that *quercus robur* is native to most of Europe west of the Caucasus and there are rival national claims

to the tree across the region. The influence of Nazi ideology on horticultural thinking is evident from the contemporaneous reproach of landscape gardener Albert Krämer that Germans “still lack gardens that are race-specific, that have their origins in nationality and landscape, in blood and soil.”¹⁷ The celebration of supposedly “race-specific” species went hand in hand with attempts to eradicate foreign plants, including the small balsam, a harmless Eurasian forest annual against which Nazi botanists waged a “war of extermination.”¹⁸ Their hyperbolic claim that “as with the fight against Bolshevism, our entire occidental culture is at stake, so with the fight against this Mongolian invader, an essential element of this culture, our forests,” is at stake,¹⁹ is notably only slightly removed from the language of Invasion Biology, in which the supposed threat of the dispersal of species echoed fears of the danger of communist contamination.

During the Cold War, a warmongering vocabulary and the fight against ideological foes was transferred onto botanical threats, as demonstrated by the opening of Elton's *The Ecology of Invasions*, with its warning that “nowadays we live in a very explosive world,” wherein it is not just “nuclear bombs and wars that threaten us,” but also “ecological explosions.”²⁰ Dealing primarily with “occasions when a foreign species successfully invades another country,” he laid out his intention to go beyond the “technological discussion of pest control,” to consider the implications of “living in a period of the world's history when the mingling of thousands of kinds of organisms from different parts of the world is setting up terrific dislocations in nature.”²¹ In the high-stakes struggle between competing geopolitical camps it was not just the public sphere but also supposedly objective scientific disciplines that were playing fields for ideological interference. As a result, scientific rhetoric about the threat posed by invasive species was effectively interlaced with visceral fears of the spread of communism to the workers of the capitalist world.

On the other side of the Iron Curtain, exaggerated concern with invasive species also coalesced with Cold War paranoia. Tellingly, the battle against non-natives even found its way into the thematic framework of officially endorsed Socialist Realist art. Anton Djuračka's drawing *Spraying the Colorado Beetle with Pesticide* (1954) depicted bare-chested workers atop a tractor spraying a haze of chemicals over infested potato fields in the heroic effort to eradicate the Colorado beetle from the territory of communist Czechoslovakia. The campaign against the potato beetle was used as a propaganda tool by the authorities, who spread the message through newsreels and leaflets that the insect was being dropped on Eastern Europe as a weapon of war. A Czechoslovak television broadcast from the period declared, to a background of an overcast sky, that “the American imperialists have sent potato beetles by clouds and air to our Republic,” while footage of men spraying pesticides onto crops accompanied the promise that “we will protect and clean our fields of the American plague.”²² Although the potato beetle did find its way to Europe after World War I and began to multiply and disperse in the following decades, there is no evidence of it having been used as a biological weapon during the Cold War. The beetle's spread through socialist fields could, however, have had an anthropogenic cause in the collectivization and industrialization of agriculture that destroyed habitats for insect-eating birds.

In their performance lecture, *The “Next ‘Invasive’ is ‘Native’*”, London-based artist duo Cooking Sections (Daniel Fernández Pascual and Alon Schwabe) investigated the hysteria around the spread of Japanese knotweed in the United Kingdom. Taking the form of a durational reading session in two voices, the work juxtaposes alarmist media representations of the “hidden threat” of the “most invasive,” “killer,” “aggressive,” “horror weed” with scrupulous analysis of the plant's complex natural and cultural history and its embeddedness in economic and urbanistic processes.²³ As the lecture reveals, before Japanese knotweed began its imaginary assault on British suburbia, it had been a favoured exotic addition to Victorian landscape gardens, having been introduced to the country via an unsolicited donation to the botanical collections



Figure 30.1 Cooking Sections, *The Empire Remains Shop: The Next Invasive Is Native, Devaluing Property* Real Estate Agency, 2016

of Kew in 1850. Escaping from the wild gardens favoured by English horticulturalists of the era, it established itself in “waste dumps, railway embankments and graveyards across the land.”²⁴ Since the 1970s, the epicentre of the supposed knotweed invasion has been the post-industrial city of Swansea, where the lead- and sulphur-polluted soils of derelict factories were conducive to resettlement by a plant that originally flourished on the nutrient-poor lava slopes of Japanese volcanos.

One of the lines in the script proclaims: “Empire redesigned the wild,”²⁵ pointing to the artists’ guiding interest in the interference of colonial legacies with the global distribution of foods. This was the primary focus of their overarching venture, *The Empire Remains Shop*, which, from a temporary project space on Baker Street, considered through a series of performances, installations, and discussions held in autumn 2016 “the possibility and implications of selling back the remains of the British Empire in London today (Figure 30.1).”²⁶

The recent cultural, environmental, and economic history of knotweed suggests, however, not so much the redesign of empire by the wild, but rather the agency of the “new wild” in reconfiguring landscapes degraded by colonialism and industrial development. The imagined power of knotweed to smash through concrete and its equally unfathomable ability to devastate house prices was the subject of the Devaluing Property Real Estate Agency the artists set up in the storefront of the Empire Remains Shop. Passers-by could inspect the “toxic assets portfolio” in the window display and consult with the artists about the fact that, despite its atrocious reputation and deleterious effect on property values, Japanese knotweed has many potential benefits for the “post-industrial ecosystem.”²⁷

The repetitive enunciation of the pairing “native, non-native” led Cooking Sections to speculate about the threshold necessary for an alien plant to become naturalised: “Three years? 30 years? 300 years? 3,000 years? 30,000 years?”²⁸ Pointing to the arbitrariness of such criteria for establishing a plant’s “degree of belonging,” they determine that in the long run “most native flora could

actually be seen as ‘alien invaders’.”²⁹ This corresponds to the scientific insight that “the ancestors of all species that are alive today flowed back and forth across the globe for many millions of years,” therefore we should “never assume that where we see a species today is where that creature’s ancestors originated.”³⁰ At the same time, humans have dramatically increased the rate of transfer of species between distant locations, to the extent that it could be claimed that in effect as a result of globalization we are “reuniting the biological world” to create a “new Pangaea.”³¹ The alternation between native and non-native in *Cooking Sections*’ dialogue occasionally expands to include the identifier “invasive,” complicating distinctions between the ecological role of species in particular ecosystems. In that sense, it is important to point out as an additional counter to the habitual demonization of non-natives that the cumulative impact of industrial pollution and climate chaos is also having unpredictable effects on the behaviour of native plants. As anthropologist Anna Tsing has noted, native species can be just as aggressive as the despised interlopers when they abandon “companionable habits to carve a path of destruction across the landscape.”³²

The arbitrariness with which resettled species are adopted or rejected by populist political movements to serve their wider campaign to stoke fears about the contamination of national culture by foreign influences is elucidated in Bence György Pálincás’s *Hungarian Acacia* (2017) (Figure 30.2).

Realized collaboratively with Kristóf Kelemen, it took the form of a post-fact documentary theatre piece telling the “story of an alien species that became Hungary’s most patriotic tree.”³³ The black locust, or false acacia tree, arrived in Hungary 300 years ago from North America at the height of the Columbian exchange, first taking root in aristocratic gardens and spreading



Figure 30.2 Bence György Pálincás and Kristóf Kelemen, *Hungarian Acacia*, 2017
Source: Photo by Krisztina Csányi

since across the country to the extent that it is now considered the “most Hungarian tree” by 63% of the population.³⁴ In 2014, when the European Union discussed placing the tree on a regressive blacklist for the “prevention and management of the introduction and spread of invasive alien species,”³⁵ the Hungarian government reacted unexpectedly by leaping to the defence of the black locust. The autocratic prime minister and champion of illiberal democracy Viktor Orbán reversed the ruling party’s previous policy of considering the eradication of what conservationists viewed an invasive species, declaring: “We send this message to Brussels! We are protecting the Hungarian land, free pálinka brandy distillation, honey, and the black locust!”³⁶ The right-wing government went one step further by pronouncing the tree to be a *Hungaricum*, an official brand for entities of cultural, culinary or strategic significance to the Hungarian nation. At a time when the ruling nationalists were putting up razor wire fences along the border to keep out refugees, to admit an introduced species to the national pantheon constituted a duplicitous act.

The theatrical production *Hungarian Acacia* dramatized, through choral chanting, educational slam poetry and multimedia projections, the entangled natural and human histories of the black locust tree and the manipulation of the species in the political arena. The piece subverted the nationalist intentions of the official campaign to co-opt the resettled tree by pushing its reasoning to its logical conclusion, for if the black locust could become a *Hungaricum*, then: “anybody who can take root in Hungarian soil can be Hungarian.”³⁷ They also took their campaign outside the theatre, organizing visits to politically charged locations and tree planting events as the focus for social mobilization, with the black locust becoming a symbol for a more open, multi-cultural and tolerant society. At a time when the current Hungarian government is amongst the most vocal proponents of an extreme populist anti-immigration policy within Europe, *Hungarian Acacia* courageously made the case for extending an accommodating attitude to non-natives from the black locust to all migrants.³⁸

Their performance also features musical instruments carved from non-native plant species, specifically a recorder made from the black locust tree. In the related work *Emigrant Melodies* (2016), Pálkás, together with fellow artist Kitti Gosztola, drew on the practice of traditional folk musicians, who select the material to make their instruments from the plants in their surroundings that are the easiest to carve and produce the most attractive sounds, rather than simply favouring native varieties. They also astutely referenced Béla Bartók’s essay on “Race Purity in Music” written at the height of the Second World War. At a time when there was much talk about “the purity and impurity of the human race,” the Hungarian composer and ethnomusicologist demonstrated through his research on inter-ethnic exchanges of “emigrant melodies” in Central Europe that “reciprocal influence upon folk music,” had resulted in an “immense variety and wealth of melodies and melodic types.”³⁹ His conclusion that “‘racial impurity’ finally attained is definitely beneficial”⁴⁰ could also be understood as a unambiguous retort to the pernicious ideology of Nazism. Notably, the politico-musical dispute over race also resonates with discussions in the environmental field, where the cross-border movement of species is increasingly recognised as strengthening ecosystems by enriching rather than reducing biodiversity.

The black locust, despite its negative reputation amongst conservationists who view the tree through the lens of Invasion Biology, actually shares many of the characteristics that have led supporters of the new wild to re-evaluate the role of so-called invasive species in restoring degraded ecosystems. Notably it was only in the wake of the Second World War that the black locust began to spread more widely in Hungary, finding fruitful ground in ruined post-war landscapes, where it “invaded the rubble left after bombing of urban sites,” to gain a foothold “as a spontaneous pioneering tree.”⁴¹ Forest ecologists have also pointed out that it characteristically

“dominates early stages of forest regeneration and rapidly colonizes open sites in suburban wasteland, mining areas, abandoned fields and pastures, forest gaps or sites damaged by fire,”⁴² preparing the way for other plant species to return and re-establish dynamic biological processes.

One such pioneering plant was at the core of Polish artist Diana Lelonek’s radically pragmatic proposal to revitalize the post-coal industrial landscape of the region of Konin in Central Poland. Motivated by the ambition to envision strategies to reinvent the environment, economy, and self-image of an area scarred by the devastation of open cast mining and afflicted by the social consequences of the rapid decline of heavy industry during the post-communist period, the artist enlisted the help of the seaberry bush. Her project *Seaberry Slagheap* (2018) set out to channel the propensity of this hearty, resilient and high-yielding shrub to flourish in the barren post-extractive soils, also designing a range of locally manufactured superfood products using the fruit of this non-native plant (Figure 30.3).⁴³

The degraded sandy landscape of the Konin coalfield, which sucks water from an already depleted water table drying out the region’s lakes and is scattered with bleak slagheaps, has turned out to be fertile terrain for the seaberry or sea buckthorn, which has migrated westwards from the harsh conditions of the Siberian steppes. Like many pioneering plants with the ability to transform post-industrial landscapes, it is found on the European Union’s list of unsavoury “alien and invasive” species for the threat it apparently poses to the native vegetation of sand dunes. However, as one proponent of the “new wild” points out: “Nature’s desperados are proven colonists and exploiters of the ecological mess humans leave behind,” making them nature’s “best chance of healing the damage done by chainsaws and ploughs, by pollution and climate change.”⁴⁴

At the same time, the artist’s criticality toward the seemingly easy solutions to the ecological crisis offered by green capitalism can also be detected in the labelling of her superfood jams and juices from seaberries picked on slagheaps, which mimics the sustainable aesthetics of



Figure 30.3 Diana Lelonek, *Seaberry Slagheap*, 2018

supermarket organic packaging while showing images of derelict houses left behind by mining on the back. By parodying the superficial optimism of such marketing-led regeneration schemes, *Seaberry Slagheap* draws attention to the tendency for capitalism to seek to turn ecological crisis to its advantage, also by locking populations into new cycles of consumption. What is more, although the scale of both ecological crisis and artistic interventions in the environment has increased dramatically since the first land reclamation artworks of the 1970s, the ethical bind facing artists who engage in the restoration of industrially damaged landscapes remains the same. As artist Robert Morris put it in his 1979 text on “Earthworks: Land Reclamation as Sculpture,” one of the principal uses of such art projects is to “wipe away technological guilt” by making “sites scarred by mining or poisoned by chemicals now seem less like the entropic liabilities of ravenous and short-sighted industry and more like long-awaited aesthetic opportunities.”⁴⁵ Lelonek shows through her approach that she is mindful of the danger that artists could be complicit in covering up the ecological crimes of extractivism, as well as the dependency of art on the proceeds of toxic capitalism. Nevertheless, she unreservedly advocates natural solutions to climate disaster by pointing to the agency of pioneering plants in restoring biological processes as a way to counteract the effects of climate chaos.⁴⁶

The historical demonization of newcomer species in Cold War science and nationalist ideology, together with the more recent resurgence of manipulated fears of invasive plants in the cynical rhetoric of anti-globalist populism, has been demystified and countered in critical art and science. Encroaching planetary crisis has focused minds on the ecological benefits brought by new arrivals in terms of reversing biodiversity loss and the pioneering work of so-called invasive species in restoring destroyed landscapes. It is now evident that the main drivers of the Sixth Extinction are climate change and anthropogenic habitat loss, rather than the homogenizing effect of the global intermixing of non-native species. The rewilding of extractivist sites or suburban wastelands by non-native plants is also now valued for the potential contribution of restorative action in a specific locality to lessening or reversing climate disorder by creating natural carbon sinks. Contemporary artistic engagement with vegetal migrants has explored ways of collaborating with the plant pioneers of the new wild to model transformative ecological solutions. The gravity of such an endeavour springs from the knowledge that, in the absence of swift and radical action on the largest political scale, the planetary course is set to indiscriminately turn human and non-human Earth dwellers into climate refugees, dissolving any residual distinction between native and non-native.

Notes

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- 2 Charles Elton, *The Ecology of Invasions of Animals and Plants* (London: Methuen, 1958).
- 3 Mark A. Davies, *Invasion Biology* (Oxford: Oxford University Press, 2009), 165.
- 4 Mark Davies et al., “Don’t Judge Species on Their Origins,” *Nature* 474(153) (9 June 2011).
- 5 Davies et al., “Don’t Judge Species on Their Origins.”
- 6 Karrigan Börk, “Guest Species: Rethinking Our Approach to Biodiversity in the Anthropocene,” *Utah Law Review* 1 (2018), 169.
- 7 Fred Pearce, *The New Wild: Why Invasive Species Will Be Nature’s Salvation* (London: Icon Books, 2015), 2.
- 8 Daniel Simberloff, *Invasive Species: What Everyone Needs to Know* (Oxford: Oxford University Press, 2013), 2–3.
- 9 Chris D. Thomas, *Inheritors of the Earth: How Nature is Thriving in an Age of Extinction* (London: Penguin, 2018), 91.
- 10 *Ibid.*, 114.

- 11 See also, Maja and Reuben Fowkes, “Facing the Unprotectable: Emergency Democracy for Post-Glacial Landscapes,” in Barnaby Drabble, ed., *Along Ecological Lines: Contemporary Art and Climate Crisis* (Manchester: Gaia Project, 2019).
- 12 See also Maja and Reuben Fowkes, “Cosmopolitical Struggles for a Pluriversal Planet,” in Corina Apostol, ed., *Creative Time: Another World is Possible* (New York: Routledge, 2019).
- 13 Hewett Watson, *Rarer Plants of Britain* (London, 1835), 38.
- 14 Alfred Crosby, *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Westport, CT: Greenwood Publishing Company, 1972).
- 15 Kathryn Yusoff, *A Billion Black Anthropocenes or None* (Minneapolis: University of Minnesota Press, 2018), 29–30.
- 16 See, Rainer Fuchs, ed., *Natural Histories: Traces of the Political* (Vienna: MUMOK, 2017), 132–133.
- 17 Quoted in Gert Groening and Joachim Wolschke-Bulmahn, “The Native Plant Enthusiasm: Ecological Panacea or Xenophobia?,” *Landscape Journal* 11(2) (January 1992), 24.
- 18 Groening and Wolschke-Bulmahn, “The Native Plant Enthusiasm.”
- 19 Groening and Wolschke-Bulmahn, “The Native Plant Enthusiasm,” 25.
- 20 Charles Elton, *The Ecology of Invasions of Animals and Plants* (London: Methuen, 1958), 18.
- 21 Elton, *The Ecology of Invasions*.
- 22 Clip of Czechoslovak propaganda film on Colorado beetle, weekly news bulletin no. 28 (1950), accessed with English translation at: www.youtube.com/watch?v=sUB146pkVCU
- 23 Cooking Sections, *The Empire Remains Shop* (New York: Colombia University Press, 2018).
- 24 Pearce, *The New Wild*, 99.
- 25 Cooking Sections, *The Empire Remains Shop*, 172.
- 26 Website of *The Empire Remains Shop*, accessed at: <https://empireremains.net/about/>
- 27 Cooking Sections, *The Empire Remains Shop*, 186.
- 28 Cooking Sections, *The Empire Remains Shop*, 168.
- 29 Cooking Sections, *The Empire Remains Shop*.
- 30 Thomas, *Inheritors of the Earth*, 105.
- 31 Thomas, *Inheritors of the Earth*, 107. For a reading of the notion of a “new Pangaea” that echoes Elton’s views on invasive species, see Elizabeth Kolbert, *The Sixth Extinction: An Unnatural History* (London: Bloomsbury, 2014), 212–213.
- 32 Anna Tsing, “The New Wild,” *The Clearing* (December 6, 2018).
- 33 Description on artist’s website, accessed at: <http://palinkasbencegyorgy.hu/tagged/magyarakac>
- 34 Ibid.
- 35 Regulation (EU) No. 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species.
- 36 Slogan of a FIDESZ petition, quoted by the artist at: https://trafo.hu/en/programs/magyar_akac
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- 38 See also Maja and Reuben Fowkes, “Feeling the Curve of the Earth: Deviant Democracies and Ecological Uncertainties,” in Christian Alonso, ed., *Mutating Ecologies in Contemporary Art* (Barcelona: MACBA, 2019).
- 39 Béla Bartók, “Race Purity in Music,” *Tempo* 8 (1944), 132–133.
- 40 Bartók, “Race Purity in Music.”
- 41 Michaela Vitková, Jana Müllerová, Jirí Sádlo, Jan Pergl, and Petr Pyšek, “Black locust (*Robinia pseudoacacia*) Beloved and Despised: A Story of an Invasive Tree in Central Europe,” *Forest Ecology and Management* 384 (2017), 287.
- 42 Vitkova et al., “Black locust (*Robinia pseudoacacia*) Beloved and Despised.”
- 43 See, Jakub Gawkowski, ed., *The Most Beautiful Catastrophe* (Bytom: CCA Kronika, 2019), 67–71.
- 44 Pearce, *The New Wild*, 4.
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31

MULTISPECIES FUTURES THROUGH ART

Ron Broglio

Isabella Kirkland paints lush natural history works reminiscent of seventeenth-century Dutch still lifes or British natural history illustrations during the age of colonial conquests. In *Gone*, Kirkland amasses detailed bodies, scales, feathers, and fur of sixty-three different species ranging from the Jamaican giant galliwasp to a Laughing Owl and a Tasmanian Tiger, from reptiles to birds to insects to mammals.¹ Despite stylistic similarities to early natural history works, Kirkland's paintings are importantly different from their predecessors. All of the species in *Gone* are extinct due to the weight of human intervention in ecosystems across the globe. She is leveraging the stylistic language of natural history which accompanied the age of exploration and revealing it as an age of exploitation in which animals become the roadkill on the highways of human progress.

Animals in contemporary art point to the entangled, enmeshed world in which we find ourselves. If the age of discovery and the age of exploration expanded the global knowledge and reach of Europe, today in the age of the Anthropocene we are bearing the inheritance of exploitation and extraction from these former ages. We have expanded the number of known species from the days of Linnaeus to a speculated eight million species of animals, plants, and insects on the planet, of which one million are threatened with extinction within our lifetime. Kirkland's *Gone* testifies to some of the 680 vertebrate species driven to extinction since the sixteenth century.² Kirkland leverages the artistic mode of illustration and enumeration used to illustrate growing scientific knowledge. Now we must be confronted with the knowledge of animals lost to our invasive habits of dwelling on this earth. Kirkland explains "You can't protect something if you don't value it or know what it's for."³ Of course, "what it is for" is not necessarily for us or our use. Kirkland is one of many artists who wants to point to a vast array of animal worlds that do not have to be coopted for our utility.

Contemporary animal art moves in several directions. Kirkland's is of the sort that lays bare human greed and knowingly or sometimes unwittingly violence for our own ends. Other artists take up the banner that another world is possible and help us envision these speculative futures. In both cases, the creativity of such work responds to the complexity of the Anthropocene with imaginative force of art and the agency of a larger-than-human world.

In *Requiem: Ectopistes Migratorius*, Michael Pestel addresses the extinction of the passenger pigeon.⁴ The last two of these pigeons were in captivity at the Cincinnati zoo. The male, George,

died first and the female, Martha, lived another four years as the last of her kind and died on September 1, 1914. In the mid-1800s there were some three to five billion passenger pigeons. The sky would blacken when large flocks flew overhead. The extinction of this thriving species happened in the span of a human lifetime.

Pestel highlights this ability to know and yet powerlessness over the loss. The entrance of the exhibition has large black letters of the DNA sequence for the passenger pigeon. Again, we know this animal using reason and biological data, but this knowledge feels mute before the finitude of extinction; in fact, the tension between the power of knowledge and the helplessness of loss may heighten the affective potency of *Requiem*. Further along in the exhibition is a human-scale wooden bird cage. The cage is an allegorical object; instead of using wood in its natural form as a tree, it is cut down and transformed by humans and made into a mode of confinement. Inside the cage are stills from Eadweard Muybridge's study of a bird in flight. A viewer can twirl in a seat inside the cage and so animate the stills—breathing an artificial life into them. Meanwhile, the actual bird will never fly again. Pestel includes a number of interactive devices, such as a “piano table” that allows visitors to create primitive sounds through string vibration and scratching that serves as a poor attempt to mimic an extinct bird's song.

In another section of the installation the artist has created elaborate contraptions meant to address the human technologies that brought the demise of the bird. As Pestel explains, “This extinction was precisely engineered by human beings... the gun, the train and the telegraph. The gun to kill them, the train to transport the meat and the telegraph that spotters used to alert the hunters hundreds of miles away.”⁵ The exhibition curator explains, “It's a show about awareness. It's about what we've done and what we can do.”⁶

The extinction of the passenger pigeon at our hands is almost unbelievable in its scale. Reason and technology advanced westward expansion which demolished the non-human worlds and also many human worlds. The painter Walton Ford captured the immensity of this blind destruction of the passenger pigeons in his 1960s work *Visitation* where a large field is obscured by the bodies of birds gorging themselves on corn, fruit, and nuts. As an exhibition label at the Smithsonian explains: “The birds' ravenous feasting on the bounty of the land could symbolize the profligate exploitation of natural resources perpetuated by European settlers in the New World, which ultimately led to the extinction of the passenger pigeon.”⁷ At the top right of the painting Ford includes a quote “What it portends I know not – Thomas Dudley 1631.” Dudley was the British colonial magistrate to Massachusetts. Invoking him in the painting emphasizes the ravenous powers of colonialism. Ford continues to make animal works that straddle realism and wonder and the tensions between thriving and death.

Such animal art reveals the reach of global capitalism and large-scale anthropogenic systems and their impact on the non-human worlds to which we are connected. In *Natural Contract*, the philosopher Michel Serres succinctly explains the transformational power of the human species from small tribes to billions of humans with diverse technological affordances: “No longer swallowed up like a dimensionless point, he [humans] exists as a collectivity, transcending the local to extend into immense tectonic plates, just as astronomically observable as the oceans.”⁸ Indeed, we weigh upon this Earth like tectonic plates causing seismic ruptures.

To help us make sense of our interconnectedness to non-human life, animal studies has turned from its early focus in the 2000s on singular species to a multispecies approach. So, while artists like Kirkland and Pestel focus their work on specific species extinction, they connect such loss to larger ecologies, including the human as a tectonic weight. The multispecies approach

allows for complex conversations about our entanglements. In 2010 the journal *Cultural Anthropology* published a collection of essays that helped opened the conversation. As the special issue editors Stefan Helmreich and Eben Kirskey put it:

Multispecies ethnographers are studying the host of organisms whose lives and deaths are linked to human social worlds. A project allied with Eduardo Kohn's "anthropology of life"—"an anthropology that is not just confined to the human but is concerned with the effects of our entanglements with other kinds of living selves" (2007:4)—multispecies ethnography centers on how a multitude of organisms' livelihoods shape and are shaped by political, economic, and cultural forces.⁹

With this approach comes a newfound interest in systems theory and Gregory Bateson's *Steps to an Ecology of Mind*. For Bateson, "We live in a world that is only made of relationships" and these relationships are more important and fundamental than species as singular units.¹⁰ Bateson and systems theory develop our understanding of relations in order to get us outside of singular unit thinking. Unlike Darwin, who proposed "the unit of survival was either the family line or the species," for Bateson the "unit of survival is *organism plus environment*. We are learning by bitter experience that the organism which destroys its environment destroys itself."¹¹ A multispecies approach acknowledges the entanglement for mutual survival.

Throughout his work, Bateson trying to shift the way we perceive the world because our current modes of perception prevent us from seeing the interdependencies in ecological systems: "The most important task today is, perhaps, to learn to think in the new way. Let me say that I don't know how to think that way."¹² Making and viewing art is about perception. Contemporary artists working with animals refocus the way they see and through their work invite others to do the same. A multispecies animal art thinks the world in new ways by manifesting "how a multitude of organisms' livelihoods shape and are shaped by political, economic, and cultural forces."

Briefly, by way of further explication, let us consider a multispecies approach as it relates to the loss of honey bees. The reason for the current decline in bee population is still unresolved, but it has been increasingly clear that pesticides and particularly neonicotinoids which target the nervous system contribute to colony collapse disorder.

In *Huddle 2 (Workers)* Esther Traugot has laid out seemingly hundreds of bee corpses on a glossy white table.¹³ They form a geometric pattern of concentric rings radiating outwards with each bee placed facing toward the center. Around the abdomen each bee is swaddled in a crocheted cotton bandage carefully tucked under its wings. The work makes palpable the loss of these wondrous pollinators, provides a ritual for mourning their loss, and suggests we should think ways of caring for each being. In this work we see the collective and the individuals. It is an effective way to see a collective of individuals at risk amid a world all the more dangerous because of human agriculture.

Seventy-five percent of global crops producing seeds and fruit depend on pollinators. A decline in bees means a loss of food for us. A significant cause of decline is our insecticides along with stressed bee colonies due to transporting them as industrially pollinators for large farms. This means we are killing the very animals that help nourish us. Mike Bianco's *On Becoming a Human Honeybee* and Lisa Korpos's *The Community Bee Clinic* are art interventions attempting to help the bees and make us aware of their demise. Bianco sees himself as part of the bee community assemblage.¹⁴ He then leads beekeeping and demonstration programs to communicate the imperative of living with bees and creates sculptural objects that manifest the human-bee

relationship. Like Bianco's *Becoming*, Korpos's *Clinic* is part science, part artistic performance, part speculative design. As Korpos explains, "Through the performance of interspecies nursing care and use of speculative biomedical objects, participants are invited to engage with non-human bodies and ecologies in new ways and at new scales."¹⁵ Feeding syringes for bees, resting pads, and care facilities are all part of the performance. Bianco and Korpos's work leverage Bill Burn's 2005 *Safety Gear for Small Animals* and applies it to our current ecological state of affairs. Burn's has created orange caution vests, small hardhats, tents and other gear to keep squirrels, birds, insects—wildlife—safe. The comedic gesture has a striking point: it is dangerous in nature and we only add to the problem; maybe we should help. Annette Hurtig, the exhibition curator at the Museum of Contemporary Art in Toronto, explains:

While providing sound scientific fact, the exhibition functions also as a kind of cautionary tale, as a moral fable, an apologue, if you will, and as a visual allegory, offering lessons and pragmatic advice for those interested in the plight of animals.¹⁶

While so much of art is by humans for humans, these works show how decisions we have made as a society to benefit us in agriculture have an adverse effect on other animals and through the demise of bees their loss becomes our loss as well. Following a multispecies approach and Bateson's notion that the environment is more fundamental than the individual, these works emphasize the larger-than-human community of which we are a part.

Natural history continues to be an evocative figural tool for animal art. Unlike natural history illustration as a knowing and extracting from nature, many contemporary artists are invested in the wellbeing and thriving of other animals—even as they may use the tools and some of the rhetoric of natural history. Exemplary of such work is the art of Bryndís Snæbjörnsdóttir and Mark Wilson. In *Nanoq: Flat Out and Bluesome* they show the results of a project during which they spent five years tracking taxidermized polar bears in the United Kingdom and photographing them in situ.¹⁷ The range of bears from the late 1700s to the 2000s shows the history of human incursion into the wilderness of the polar North. How the animal fur is modeled tells us something about how we see polar bears and the North. The Victorian period bears such as those in an English manor house are posed as ferocious animals on hind legs, snarling and showing their teeth while the most recent bears have an almost Disneyesque quality of sweetness. Since their exhibition in 2006, the demise of the polar bear has become synonymous with global warming. *Nanoq* is a prescient staging of our views of nature. At Spike Island they exhibited the work, which included ten of the taxidermized polar bears in specially made vitrines. Such display of the taxidermy forms seems to be a nod to natural history but the subject matter—polar bears amid global warming—and the juxtaposition of the bears over centuries moves the work away from natural history to an ethics of care.

In his 2004 essay "Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern," the anthropologist Bruno Latour addresses the problem of scientific facts in the modern world. For Latour, facts are not neutral nor objective; rather they arise from social contexts and scientific consensus and are summoned for particular reasons. Facts are concerned with something. The problem, however, is that too often we forget that concern; we forget the care for the thing enmeshed in a state of affairs from which facts arise: "Matters of fact are only very partial and, I would argue, very polemical, very political renderings of matters of concern and only a subset of what could also be called states of affairs."¹⁸ Polar bears are not singular isolated objects to be examined as non-contextualized species. They are not abstracted facts but rather are part of a larger ecosystem.

In *Matters of Care*, Puig de la Bellacasa takes Latour a step further asking us for a deeper engagement with the things of the world. Miriam Ticktin and Katinka Wijsman summarize the argument this way:

the goal is not simply to speculate about how things could be different if we cared for a broader range of things, but to get involved in their ‘becomings.’ It is an affective mode that encourages intervention in what things *could* be.¹⁹

Facts become situated things in which we are involved and things for which we should provide care. Such work bridges the divide between affect and the seeming objectivity of science in order to dwell alongside other entities in this world (Figure 31.1).

Bryndís Snæbjörnsdóttir and Mark Wilson’s *You Must Carry Me Now* is an example of this move from data to affect.²⁰ The work consists of a set of fourteen images, each showing the autopsied body of a California Condor placed on a black background. The shimmering dark feathers and large crumpled corpses of these endangered species are both noble and painfully mournful. Some still have the radio tag identification number attached to a wing. Alongside each photographed body is a text that is headed with the bird’s ID number and then provides a



Figure 31.1 Bryndís Snæbjörnsdóttir and Mark Wilson, *Bird 301*, 2014

story about the bird transcribe from a description by a field biologist who knew each animal for the years of its life. The work moves between scientific data—ID numbers and statistics—and the affective surplus. As Cary Wolfe describes the work:

The archive may record the “official story” of body weight, reproductive rate, legal status, and so on, but it also actualizes something more, and in that other space, that other scene, we discover that the world is not given but made. Or, as one scientist says of “Bird 133” “133 and I share the same birthday—it’s the little things that make you connect”.²¹

Art as matters of care activates “that other space, that other scene.” Amid facts and concerns, it opens up an empathetic pathway to move outside ourselves and think of another—even a radically other such as endangered animals with which we share this planet.

Returning to Wolfe’s quote, he makes the distinction between a world that is given and one that is made or as he says “in that other space, that other scene, we discover that the world is not given but made.” A given world is the facticity of the Earth, but this is not enough. A made world is the recognition that how we dwell upon the Earth shapes and makes the world. It is not made alone, but with other beings. It is made in the large and small rituals and habits of daily life—the choices we make as to food, clothes, transportation, and so on—all of which have implications for other animals geographically near and far away from us.

Complementing the work of Bryndís Snæbjörnsdóttir and Mark Wilson is the art of Subhankar Banerjee. In Banerjee’s photography and writing, we attend to the move from scientific seeing and facticity to matters of care and art as “that other space” that activates affect. Exemplary here is his Arctic series brought together in *Arctic Voices: Resistance at the Tipping Point* (Figure 31.2).²²

There is a clear facticity to the images that give witness to life in Arctic National Wildlife Refuge and surrounding areas—a wide shot of the Sheenjek River, white on white snow with an opening to a bear’s den, long trailing herds of caribou, close-up images of nesting loons. The subjects in the dark greys and blacks are set in contrast to the surrounding of ultra-white snow or blended with the dark tones of the bare trees and rocks. The cool blue-grey tones in the work add to the feel of a clear-eyed, almost coldly objective camera witnessing the life in the North. And yet... yet we know the framing, the focus and range, the light and exposure are all artistic choices. Seeing these animals making their worlds in their habitat becomes something more than scientific seeing. Writing about Banerjee’s images, Yates McKee explains “the photographs speak to a certain non-self-evidence of evidence, calling out to be read as texts and in relation to other texts that are not confined to the images themselves.”²³ The images are more than a world given. They reveal a world made, one made by the animals and by an artist seeing and opening these other spaces, other scenes for us. As Banerjee himself says of his loon images: “In these bird portraits [loon in the arctic] we do not get much information about their natural history but instead a psychological state of being-in-the-land.”²⁴

As seen with Snæbjörnsdóttir and Wilson’s condor images, Banerjee places his photographs within a larger context using the verbal alongside the visual. The artist provides texts that, like his images, are matter of facts but at the same time when seen with an ecological eye are matters of concern and care. Consider, for example, his textual description accompanying images of migratory caribou:

Early May 2002, Arctic National Wildlife Refuge, Alaska. Pregnant female caribou from the Porcupine River herd migrating over the Brooks Range Mountains in the

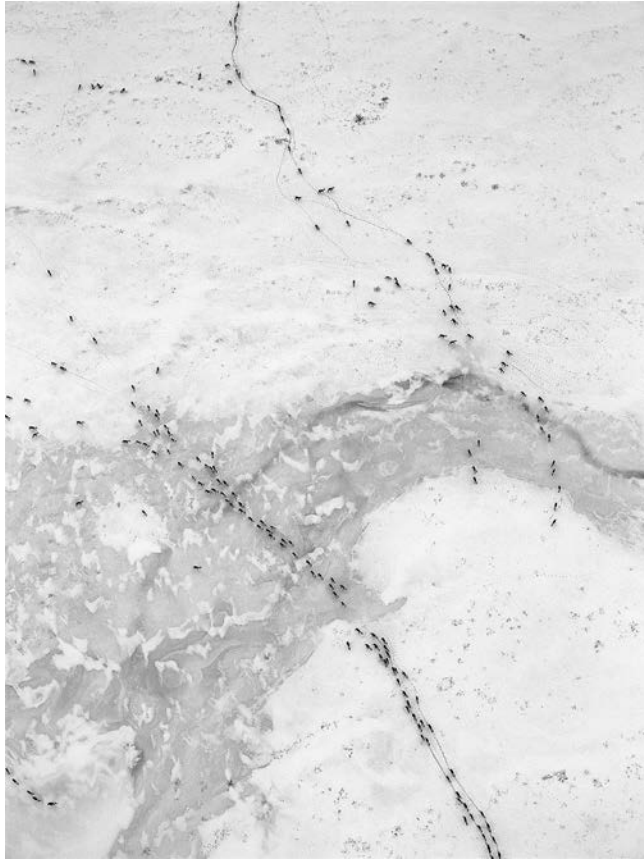


Figure 31.2 Subhankar Banerjee, *Caribou Migration I*, 2002

Arctic Refuge, on their way to the coastal plain for calving. The coastal plain of the Arctic Refuge is the core calving area of the Porcupine River herd, and is also the most debated public land in the United States history. Whether to open up this land to oil drilling or preserve it has been raging in the halls of the United States Congress for more than four decades.²⁵

The text can be read as a factual natural history account of the state of affairs. Yet we see in these words how complexly imbricated human politics and animal dwelling are. We see that our habits of dwelling with oil have effects in far-away geographic places—in this case the Arctic—and have effects on animals few humans south of 66 degrees latitude think about.

The issue of caribou and oil is also a question of how the world is made for the Gwich'in people of Alaska, the Yukon, and the Northwest Territory. As Banerjee explains, “The Gwich'in call themselves ‘the caribou people.’ To open up the caribou calving ground to oil development is a human rights issue for the Gwich'in Nation.”²⁶ This work is not just a multispecies approach but something more richly textured and entangled. Not just humans and caribou, but also some groups of humans working against others for ways of living on the land and not just any species of caribou, but specifically in this case the Porcupine River herd and its migratory patterns developed over centuries.

I would like to extend the matters of concern and thinking “the world is not given but made” through two phrases by philosopher Isabelle Stengers. In *Capitalist Sorcery*, Stengers and her co-author Philippe Pignarre explain that capitalism is a sort of witchcraft and to counteract its power we need to create counter-spells—ways of thinking and acting that provide an alternative. Their book opens with a rallying cry “Another world is possible.”²⁷ Indeed, they admit, many worlds could be possible, but it is enough to say at least one, another world, can be realized. As capitalism and neoliberalism have planted a flag into the future, “another world is possible” helps us expand our thinking beyond an already marked path of the future. Accompanying this rally cry is another phrase, “care of the possible.”²⁸ Here Stengers asks that we not shut down the plentitude of ways of being by giving in to the mandates of global capitalism. Stengers is asking us to more carefully think how we make the world, to see this as a mutual world making with an expanded range of other beings—as she says in “The Cosmopolitical Proposal.”²⁹

A number of artists take up the banner that another world is possible. Sometimes these are dystopic worlds as with Alexis Rockman’s *The Farm*, which imagines biotech companies altering the genes of livestock to give us animals-as-products, including chicken that are featherless and have more chicken wings, cattle that are square meat patties, and pigs as ready-made organ donors.³⁰ In his *Bronx Zoo*, Rockman paints a surreal, fantastic dystopia of a world without humans in which uncaged animals in a flooded zoo do battle to create new ecologies in the ruins of what was New York.³¹ The bright, bold colors of Rockman’s paintings contrast with his dark humor in which he asks viewers to imagine the future implications of our world. For Rockman the future according to capital has multi-winged chickens and square beef while another world is possible means an unnatural nature in the ruins of the concrete jungle.

Other artists take up possible worlds to model thriving speculative ecologies. Patrick Nagatani’s *Golden Eagle, United Nuclear Corporation Uranium Mill and Tailings, Churchrock, New Mexico* pits technological destruction by nuclear technologies against the eagle and all that the animal symbolizes for indigenous tribes within the area of the nuclear experimentation and uranium extraction (Figure 31.3).³² The photograph shows a nuclear power plant in the remote New Mexico high desert landscape after a recent winter snow. The image seems rather dull in itself, rather a mundane industrial building and parking lot surrounded by mesas and plains. Of course, despite it seeming innocuous, this is the site that devastatingly released uranium into the landscape. Hovering above the building in the foreground and taking up a quarter of the image is an eagle from a Hiroshige Japanese woodblock print. The eagle is descending from its ethereal heights; its eye is red and its beak is pointed directly at the uranium mill.

New Mexico has a long and continuing history with the nuclear weapons research and testing. Churchrock is located on the Navajo nation, where in 1979 a dam at the United Nuclear Corporation Church Rock uranium was breached and released over a thousand tons of uranium and almost a million gallons of heavy metal into the Puerco River. With uranium levels in the water at 7000 times the allowable drinking level, the contamination had serious effects on humans, livestock, and animals downstream of the breached dam. Relief to the community was far from adequate and remediation efforts continue to this day.

Another photograph in Nagatani’s “Nuclear Enchantment” series is *Kweo/Wolf Kachina, United Nuclear Corporation Uranium Tailings Spill, North Fork of Rio Puerco, near Gallup, New Mexico*.³³ Kachina are spirit beings sacred to the Pueblo people. In this photo an image of a Pueblo Indian dancing in costume with a wolf’s head is imposed onto a photo of the Puerco River where cows lay dead and glow green from consuming contaminated water. The loss of cattle was the loss of a livelihood and sustenance for many in the community. With the eagle image and the Kweo/Wolf Kachina, Nagatani invokes the indigenous relationship to the land. In Donna Haraway’s words, “it matters what stories tell stories” (35).³⁴ Rather than tell the story



Figure 31.3 Patrick Nagatani, *Golden Eagle, United Nuclear Corporation Uranium Mill and Tailings, Churchrock, New Mexico*, 1990

of military might or suspect progress through a nuclear age, Nagatani invokes Indigenous stories and rituals as a way of trying to heal a damaged planet.

Brandon Ballengée also works with the problems of a damaged planet. In *Love Motel for Insects* he is trying to facilitate insect sex to combat the radical decline in insect populations. Ballengée prototypes a solution where species loss due to human destruction of habitats is mitigated by humans building architectures for animals. *The Love Motel* is a series of public sculptures “intended to construct situations between humans and anthropods.”³⁵ Each work has several abstract blobs sometimes made to look like a moth other times in a pyramid shape. The metal frame of the form is wrapped with a translucent white mesh which glows a soothing ultra-violet purple or blue in the evening. The glowing sculpture is meant to attract insects so that they can find love, mate, and re-populate the environment. Meanwhile, for the humans it is a beautiful glow on the landscape that offers the opportunity to think of the more-than-human world. The works are whimsical and hopeful as gestures that another world is possible and that such a world should include non-charismatic animals, the pests, the insects which are important for biodiversity of a healthy ecosystem.

“Don’t build your home. Grow it” proclaims Terraform ONE.³⁶ This art/architecture/design team imagines organic human dwellings that enhance rather than detract from the animal world much along the lines of Anna Tsing’s work with mushrooms as a way of living futures on a damaged planet.³⁷ Mitchell Joachim, one of the architects and designers of Terraform One, explains the logic of capitalism as a trauma: “We’ve got McPeople, McCars, McHouses.” To combat the McHouse, Terraform ONE plans to grow homes by training trees. Using the ancient technics of tree grafting alongside designed scaffolding to direct growth, the trees form habitable structures.

Instead of building construction as an ecological drain of resources, grown homes actually assist the environment. They provide carbon offsets and home for non-human species to dwell alongside their human neighbors. In such housing the lives of humans and animals are closely intertwined. Joachim continues the speculative design: “imagine pre-growing a village—it takes about seven to ten years and everything is green.” Currently, we build homes based on how we as a culture have developed our idea of dwelling—how much floor space, storage, how many rooms, and so forth. Terraform ONE gets at the fundamental problem—the cultural expectations of how we dwell. By proposing and even prototyping growing homes, they expose the constructed nature of our expectations about housing. In short, they change the scene and change the narrative.

The function of art has been for culture to tell stories about itself, for culture to take measure of itself and its directions. Art then is fundamentally a product of and for culture and one that points to foundational concerns regarding what it means to be human. Can art, which is a human endeavor and for humans, be hospitable enough to give itself over to thinking and remediating the anthropogenic effects upon the earth? Animal art confronts us with the fundamental problems of the Anthropocene—the social, cultural, political, and economic forces by which we weight upon the planet. Engaging in such art means taking on new perspectives in how we dwell with other animals on this earth. It matters what stories we use to tell stories but also what stories we use to make art and what art we use to think the world around us. Animal art has the opportunity to confront our basic assumptions of what it means to be a human on this planet. We are radically enmeshed in the lives of other beings. Art allows us to see this and to imagine dwelling anew.

Notes

- 1 See Kirkland's website www.isabellakirkland.com/gone
- 2 See the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) global assessment report on biodiversity and ecosystem services, May 6, 2019. www.ipbes.net/news/Media-Release-Global-Assessment.
- 3 State of the Art, “Isabelle Kirkland.” <https://stateofheart.crystalbridges.org/blog/project/isabella-kirkland/>
- 4 The *Requiem: Ectopistes Migratorius* was on exhibition at the Williams Center Gallery, Lafayette College September 1 to December 13, 2014. For information about the exhibition, see Tim Higgins, “Lafayette College art installation tells story of Martha, the last passenger pigeon” *The Morning Call*. November 8, 2014. www.mcall.com/entertainment/arts-theater/mc-requiem-passenger-pigeon-michael-pestel-easton-20141108-story.html; and Cary Wolfe, “Each Time Unique: the Poetics of Extinction” in *Animalities: Literary and Cultural Studies Beyond the Human*, ed. Michael Lundblad, Edinburgh: Edinburgh University Press, 2017.
- 5 Higgins, “Lafayette College art installation.”
- 6 Higgins, “Lafayette College art installation.”
- 7 *The Singing & the Silence: Birds in Contemporary Art*, 2014 exhibition, Smithsonian American Art Museum <https://americanart.si.edu/artwork/visitation-78224>
- 8 Michel Serres, *The Natural Contract* (University of Michigan Press, 1995), 17.
- 9 S. Eben Kirksey and Stefan Helmreich, “The Emergence of Multispecies Ethnography,” *Cultural Anthropology* 235(4), 545–576, 545.
- 10 Sited in Jan van Boeckel, “When We Find Meaning in Art, Our Thinking Is Most in Sync with Nature,” Nature Art Education. www.naturearteducation.org/AnEcologyOfMind.htm
- 11 Gregory Bateson, *Steps to an Ecology of Mind* (Chicago and London: University of Chicago Press, 1972), 491.
- 12 Bateson, *Steps to an Ecology of Mind*, 462.
- 13 From Esther Traugot's website “Bees: Huddle 2 (Workers).” <https://esthertraugot.com/section/471825-Huddle-2-Workers-2015.html>

- 14 From Mike Bianco's website "Bees: On Becoming a Human Honey Bee." www.biancoprojects.com/where-have-all-the-bees-gone
- 15 See Lisa Korpos's website "Community Bee Clinic." www.lisakorpos.com/p/community-bee-clinic.html and the University of California San Diego events <https://calendar.ucsd.edu/event/lisa-korpos-the-community-bee-clinic/May%206,%202019/May%206,%202019/12:00%20pm/>
- 16 See Bill Burns's website <https://billburnsprojects.com/?pageid=128> and for the 2005 exhibition see <https://museumofcontemporaryart.ca/exhibition/bill-burns-safety-gear-for-small-animals/>
- 17 See the artist's website <https://snaebjornsdottirwilson.com/category/projects/nanoq/> and their publication, Bryndís Snæbjörnsdóttir and Mark Wilson, *Nanoq: Flat Out and Bluesome* (London: Black Dog Publishing, 2006).
- 18 Bruno Latour, "Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern," *Critical Inquiry* 30, Winter 2003, 225–248, 232.
- 19 Miriam Ticktin and Katinka Wijsman, "Review of Maria Puig de la Bellacasa's *Matters of Care*," *Hypatia*, 2017.
- 20 These condor images are part of their solo show *Trout Fishing in America and Other Stories*, Arizona State Art Museum, 2014. See <https://snaebjornsdottirwilson.com/category/projects/trout-fishing-in-america/>
- 21 Cary Wolfe, "Condors at the End of the World," *You Must Carry Me Now: The Cultural Lives of Endangered Species*, eds Bryndís Snæbjörnsdóttir and Mark Wilson (Gothenburg, Sweden: Förlaget 284, 2015), 157–172, 172.
- 22 Subhankar Banerjee, *Arctic Voices: Resistance at the Tipping Point* (Seven Stories Press, 2012).
- 23 Yates McKee, "Of Survival: Climate Change and Uncanny Landscape in the Photography of Subhankar Banerjee," *Impasses of the Post-Global: Theory in the Era of Climate Change*. Vol 2. Ed. Henry Sussman (Ann Arbor: MPublishing, University of Michigan Library, Open Humanities Press), 2012, 18–107, 82.
- 24 See the artist's website under Projects, Arctic Series Loon on Nest, Oil and the Caribou, 2002. <http://subhankarbanerjee.org/photohtml/arctic-photo-white-10.html>
- 25 See the artist's website Projects, Arctic Series Photographs, Caribou Migration III, Oil and the Caribou, 2002. www.subhankarbanerjee.org/photohtml/arctic-photo-white-01.html
- 26 See the artist's website Projects, Arctic Series Photographs, Caribou Hunt—Charlie Swaney and Jimmy John, Gwich'in and the Caribou, 2007 www.subhankarbanerjee.org/photohtml/arctic-photo-white-03.html
- 27 Isabelle Stengers and Philippe Pignarre, *Capitalist Sorcery: Breaking the Spell* (Palgrave, 2011), 3.
- 28 Isabelle Stengers, "Care of the Possible: Isabelle Stengers Interviewed by Erik Bordeleau," *Scapegoat*. Vol. 1. 12–17, 27. www.scapegoatjournal.org/
- 29 Isabelle Stengers, "The Cosmopolitical Proposal," *Making Things Public: Atmospheres of Democracy*. Ed. Bruno Latour, Peter Weibel. Center for Art and Media in Karlsruhe (MIT Press, 2005), 994–1003.
- 30 *The Farm* (2000) is one in a series called "Wonderful World." See <http://alexisrockman.net/wonderful-world/>
- 31 *Bronx Zoo* (2012–2013) is a large canvas triptych and part of Rockman's "Rubicon" series. See <http://alexisrockman.net/rubicon/>
- 32 For further information see the Akron Museum of Art's catalogue description online <https://akronartmuseum.org/collection/Obj3600?sid=25&cx=100384> as well as the "Nuclear Enchantment" series on the artist's website www.patricknagatani.com/
- 33 For further information see the Akron Museum of Art's catalogue description online <https://akronartmuseum.org/collection/Obj3930?sid=25&cx=100435>
- 34 Donna Haraway, *Staying with the Trouble* (Raleigh, NC: Duke University Press, 2016), 35.
- 35 For further information and images about this project begun in 2001 and ongoing, see the artist's website <https://brandonballengee.com/projects/love-motels/>
- 36 Mitchell Joachim, "Don't Build Your Home, Grow It!," TED2010, February 2010. www.ted.com/talks/mitchell_joachim_don_t_build_your_home_grow_it. Also see their website www.terreform.org/projects_habitat_fab.html
- 37 Anna Lowenhaupt Tsing, *The Mushroom at the End of the World* (Princeton NJ: Princeton University Press, 2015).

ACTIVIST ABSTRACTION

Anita Krajnc, Save Movement Photography, and the Climate of Industrial Meat

Alan C. Braddock

On June 22, 2015, Canadian activist Anita Krajnc led a group intervention in Toronto to give water and comfort to pigs while bearing witness to their suffering from stress and heat exhaustion in a transport truck destined for an industrial slaughterhouse. It was one of many such inventions by Krajnc and her group, Toronto Pig Save (TPS), but on this occasion she was arrested, charged with criminal mischief, and released on bail pending a court decision. Krajnc and her cause attracted international media attention. She was eventually acquitted at trial in 2017, when the Ontario Superior Court of Justice ruled her actions did not interfere with slaughterhouse operations or jeopardize safety. The Save Movement, which Krajnc co-founded in 2010, has since grown into a global force consisting of loosely affiliated local groups operating on six continents engaging politics of species and climate justice. The movement has been catalyzed in part by photographs taken by Krajnc and fellow activists to document their interventions (Figure 32.1). Journalists have written much about her activism and legal battles, but the specific visual character and significance of Save Movement photographic imagery has received little attention.¹

The present essay examines Save Movement photography as an activist art practice that critically exposes the meat industry for causing untold suffering to livestock animals, notably pigs, whose cognitive and emotional capacities are often compared with those of dogs. I argue such photography also serves a related goal of the movement by highlighting the industry's enormous role in exacerbating climate change. As Krajnc observes in an essay explaining Save Movement's aims and founding principles,

Those living in “advanced industrialized countries” use a disproportionate share of environmental space (e.g., a greater share of the global atmosphere as a dump for greenhouse gases) and have profited in the past and present from environmental damage by not paying for the full costs of our consumption and wealth generation. As a result, we have an added duty to act.²

Since the late 1990s, long before she helped found the Save Movement, Krajnc has raised awareness about climate change and other environmental issues in tandem with human and animal rights. In her 2001 PhD dissertation in Political Science at the University of Toronto, she wrote “Efforts to end discrimination based on such arbitrary factors as race, sex, sexual orientation,



Figure 32.1 Elli Garlin, Anita Krajnc gives water to an overheated pig on way to slaughter, 2015

ability, age, and species (in the case of animal rights) are essentially moral struggles, and involve similar ideals, namely, freedom, equality, and justice.” She draws inspiration from historical leaders of nonviolent progressive activism, including Leo Tolstoy, Mahatma Gandhi, and Martin Luther King, Jr. By using photography to address animal cruelty and climate change as interconnected problems of social and environmental justice, Krajnc and her peers model an intersectional ecological approach to activism.³

Epitomizing this approach are certain photographs taken by Krajnc depicting a partial view of a single pig, whose eye appears through an ocular opening in the transport truck wall. In such pictures, Krajnc creatively emphasizes animal subjectivity by making a captive being’s sentience the focal point of a framed “portrait”—a term she uses to describe many of her Save Movement images. The most powerful example of these, in my opinion, is Krajnc’s striking 2015 photograph of a sow, *Portrait Mother Earth*, the unique title of which associates this pig with a planetary sense of environmental concern and animal personhood (Figure 32.2). Is this mere anthropomorphism or something else? For me, Krajnc’s picture functions differently from conventional humanized animals seen in Disney films and other popular imagery. Rather, her photograph challenges portraiture’s conventional humanism and expands its limits, inducing empathy by forcefully asserting the self-awareness, intelligence, and emotional capacity of pigs as sentient creatures to whom we have an ethical obligation. Sentiment obviously enhances the appeal of *Portrait Mother Earth*, but the image avoids saccharin excess by confronting beholders with glaring truths: the global meat industry engineers, confines, transports, slaughters, and commodifies millions of these individual beings as “pork” every day and more than a billion each year. Through its carefully conceived abstract composition—isolating the sow’s pensive face and eye while eliding most of her body—the photograph produces a restrained sense of affective depth that avoids both aesthetic detachment and cloying mawkishness.⁴

Portrait Mother Earth fulfills what Krajnc calls the Save Movement’s “central strategy,” namely “bearing witness” to meat industry brutality in a way that “politicizes the transport trucks en



Figure 32.2 Anita Krajnc/Toronto Pig Save, *Portrait Mother Earth*, December 31, 2012

route to slaughterhouses, making them noticeable” and “draws attention to the animals suffering.” But *Portrait Mother Earth* accomplishes more than that. The picture recalls another statement by Krajnc regarding how

images of the animals in death trucks crying out, “Face us! Help!” break the disconnect of cellophane and plastic wrapped “meat,” “dairy,” and “eggs” with the incalculable pain and horror of individual animals wanting to escape confinement, torture, and death.⁵

By giving the lie to “plastic wrapped ‘meat,’” *Portrait Mother Earth* critically addresses the commodifying impulse of industrial capitalism, which relentlessly abstracts and fetishizes specific living beings and social relations, fictively transforming them into what Karl Marx described in *Capital* (1867) as “the fantastic form of a relation between things.” Krajnc’s photograph thus appropriates capitalism’s abstracting impulse in order to expose it and turn it on its head. That is, by visually reducing a specific animal’s body to only a face with sentient eye, the image abstracts the pig, momentarily creating species confusion, inviting the viewer to identify with this other being. The picture conjures a generalized sense of subjectivity that is neither strictly human nor pig, represented through a technique best described as anti-speciesism, not anthropomorphism. If Krajnc strategically dabbles in capitalism’s tendency to abstract and generalize, her photograph paradoxically invites empathetic response. As such, it counteracts the meat industry’s profit-driven transformation of other-than-human animals into commodities divorced from subjectivity, personhood, and labor. Think of the countless anthropomorphic advertising images of pigs and other creatures the industry uses to promote popular beliefs about their happy, willing availability for consumption as meat. Critiquing such consumer imagery, Nicole Shukin has observed,

animal signs are anything but self-evident. Confronting their fetishistic functions in cultural discourses of the twentieth and twenty-first centuries begins with a

determination to excavate for the material histories of economic and symbolic power that are cunningly reified in them. Animal signs function fetishistically in both Marxian and psychoanalytic senses; that is, they endow the historical products of social labor to which they are articulated with an appearance of innate, spontaneous being, and they serve as powerful substitutes or “partial objects” filling in for a lost object of desire or originary wholeness that never did or can exist, save phantasmatically.⁶

Krajnc’s *Portrait Mother Earth* could not be more different from such phantasmatic fetishism, because the picture’s activist abstraction helps “excavate the material histories” described by Shukin. As I explain later, Save Movement photography promotes this process of excavation by revealing the hidden logistics and public footprint of industrial meat. Also, by indexing living beings destined for slaughter, the images reframe photography’s temporality in other-than-human terms. Finally, by situating the animal subject within a transport truck powered by fossil fuels, Save Movement photographs implicate the vehicle itself as a metonym for an industrial commodity chain that wreaks climate havoc. Often figured by Krajnc and her fellow activists as an unbearably overheated microclimate, the truck stands for the larger enterprise of meat production that adversely impacts the planet with greenhouse gas emissions.

The Save Movement

Before examining Krajnc’s photograph in detail, I will briefly trace the origins and history of the Save Movement she co-founded. As Krajnc explains, the movement draws inspiration from her reading of Tolstoy on vegetarianism and bearing witness as well as the modern history of non-violent social movements, which she studied in graduate school. In her 2001 dissertation on “green learning,” quoted earlier, Krajnc distinguished scientific knowledge operating in the silos of “epistemic communities,” such as academia or government, from “broad based societal learning” of non-governmental organizations. Such societal learning, she contends, “promotes public education which results in (1) public pressure on governments and intergovernmental bodies to adopt new or better policies, and (2) the transmittal of an ecological sensibility in global civil society, which further enhances environmental protection.” In drawing this distinction, Krajnc foreshadowed her activism with the Save Movement, which focuses on “the transmittal of an ecological sensibility in global civil society.” Her advocacy of “public education” outside “epistemic communities” also anticipated Save Movement photography as a provocative tool of visual instruction, deriving power from social engagement beyond the professional institutions of “art” even as it appropriates the aesthetic discourse of portraiture.⁷

After completing her PhD, Krajnc wrote academic articles and reviews based on her dissertation. By 2010, though, she moved away from academia into full-time community organizing and direct action. In a recent article co-authored with Ian Purdy, she recalls how

TPS was formed in December 2010, after Anita Krajnc walked with Mr. Bean, a lanky beagle and whippet mix adopted from Animal Alliance of Canada’s “Project Jessie,” along Lake Shore Boulevard [in Toronto], coming face to face with seven or eight transport trucks during rush-hour traffic. Each truck was crammed with inexpressibly sad and scared pigs, their little snouts poking out of the portholes, and their expressions enquiring, “Why?” The ensuing TPS group’s mission was simple: to make slaughterhouses have glass walls and thereby politicize the death trucks and slaughterhouses, help make the unseen seen, and to encourage activism, advocacy, and community organizing.⁸

Her comment about making “the unseen seen” concisely summarizes Save Movement photography as a form of visual activism. The images have been shared publicly and promoted by People for the Ethical Treatment of Animals (PETA), but the movement’s emphasis on bearing witness distinguishes Krajnc and her group from more militant organizations such as the Animal Liberation Front or Mercy for Animals, whose members have engaged in the illegal release of non-humans from captivity and posed as workers in order to document slaughterhouse operations. Besides taking photographs, Krajnc’s group organized the exhibition *Art to Save Pigs*, co-curated with Purdy at Brock University’s “Thinking about Animals” conference in 2011—an event Krajnc describes as the “de facto public launch” of TPS and the Save Movement.⁹

Since 2011, Krajnc has focused on local interventions while helping to develop a global network of decentralized community organizations, whose goals are varied and evolving. In addition to pigs, Save activists raise awareness about the industrial slaughter of cows, chickens, turkeys, lambs, calves, and rabbits. The movement has expanded rapidly, forming fifty groups in North America, Europe, and Australia by 2015 and double that number by 2016. According to Krajnc, today there are “about 900 Save groups worldwide.” This exponential growth owes much to their decentralized structure. As Krajnc explains, “The movement is organized around loose anarchic principles rather than a hierarchical, top-down form” in order to be “welcoming to new members” and “facilitate the rise of a global movement.”¹⁰

In January 2015, shortly before her arrest, Krajnc and TPS initiated a “climate vegan campaign” with public teach-ins, street art, and an Earth Day vegan food giveaway at Toronto’s City Hall. The purpose of this new initiative, says Krajnc, was to highlight the fact that “it is not possible to reach international targets aimed at avoiding catastrophic climate change without a rapid radical dietary shift toward a plant-based diet.”¹¹ The organization’s website offers this general mission statement: “Our goals are to raise awareness about the plight of farmed animals, to help people become vegan, and to build a mass-based, grassroots animal justice movement.”¹² Meanwhile, the affiliated Climate Save Movement makes this declaration:

Animal agriculture and fossil fuels are devastating our planet. We need to take drastic and immediate action. This year [2020] and decade are crucial if we are going to stop runaway climate chaos with areas of the world too hot to live in, with disease vectors spreading, ecological and agricultural systems breaking down and possibly leading to mass starvation, and more frequent and severe extreme weather events from hurricanes, floods, forest fires to droughts and sea level rise. Animal agriculture is a leading source of climate chaos, generating more greenhouse gas emissions (carbon dioxide, methane, nitrous oxide) than all cars, trucks, planes, ships and other transportation modes combined and responsible for critical land use changes: deforesting the world to produce animal feed.¹³

The Save Movement’s wide-ranging integration of animal activism, environmentalism, and climate justice provides a useful case study in intersectional activism.

Meat and Climate Change

At first glance, the Save Movement’s attention to climate change in tandem with animal issues might seem strange or misplaced. Discussions in the US about the causes of climate change have tended to revolve around fossil fuel consumption and greenhouse gas emissions associated with automobiles, airplanes, or other modes of transportation. Prior to the COVID-19 pandemic in 2020, the Environmental Protection Agency identified transportation as leading all other sectors

in generating 29% of US greenhouse gas emissions, followed by electricity production (28%), industry (22%), commercial & residential heating (12%), and agriculture (9%). This American perspective is skewed, however, for when we view climate change globally, agriculture and related issues of land use actually account for 24% of worldwide greenhouse gas emissions—second only to electricity and heat production.¹⁴

Data compiled in 2013 by the United Nations Food and Agriculture Organization (FAO) suggested that agricultural livestock production generates 14.5% of global greenhouse gas emissions (GHG)—a figure expected to grow considerably as the world's human population increases and more people adopt a Western-style diet heavy in meat and dairy. Other scientists have offered more alarming statistics, citing not only direct emissions but also climate effects of deforestation and carbon sequestration loss resulting from accelerating livestock production in South America and elsewhere. According to a 2009 report by the World Watch Institute, “livestock and their byproducts actually account for at least 32,564 million tons of CO₂e per year, or 51 percent of annual worldwide GHG emissions.” Regardless of the precise GHG figure and how to frame it, scientists agree about the upward global trend. A 2017 study at Michigan State University observed “Global demand for livestock products is expected to double by 2050, mainly due to improvement in the worldwide standard of living.” Whether this constitutes an “improvement” is debatable in light of the associated climate impacts. In 2019, a report by Harvard University's Farmed Animal Law and Policy Program declared “Unabated, the livestock sector could take between 37% and 49% of the GHG budget allowable under the 2°C and 1.5°C targets [of the 2015 Paris Agreement], respectively, by 2030.”¹⁵

It is too early to know the long-term impacts of the COVID-19 pandemic on industrial livestock production, but reports about the coronavirus originating in a Wuhan, China, animal market have prompted new criticisms of the global meat industry by advocates of plant-based food, including the Save Movement. In a video posted on their website, Earth appears to be on fire and ravaged by infection as news reports link the virus to the Wuhan market, where animals were bought, sold, and slaughtered in close proximity with humans. In one passage, the video narrator intones “the taste of animal flesh is not only harming animals but threatening our survival as a species. In a plant-based world, the opportunities for viruses and diseases to spread are far less great.” A closing caption reads: “Phase out fossil fuels. End animal agriculture and fishing. Reforest the earth.” As of this writing, scientists debate the precise etiology of COVID-19, but most studies, including one published in *Nature* on March 17, 2020, confirm that zoonotic transfer, or animal-to-human transmission, played a key role—very possibly at Wuhan. These developments are galvanizing an already burgeoning vegan food movement, judging from recent media reports about skyrocketing sales of plant-based alternative meat products.¹⁶

As we have seen, even before the pandemic, a mounting chorus of scientific reports already attributed substantial GHG emissions and other climate change vectors to the meat industry. These included rising methane emissions from livestock animals themselves, 70 billion of which were slaughtered worldwide in 2016, according to the nonprofit research organization Faunalytics (using FAO data), as well as carbon dioxide exhaust associated with their transport and other sources. This says nothing about impacts on water consumption and land use. Destruction of rainforests to create ranch land and cultivate animal feed grains further exacerbate GHG emissions by reducing the planet's carbon-absorbing capacity. Still other impacts, such as biodiversity loss from monoculture and environmental injustices facing human residents forced to endure pollution and health problems living near or working in factory farms and slaughterhouses, do not even enter into climate change calculations. Perhaps the starkest irony

about industrial meat production concerns its massive use of grain and land simply to feed livestock prior to slaughter, inefficiently converting one quantity of caloric energy into a lesser quantity in the form of meat. A destructive constellation of Western cultural tastes and economic biases favoring unsustainable consumption of flesh thus drive an expanding neo-colonial system of industrial meat premised on waste, inequity, and greed—all at the expense of the planet and its disenfranchised inhabitants, both human and other-than-human.¹⁷

Activist Abstraction—The Punctum of Death and Time

Let us now return to Krajnc's *Portrait Mother Earth* (see Figure 32.2) and Save Movement photography in order to reflect further on how they engage these issues. Unlike more familiar and shocking imagery produced inside slaughterhouses by undercover activists working for other organizations, Save Movement photographs document the transport of livestock animals in trucks on public streets. Many Save Movement pictures are disturbing nonetheless, for they often show thirsty, anxious pigs foaming at the mouth and/or bleeding from orifices and wounds sustained at the industrial "farm" or in transit. Additional photographs depict activists bearing witness, giving water to the pigs, holding signs, and speaking with passers-by. Instead of exposing violent actions on the killing floor or at the industrial feedlot (also known as a Confined Animal Feeding Operation, or CAFO), Save images represent an interstitial stage in the process of meat production, revealing how its commodity chain insidiously extends beyond the barricaded private fortresses of cultivation and slaughter into the broader public sphere. The photographs thus perform an ecological function by connecting the dots in an otherwise hidden economy of food, disclosing a banal, logistical transition between living beings and dead meat—a transition dependent upon fossil fuels.

Furthermore, by highlighting that transitional moment before slaughter, Save Movement images reconfigure in other-than-human terms certain dynamics of temporality and mortality that prominent cultural critics have long associated with photography. For example, in her classic study *On Photography* (1977), Susan Sontag wrote:

All photographs are *memento mori*. To take a photograph is to participate in another person's (or thing's) mortality, vulnerability, mutability. Precisely by slicing out this moment and freezing it, all photographs testify to time's relentless melt... Photographs state the innocence, the vulnerability of lives heading toward their own destruction, and this link between photography and death haunts all photographs of people.¹⁸

Sontag's violent references to "slicing," "freezing," "melt," and "death" eerily acquire new meaning in this context, where industry renders certain living beings "things." Krajnc and her fellow activists did not intend to comment on Sontag's famous text, but their images nevertheless invite us to reimagine such critical vocabulary, including the "vulnerability of lives," in broader, more-than-human terms. Likewise, Save Movement photographs prompt new reflection on influential observations about time and mortality by Roland Barthes in *Camera Lucida* (1981):

The Photograph does not necessarily say what is no longer, but only and for certain what has been. This distinction is decisive. In front of a photograph, our consciousness does not necessarily take the nostalgic path of memory (how many photographs are outside of individual time), but for every photograph existing in the world, the path of certainty: the Photograph's essence is to ratify what it represents... Every photograph is a certificate of presence.¹⁹

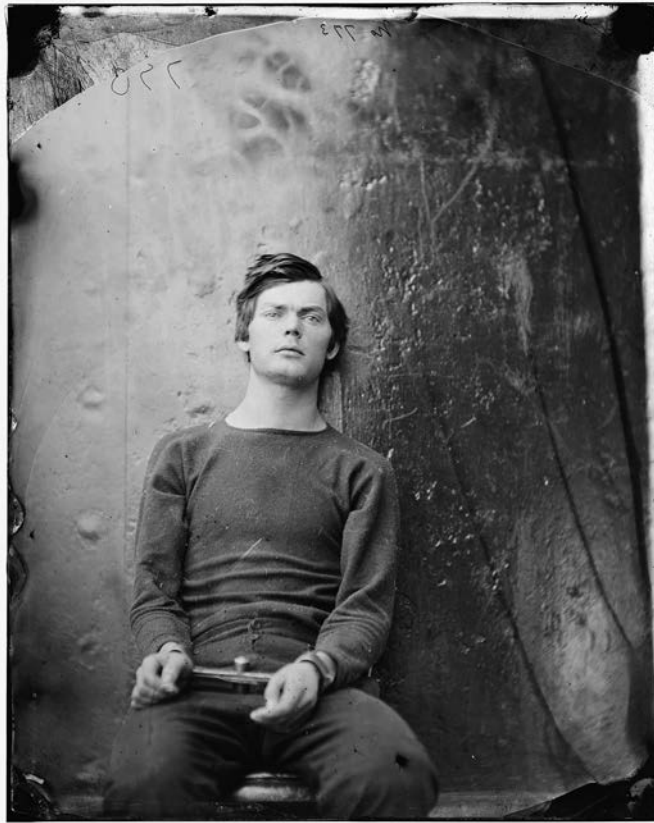


Figure 32.3 Alexander Gardner, *Washington Navy Yard, D.C., Lewis Payne*, 1865

In another memorable passage, Barthes meditates on Alexander Gardner's 1865 photograph of Lewis Payne, a co-conspirator in the assassination of US President Abraham Lincoln (Figure 32.3). Arrested, imprisoned, and awaiting execution, Payne sits shackled in confinement, looking directly at the beholder. Barthes describes what he calls the "punctum," or an unintended element that "pricks" his attention, in this photograph of Payne:

*He is going to die. I read at the same time: This will be and this has been; I observe with horror an anterior future of which death is the stake. By giving me the absolute past of the pose... the photograph tells me death in the future.*²⁰

Krajnc's *Portrait Mother Earth* projects death in a disconcertingly similar manner through the figure of a condemned animal staring at the viewer. Although no connection of influence links these two photographs taken 150 years apart, each manifests uncanny power as *memento mori*, or reminder of mortality, registering "time's relentless melt" (Sontag) as well as the "horror" of "an anterior future of which death is the stake" (Barthes). Both Payne and this sow are long since dead, but their images remain as lasting tokens of their doomed living presence before the camera. The key difference, of course, apart from ideological questions of guilt and innocence regarding each subject, is the fact that Krajnc's photograph recasts the critical dynamics of mortality and temporality articulated by Sontag and Barthes in

other-than-human terms for activist purposes in behalf of species and climate justice. Whereas Payne was guilty of conspiring to murder a US president, “Mother Earth” confronts us as the innocent victim of an industrial system that is killing the planet. Even so, I would argue, by introducing momentary confusion about species identity (as noted earlier), *Portrait Mother Earth* avoids the sort of obviousness and conventionality that Barthes associated with “enthusiastic commitment” or *studium* in photography—a related term denoting cultural framing and motivation that counteracts the idiosyncratic unpredictability of the *punctum*. An “enthusiastic commitment” surely motivates Anita Krajnc and the Save Movement, but this does not overwhelm *Portrait Mother Earth* by rapidly exhausting visual interest. In my experience—in classrooms, lectures, conversations—viewers find the picture both striking and compelling enough to linger upon it.

Some readers might object that my interpretation distorts the critical intentions of Sontag and Barthes by adapting them inappropriately to a photograph of an animal. The same readers may also find this adaptation moralistic. Yet such objections, which I frequently encounter when discussing animal ethics, oddly never seem to arise regarding humans caught up in the same structures of representation, revealing a double standard. Is Gardner’s nationalistic photograph of Payne any less culturally framed or moralizing in pursuing its aims than Krajnc’s *Portrait Mother Earth*? I think not. Regarding Barthes in particular, of all critical theorists he would probably have been amenable to the semantic drift I propose, given his poststructuralist, anti-intentionalist inclinations in *Camera Lucida*, “The Death of the Author,” and other texts. Like Gardner, Krajnc demonstrates the power of photography to certify presence while exposing the *punctum* of death and time. No more or less “enthusiastic” about its “commitment” than Gardner, Krajnc “pricks” our attention in confronting an industrial process that endlessly slaughters animals for meat while exacerbating climate change.²¹

Postscript: Decolonial Veganism?

I conclude with a decolonial perspective on Save Movement vegan advocacy, which raises important environmental justice questions about their intersectional activism. Veganism, a plant-based philosophy of abstinence from animal products, constitutes a guiding principle of the movement, as it does for PETA, The Humane League, Mercy for Animals, and other organizations, along with a growing number of non-activist individuals. Activists and non-activists alike often embrace veganism for its overlapping benefits: counteracting violence against animals, promoting environmental justice, improving health, and more. In recent years, veganism has attracted more diverse adherents, some pursuing it for personal reasons while others build coalitions campaigning for animal rights, environmental causes, and/or cultural self-empowerment. Still other vegans have adopted militant activist practices that tend to be exclusionary.²²

The Save Movement ardently campaigns for species and climate justice in opposition to industrial meat production, but it espouses a fundamentally peaceful, nonviolent, and apparently inclusive approach to vegan activism. The movement’s mission statement mentions wanting “to help people become vegan,” adding “We use a non-violent, love based approach to community organizing... inclusive and welcoming to all.” Precise information about membership diversity does not appear on the Save Movement website, but the existence of 900 local groups on six continents confirms its international scope. And while the number of Save organizations in North America and Europe far exceeds those elsewhere, the presence of several hundred groups in Central and South America, Asia, and Africa, indicates the movement is thriving beyond the “Global North.”²³

At first glance, the Save Movement's expansive growth mirrors the trajectory of Euro/American imperialism. Yet, as a decentralized organization committed to nonviolence, it must be distinguished from imperialism, including militant animal activism that alienates, excludes, and colonizes. A notorious example of such militant activism occurred when the Progressive Animal Welfare Society and other groups aggressively contested the Makah Tribe's reassertion of whaling rights for subsistence and spiritual reasons after a hiatus of several decades, upon the gray whale's removal from the US Endangered Species List in 1999. Militant activists opposed delisting and all hunting, arguing that killing any whales was unnecessary. They also cited the cynical involvement of Japanese industrial interests, which supported the Makah as a self-serving ploy to loosen International Whaling Commission restrictions. For these activists, it did not matter that the Makah worked closely with the commission to develop sustainable and culturally respectful hunting procedures.²⁴

Examining the Makah whaling controversy, political scientist Claire Jean Kim argues that "race and species operate as conjoined logics, or mutually constitutive taxonomies of power" at a time when neoliberalism "has escalated the war on racialized others, animals, and nature in the name of concentrating wealth and privilege in the hands of a tiny elite." In scrutinizing this power, Kim opposes "single optics" in favor of "a multi-optic approach that takes different forms of domination seriously." Accordingly, constructive work is being done to bridge differences and build coalitions between Indigenous people and some vegan activists, for example. Though challenging, such coalitions offer promising opportunities for achieving decolonial activism in behalf of animal rights, veganism, and human environmental justice. Instead of harassing Indigenous communities, the Save Movement uses intersectional strategies to contest a far more destructive target: industrial meat production, which annually slaughters 70 billion land animals for food worldwide while generating at least 15% of global greenhouse gas emissions—at a time when the Sixth Mass Extinction proceeds apace, with the UN predicting the annihilation of one million species (plants and animals) this century.²⁵

Corresponding with Anita Krajnc, I asked her about the Save Movement's position on Indigenous hunting and whaling. She said this:

We haven't taken a position on whaling by indigenous peoples as we see the main problem is with factory farms and commercial whaling. We do have a Whale Save group in Iceland and Norway, for example. We do stand in solidarity with indigenous peoples. We work with Amazon Watch and Extinction Rebellion for example. In 2019 we supported and participated in their awareness raising and direct actions worldwide and financially contributed 15,000 USD towards a PSA [public service announcement] for Amazon Watch featuring Amazonia indigenous leaders.²⁶

By standing in solidarity with Indigenous peoples and working with organizations like Amazon Watch and Extinction Rebellion, the Save Movement offers an intersectional model of activism. Such activism differs dramatically from that of exclusionary militant groups whose narrow focus on animal rights as an end in itself ignores historical inequities and asymmetries of colonialism, imperialism, and racism. While still evolving, the Save Movement imagines environmental justice expansively as a trans-species project. Bearing witness to the sentience and suffering of livestock animals within a broader imperative to oppose fossil fuels and associated inequities faced by humans and nonhumans, Anita Krajnc and her colleagues invite all to join the cause in behalf of Mother Earth.

Notes

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- 3 Barbara J. King, *Personalities on the Plate: The Lives and Minds of the Animals We Eat* (Chicago: University of Chicago Press, 2017), 143–165; Lori Marino and Christina M. Colvin, "Thinking Pigs: A Comparative Review of Cognition, Emotion, and Personality in *Sus domesticus*," *International Journal of Comparative Psychology* 28, no. 1 (2015): online. Anita Krajnc, "Green Learning: The Role of Scientists and the Environmental Movement" (PhD, University of Toronto, 2001), 8.
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- 7 Krajnc, "Green Learning," i.
- 8 Purdy and Krajnc, "Face Us and Bear Witness!," 46–47.
- 9 Purdy and Krajnc, "Face Us and Bear Witness!," 47. See also www.torontopigsave.org/art-to-help-save-pigs/; <https://prime.peta.org/tag/anita-krajnc/>; Peter Young, *Liberate: Stories & Lessons on Animal Liberation Above the Law* (s.l.: Warcry Communications, 2019).
- 10 Purdy and Krajnc, "Face Us and Bear Witness!," 59, 64. For "900 Save Groups Worldwide," see <https://torontopigsave.org/about-us/>, accessed March 26, 2020.
- 11 Purdy and Krajnc, "Face Us and Bear Witness!," 65.
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- 13 "Climate Save Movement," <https://thesavemovement.org/climate-save-movement/>, accessed March 26, 2020.
- 14 U.S. Environmental Protection Agency, "Total U.S. Greenhouse Gas Emissions by Economic Sector in 2017," www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions; "Global Emissions by Economic Sector," www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data#Sector.
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- 19 Roland Barthes, *Camera Lucida: Reflections on Photography*, translated by Richard Howard (New York: Hill & Wang, 1981), 85, 87.
- 20 Barthes, *Camera Lucida*, 96.

- 21 Roland Barthes, "The Death of the Author," in *Image-Music-Text*, translated by Stephen Heath (New York: Hill and Wang, 1977), 142–148. For the "anterior future" in other portraits of condemned non-humans, see the "Memento Mori" series (2012) by Taiwanese photographer Yun-Fei Tou, depicting shelter dogs before euthanization: <https://yunfeitou.photoshelter.com/gallery/Memento-Mori/G0000pBVGvmeaFko/>.
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ALIEN WATERS

Ravi Agarwal

Climate change has introduced instabilities in the Earth's atmosphere to the extent that our future existence has become precipitous and uncertain. Nature has been turned into a mere resource, controlled by a few, effectively determining our economic and political systems. My long engagements through an entangled art and activist practice has enabled me to observe, study, and represent ecosystems as they are inhabited and challenged, in these times of the Anthropocene and climate change.

The works presented in this chapter seek to explore the complexities of rivers and coasts through the examples of Yamuna River and the coast of Tamil Nadu in India from a local perspective. The changes observed through perceptual and aesthetic materials, on these landscapes during the last decades, demonstrate their social and cultural upheavals, and their contestations with mainstream discourses and representations of a global economy. These visual-cultural-artistic works, developed from the ground up, point towards the need for an onto-epistemological shift to face the current climate and ecological crisis. "Are they capable of shifting perspectives?" is a question I seek to address.

I grew up in an ancient city built on the banks of one of the largest river systems in India—the Yamuna. This 1,300 km-long river originates in the Himalayas and is fed by snow, rain, and glaciers. It descends into the plains of North India to confluence with another mighty river midway, the Ganges.¹ During its course, it changes from a rapid stream to a broad meandering flow over the gradual plains. Over its journey it is joined by a network of tributaries, some more significant than itself. Though only a small part of it, about 40 km, forms the banks of the megapolis of Delhi, now a city of 17 million people, it is hugely impacted by this traverse. The river has been the reason for this city's location since ancient times, providing it with water security. Between the Yamuna and the Ganges, the rivers support over 500 million people in their basin. Today, however, the river is heavily polluted in parts and also dries up completely in other places during the hot summer months. In fewer than fifty years, river engineering and urbanization has reduced it to a dismal state. Further, as monsoons become erratic and glaciers recede as a result of climate change, its future is increasingly unpredictable. This, however, has not stopped its continuing abuse.

Despite being very polluted, the river is worshipped as a mother goddess. Its name, Yamuna, is mythologically derived, as daughter of Yama, the Hindu god of death—death being not a final resting point but, according to Hindu beliefs, a part of the cycle of life, death, and rebirth. In fact,

most rivers and bodies of water are sacred and worshipped in India, and widely depicted in paintings and in folklore, as goddesses. Traditional waterbodies have statues of religious deities guarding them. They reflect a deep connection between ideas of the “self” and water-nature.

Accordingly, the riverbank of the Yamuna is a site for temples, deities, rituals, and even crematoria. It is considered as an interstitial space between this world and the other, a symbol of purity and a site of a new journey in the afterlife. It is not unusual to see people ritualistically bathing in its dirty waters despite the coliform count being extremely high. The river to them is a “temple.” To photograph such a river is to engage with its multiple layers of existence, and to question if one can ever know such a feature in its entirety.

My first photograph of the river, as a teen birdwatcher, was that of a white-tailed wagtail—a diminutive bird which migrates from Central Asia each winter and passes through Delhi. Flitting, tail bobbing, its white belly contrasting against the grey fly ash pond on which it searched for food. The bank was not green with foliage, but a sea of mushy ash, dumped from the coal-fired power plant adjoining it. This plant, built in the early 1960s, powered the city of Delhi. Its foundation stone announced proudly that it was a joint US–India collaboration. Built upon an early collaboration between global capital and a then socialist India, it marked the recently independent country’s (1947) path to a science and technology-based modernity and was amongst the projects termed “temples of new India.”² Later, in 2013, I had the fortune to photograph the now-closed (owing to emissions) power plant, as its giant turbines and coal-blackened machines were being scrapped. My journey from photographing the bird to the power plant has also been the journey of the river, of its clear waters to its dark toxicity, from its unfettered waters to its dry bed, from the promise of global capital to its disastrous ecological pitfalls.

In the interim, I spent years documenting the changing riverfront for new urbanizations. I saw the poor brutally evicted from it as the city expanded, and had innumerable conversations with the farmers, waste pickers and flower growers, who had lived there for many decades. There were countless run-ins with short-sighted bureaucrats, politicians, even religious figures,³ and developers who saw these changes as necessary to create a “global” city. I also appealed to the judiciary to stop this madness. The outcomes were multiple: research reports on the river’s toxicity, court cases, short films, photographs, and an artist’s diary—*Immersion. Emergence*, to record the observations and reflections of the journey.

My recurring engagement with the river happened between January 2004 and June 2006. Over these two odd years, I visited and re-visited the river Yamuna, the lifeline of Delhi, often many times a week, walking along its banks for long distances. In between my environmental work, based at Toxics Link, and my fragmented life in the city, the river had quietly soaked into the interstices. It had, unknown to me, seeped in as a healer and a life force, as I was to later discover. Drawing me to its banks, mostly in the early mornings, and evenings, its flowing solitude resonated with layers of my self, as they uncovered themselves even to me. Despite it being black with sewage, never did I see the river as dirty. It seemed timeless, beyond life and death, as it momentarily led me to “transcend” my being into a timeless state as well.

Within this private inaudible conversation, I had many others too. Mainly with those who live on the river, even as they were being displaced from it, owing to the city’s new hunger for land. I also took pictures, for the camera had never left my side since I first held it at the age of thirteen, and taking pictures was part of my everyday engagement of life. My work as an environmental activist often seems to draw differently into parts of myself and sometimes in conflicting ways. The “dirty” river demanded to be cleaned, and that meant that the politics of the city be engaged with,

with all the accompanying shrillness and public rhetoric which campaigning demands. But the “ever flowing” river also drew “me” inwards, into those undefined silent spaces where even the water’s murmur became loud and clear, and all I could do was be still.

This traversing from one to the other was often exhausting, but something I have had to cope with for a long time. It seems that we all are multiple beings. Over these two years, the river silently posed many questions and drove me to know more about our times. I read like never before, to try and find out why the river was dirty, or why there was only debris on its banks, either in the form of poor people or as junk, or why new city wealth gave rise to filth, or why we forget that we die. I know I still have no answers, but feel I understand the questions better, as well as my anxiety about them. In the background was a vicious city politics at play, of dirty water, poor people, price-less land, the forthcoming Commonwealth Games, city planners, big money and all “public” debates couched in an inaccessible language of science.

What made me visit the river time and again, is a difficult question to answer. Maybe the nostalgia of engrained images from my childhood forays on it, when the water was clean and the wagtails still scurried on its banks, maybe the need to deal with a deep personal crisis, maybe to rediscover my roots in an increasingly changing city, maybe to recover my sense of self or maybe just to reduce the alienation I felt all around. But it did all begin, and it did all end one day (Figure 33.1).⁴

It was in April 2004, that I witnessed the first brutal violence on the river. Over hundred thousand people were removed in a matter of a few days. The justification was an order of the High Court of Delhi based on a submission by the city government that these inhabitants were causing the pollution of the river. It begged the question—if people do not have water, how do they



Figure 33.1 Ravi Agarwal, “Alien Waters” series, 2004–2006

create sewage? The poor were evicted, but the polluting industries continued. As I photographed this unbelievable event, it became evident that the land along the river had catapulted in value as the city became global and had to be re-claimed. The democratic state was acting on behalf of capital. In many senses, for me, the river as “temple” had fallen from grace.

As I watched and photographed, no one objected, taking pictures was not a threat anymore. Not even a brick of the 5000 houses where people lived in the filth was left. But they had survived—for what was the option? Yamuna Pushta (abode by the river Yamuna). Bulldozed overnight, almost. Razed to the ground.

Whose city? One may ask. Was the river being cleaned of its sewage or merely the land reclaimed for the city’s new powerful middle class?⁵

Subsequently, the evacuated area was converted into a park. It was this site I chose for curating a large public art project.⁶ As we dug into the ground to install artworks, there emerged layers of cloth and plastic separated by sand which had been brought in by the annual floods. It was like an archaeological dig of a city whose future had been predicated on violence.

In a subsequent work on the river, looking for signs of hope, I documented the marigold flower growers upstream along the riverbank. These sustainable, community-based horticultural practices, over two centuries old, are now under threat from the new plans to urbanise the banks. It was also a long engagement which resulted in photographs, onsite installations, films, and another artist’s diary—*Have you seen the flowers on the river?*

The local economy of the flower fields is based on the fertility of its land. The “new” land is now much in demand by the exploding city, imbibed with a global desire. Land near the flower fields is priced at over three lakh rupees an acre. Selling it could make more money than growing flowers or vegetables. The riverbed is increasingly acquired for building stadiums, large temples and now the Commonwealth Games Village. The fertility of capital overtakes the fertility of land. Land and ecology are inseparable, as is the relationship between the ecology of nature and the ecology of the “self”. The changing ecology of the flower fields is the crumbling ecology of the “self” in these times. The script seems pre-written. The river is timeless. The river is dead.⁷

The conversion of the river to a mere water channel and treating its banks as real estate is nothing new. For a long time, the harnessing of water for human needs has legitimized intensive modifications of river systems through technology and capital. Marc Cioc, in his book *The Rhine*,⁸ cites the manner in which the great European river was transformed from one with meandering multibed flows, biodiversity rich oxbow lakes and marshes to a fast-single stem channelized water transport corridor to serve the purposes of industry and commerce in the mid-nineteenth century.

In the same vein, urban planners (including in India) too, have ignored the fact that the river has an extended system of natural drains and lakes, and by building upon them, they destroy the river’s catchment. For them the river may as well not exist. It is forgotten that:

The river. It is not just a water body flowing through the city, but a network of myriad relationships—interconnected to the city and its people, and to nature. Each connection, an exchange and interchange, where the wise fathomless waters give as much as can be received. The city slumbers along, unaware of the river, of its giving, and oblivious of the deep connections which exist.⁹

As a result, natural free-flowing rivers have been reshaped, beautified, engineered, and controlled. Framed in a language of “progress,” “technology,” “urbanization,” and “development,” rivers are now part of global imaginaries rather than local ecologies. Regarding them as mere water channels allows them to be re-imagined as “water.” It is a powerful discursive re-framing, which has justified many kinds of disruptive technological measures on them.

Rivers, however, support all forms of life and have been cradles of great ancient civilizations, from the Indus valley to the Nile or the Mississippi. They support complex interdependencies, which are particularly evident in social, cultural networks and biodiversity, which cannot be captured by the engineering equations of fluid mechanics and hydrology. Advaita Mallabharman proposes a living idea of rivers:

The river’s perennial fullness and modest supply of a variety of small fish were enough to give the Malos a steady livelihood, close community life, and time for singing, celebrating, storytelling, and reflecting. Along its meandering course the river sustained the cohesive richness of their cultural life.¹⁰

As Indian cities grow, they strive to imitate riverfronts in Paris or London. It is not considered that all rivers are very different from each other. In these new networks of middle-class desires, rivers have been reduced to mere aesthetic experiences. In India, where people have lived in river basins for thousands of years, their age-old cultural and social understanding is being forgotten.

In addition, the risk of climate change is not being factored into future plans. The uncertainties of climate change will impact not only rainfall patterns in South Asia but also glacial flows as well as ground water recharge in the Himalayan rivers. Not taking these into account can spell disaster for a river and monsoon dependent region. My photographic series, “After the Floods,” carried out during a very late rainfall and unusual flood of October 2010 is testimony to this. The flood was unprecedented in its timing and intensity, a sign of the changes taking place.

Ironically, controlling floods has been a key reason for building massive dams, major irrigation canals, high embankments, and now new projects like linking rivers,¹¹ in India. The country has over 5,100 large hydroelectric dams built across its major and minor rivers. It ranks third in the world in dam building. Amongst the first built infrastructures, only 15 years after independence, was the 226-meter-high Bhakra Nangal Dam.¹² This practice continues today with the latest one being the recently sanctioned Dibang Dam in North East India which will, at 288 meters, be the highest concrete dam in the world. Others are being planned. They have caused rivers to fragment, displaced millions of people—mostly poor and tribal—submerged prime forests and caused the extinction of many types of fish and other marine life.

In fact, riverine floods in the Indian plains are natural, as rivers overflow during the few monsoon months, but also deposit rich fertile alluvial topsoil on their banks. Considering floods as a problem is an idea borrowed from the management of rivers in Europe, where rivers flow fairly constantly perennially, and only occasionally overflow. Instead, designing appropriately would imply adapting and absorbing seasonal waters, treating them as a bounty of nature, rather than as an aberration.

The disconnect between how rivers are and how they are institutionally imagined is apparent, where neither riparian communities nor biodiversity is included, or the larger basin considered. Such colonial views propound centralized technological interventions. The top-down approach also renders age-old traditional systems of water and rivers management redundant.¹³

Our institutions which manage our cities, our landscapes, our rural hinterland, are lodged in histories which propagate the control and use of the planet. They are locked

in their own imagined views of the world. Hence water is controlled, land is controlled, rivers are controlled, forests are controlled, wildlife is controlled, human ideas and desires are controlled. Colonial landscapes perpetuate even today in what were earlier colonies of the Empire, in spite of other cultural imageries, or even new knowledges we now possess.¹⁴

Else All Will Be Still

My tryst with the fishing community off the Bay of Bengal, in Tamil Nadu (South India) began by chance in 2013. I was curious about the impact of climate change on the coast and on the lives of the fishermen. Spending several weeks at a stretch many times a year, over three years, I observed at close quarters the cultural, linguistic, political, and economic underpinnings of their challenges. It led to photographic works, an artist's diary—*Ambient Seas*, films, objects, and interactions with activists, writers, poets, scientists and bureaucrats besides the fisherfolk.

The fishing community at Serenity Beach (my site of investigation) had changed dramatically since the tsunami of December 2004. Their thatched roofed village had been converted into concrete houses. They had been provided with fiberglass boats to replace their ancient two-thousand-year-old kattumarans, crafts made of lightweight wood bound together with twine. Along with the new boats, had come diesel engines, especially for those who were able to invest in larger boats. Significantly, since these new boats could go further into the ocean and trawl the waters for fish, those who still had small one- or two-person boats came back each day with significantly smaller catches. A new hierarchy of technology access had developed within the same community.

The beach. Lined with boats. There are two distinct types. Those with outboard engines, and long propeller shafts—rudders—and others, hand powered by broad wooden rectangular paddles. Power and propulsion depend on who owns them, and their economic status. Access to technology is not democratic. Capital overshadows labour. For some it is eternal labor. There is no escape.

Two propelling devices, —two economies. One boat costing a mere Rs 15,000, while the other Rs 15 lakhs. With a diesel engine, a big net, the figure goes up to Rs 25 lakhs. Technology allows selective access to the sea. A small boat travels 2.0 km in, while the powered one over 20km. Every day, without fail. The fish catch is bigger, the nets trapping everything that moves. Fish as well as non-fish. The smaller boats have to be content with a smaller catch. Leftovers. Worth maybe 200—300 rupees daily—if that. When the seas are rough, the small boats stay at home (Figure 33.2).¹⁵

Alongside these developments the beach where the fishers landed their boats was turning into a tourist haven—with weekend visitors, water sports, surfing, trash, and endless cars and motorcycles. Their old homes along the strip on the beach had been bought by outsiders and reconstructed, providing rented rooms with a sea view. The fishers missed their old airy homes. This was apparent as men slept on the beach at night instead in their homes. In a matter of a few years, even as I watched, the village had been transformed.

To make matters worse, the nearby town built a new harbor with a long retaining wall jutting into the sea. This changed the ocean currents and blocked the flow of sand onto the fishing beaches. To stop this erosion the government built long stone groynes, but this only pushed the erosion further down the coast. Also, each year the tide had started coming in further. Without the beach, there was no longer the chance to make a livelihood from fishing. The neighboring



Figure 33.2 Ravi Agarwal, 4 a.m., 2014

village had already lost their beach and had now occupied this one—making it full of fishing boats. Traditional fishing was slowly becoming unviable. Even though they had been fishing for generations, for some this was the end of the line:

... fishing as a livelihood seemed to be a dying one. It would survive, but as a business, not a livelihood.

They slowly moved away from fishing to other supplemental jobs. Many sent their sons to vocational schools to turn them away from fishing. For them a generations- old livelihood was at its end. Along with them will disappear the deep knowledge they had of fish, their spawning, an ability to read the sea, and the reverence they held the waters in. It is a slow disappearance of an ecosystems understanding, rooted in livelihood, culture, mythology and language.¹⁶

As I explored deeper into their connections with nature, their language provided me with a clue. Through it I slowly understood that the fishermen and I each had a different relationship with the waters. “Neytal,” for example, the word which means “sea” in Tamil, led me to discover ancient Sangam poetry, written between 300 BC to 200 AD, and now largely lost. These love-landscape poems describe nature as a backdrop of life and not of an aesthetic or use value, as it was for me. The sea I saw was clearly not the sea they saw!

Ancient Sangam Tamil love poetry (akam) for example, reflects such subjectivities. It relates five physical landscapes (kurinji—mountains, mullai—forests, marutam—agricultural lands, neithal—sea, pa.lai—desert) to five interior ways of feeling (sexual union, yearning, sulking, pining, separation). It identifies landscapes. Akam and Puram—interior and exterior. In Akam, the sea—Neithal, denoted the pain of waiting

and pining for the loved one. “Nature” was internalized. The separation was there, but incomplete.¹⁷

Further, even as there were changes all around, the fishers were unable to fully comprehend the scale and causes. For example, even as they saw the tides change, they were unaware of “climate change,” or that it was part of a global crisis. They had not been told or invited to participate in any discussion about it. In fact, in global fora even though everyone was speaking about people like them as victims, they had no agency.

A big conference hall in a distant land. People in suits, and small talk and legal important looking papers all over. Head of states, and scientists huddle together as well-meaning NGOs watch. No fishermen or poets allowed. It is a crisis. Everyone looked worried. The sea was rising! The planet was under threat. Its future was at stake, and the humans were responsible. The climate was changing. A limit had been reached. But why oh why, did no one tell the fishermen who went out every day on the rising ocean? Or even ask them what they saw or thought about it? This was no place for non-experts. Science too had its informers, its experts.¹⁸

Changing Course

The ecological crisis is encountered only through the lens of its symptoms, and its underlying causes are not considered or addressed. This merely serves to perpetuate “business as usual” scenarios of implementing more capital-intensive technologies such as geoengineering of climate systems or river linking.¹⁹ To ensure sustainable futures, a more holistic approach is needed and the problems themselves have to be redefined. Fundamentally, “decolonizing nature entails transcending human-centred exceptionalism, no longer placing ourselves at the centre of the universe and viewing nature as a source of endless bounty.”²⁰

One could consider that “Nature” is produced through a diverse set of relationships of the human with the non-human, through cultural, social, and economic hierarchies. For example, it can appear very different to rural women for whom the forest provides firewood and water for daily use, from an urban educated middle-class person who sees it as an aesthetic wilderness experience.

Or, that the binary man-nature relationship is a multidimensional one and both the idea of the “human” as well as of “nature” needs to be rethought ontologically. The boundaries or the “human” as “self” can be expanded beyond the narrow idea of the individual. The philosopher Akeel Bilgrami enunciates a “self” which is inclusive of its surroundings and non-alienated from the community.²¹ Citing Karl Marx and Fredrich Engels, who speak of the alienation of the body of the fish from water when it becomes polluted, making water part of the body of the fish,²² and Gandhi, who proposes a cosmic idea of the “self,” he proposes an inclusive self (Figure 33.3).

Expanding the idea of “nature,” theorist Timothy Morton,²³ has proposed an “ecology without nature,” doing away with the category altogether. In a similar vein, the writer Amitav Ghosh recalls the tale of Bon Bibi, the forest goddess of the Bengal Sundarbans to state that:

[T]he Bon Bibi legend uses the power of fiction to create and define a relationship between human beings and the natural world. Nowhere does a term equivalent to “Nature” figure in the legend of Bon Bibi, yet nowhere is its consciousness absent;



Figure 33.3 Ravi Agarwal, *Shroud*, 2006

although ecological concerns are never named, the story is profoundly informed by that awareness which the literary critic Larry Buell has termed “the environmental unconscious”—a phrase that is all the more useful, in my view, because it does not invoke the cultural and linguistic freightage of the word “Nature.”²⁴

Possibly, more usefully, the category “nature,” needs to be reformulated in its diverse character, not reflected in its current usage, rather than being discarded altogether.

The return to the “local” is another key focus. As I have observed from working with communities, for preserving ecological sustainability maintaining diversities of cultures, languages, relationships, and biodiversity is important. For example, Indigenous people reflect this as they cohabit with nature. It is a reciprocal exchange where taking from nature is allowed, but not with impunity, and is part of their cultural and social rituals which express respect, debt and gratitude. Oppressive systems of global capital and finance need to be countered to allow this to happen.

For new understandings of rivers or of nature to be included in a contemporary futures framework is a challenge. Those who have been rendered invisible in terms of gender, caste, class, and race, and the non-human will need to be included in our political and justice systems. An

ethics of equity, humility, learning and co-existence, will need to replace control and use of nature. This moment of “crisis” is the opportunity to do so.

Art can play a critical role. Artists through embedding their practice in the ecological discourse and collaborating with other practitioners can foster fresh interdisciplinary understandings of the entangled questions of ecology. T.J Demos underlines the difficulties involved: “[it] 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.”²⁵ Working with communities could be a way forward for creating new insights, to forge new paths for the future. This can also shift not only sites of production, but also the viewership as well as the nature of artworks, by extracting them from institutional power structures and the traps of market-governed art object making. Such art and artists, who speak to the critical questions of our times, can be the harbingers of sustainable futures.

Notes

- 1 For a detailed account of the River Ganges and its tributaries see Cheryl Colopy, *Dirty, Sacred Rivers: Confronting South Asia's Water Crisis* (Oxford: Oxford University Press, 2012); and for the River Yamuna specifically, see Ravi Agarwal, “‘Natural’ No More? Delhi's Yamuna River,” in Gunnel Cederlöf and Mahesh Rangarajan (eds), *At Nature's Edge* (New Delhi: Oxford University Press, 2018), 185–209.
- 2 This is a quote attributed to Pandit Jawahar Lal Nehru, India's first prime minister. It is from a speech he gave on the inauguration ceremony of the Bhakara Nagnal Dam on October 22, 1963. <http://bbmb.gov.in/bhakra-project.htm> accessed on August 1, 2019.
- 3 The Art of Living Foundation (www.artofliving.org/) held a World Culture Festival on the Yamuna floodplains in February 2016, inviting over 3.5 million people and with site clearances widely believed to having been obtained politically. The Court imposed a severe fine on the organization. For details, see various websites, including www.thehindu.com/news/national/ngt-holds-sri-sris-art-of-living-responsible-for-damaging-yamuna-floodplains/article21289249.ece accessed on January 2, 2020.
- 4 Ravi Agarwal, *From Immersion. Emergence—Artist's diary. 2006*
- 5 Agarwal, *From Immersion*.
- 6 Ravi Agarwal, *Have you seen the flowers on the river?—Artist's diary. 2009*, Khoj Artist's Workshop, New Delhi.
- 7 Agarwal, *Have you seen the flowers*.
- 8 Marc Cioc. *The Rhine: An Eco-Biography, 1815–2000* (University of Washington Press, 2002).
- 9 Agarwal, *From Immersion*.
- 10 Advaita Mallabharman, *A River Called Titash* (Berkeley: University of California Press, 1992).
- 11 River-linking projects which entail large-scale inter-basin transfer of waters. With an estimated over 100 billion USD proposed for them (the first being to link river Ken and Betwa in Central India) the massive engineering of rivers has become more firmly entrenched than ever.
- 12 This is another example of a ‘temple of new India, a quote attributed to Pandit Jawahar Lal Nehru, India's first Prime Minister. It is from a speech he gave on the inauguration ceremony of the Bhakara Nagnal Dam on October 22, 1963. <http://bbmb.gov.in/bhakra-project.htm> accessed on August 1, 2019.
- 13 “[W]ater harvesting systems rather than being displaced were instead ‘overlaid’ or coexisted with new types of modern hydraulic technologies, introduced by the British.” Rohan D'Souza, “Water in British India: The Making of a ‘Colonial Hydrology,’” *History Compass*, vol. 4 no. 4 (2006): 621–628.
- 14 Agarwal. *Immersion*.
- 15 Ravi Agarwal. *Ambient Seas—Diary Notes, October 12, 2013 to August 17, 2015—Artist's diary*. The Guild Art Gallery, Mumbai, 2016. 19
- 16 Agarwal. *Ambient Seas*.
- 17 Agarwal. *Ambient Seas*.
- 18 Agarwal. *Ambient Seas*
- 19 “Interlinking of Rivers,” *Ministry of Water Resources, River Development and Ganga Rejuvenation, Govt of India*. <http://mowr.gov.in/schemes-projects-programmes/schemes/interlinking-rivers>. Accessed on January 1, 2020.

- 20 T. J. Demos, *Decolonizing Nature: Contemporary Art and the Politics of Ecology* (Berlin: Sternberg Press, 2016), 19
- 21 Akeel Bilgrami, "Capitalism, Liberalism and the Claims of Historical Necessity," in *Marx, Gandhi and Modernity: Essays presented to Javeed Alam*, ed. Akeel Bilgrami (New Delhi: Tulika Books, 2014).
- 22 Karl Marx and Fredrich Engels, "The German Ideology," in James Ballemmy Foster (2000), *Marx's Ecology: Materialism and Nature* (New York: NYU Press), 112.
- 23 Timothy Morton, *Ecology without Nature: Rethinking Environmental Aesthetics* (Cambridge, MA Harvard University Press, 2007).
- 24 Amitav Ghosh, *Wild Fictions* (2008), 13, accessed August 1, 2019, www.amitavghosh.com/docs/Wild%20Fictions.pdf
- 25 T. J. Demos, *Decolonizing Nature: Contemporary Art and the Politics of Ecology* (Berlin: Sternberg Press, 2016), 16.

EVERYTHING IS ALIVE

Jason deCaires Taylor's *Vicissitudes*

Inez Blanca van der Scheer

At the base of Grenada's Moliniere Bay at five meters deep, 26 sculptures of children face the ocean currents hand in hand. These works comprise sculptor Jason deCaires Taylor's *Vicissitudes*, a noted piece of his oeuvre of underwater sculptures. The sculptures were submerged in 2006 by local Grenadian volunteers and would become the face(s) of deCaires Taylor's, and indeed the world's, first underwater sculpture park. This sculpture, alongside others both by deCaires and other artists, is currently in the custody of Grenada Sculpture Management Inc, a non-profit volunteer group whose maintenance and development of the underwater park is endorsed by the island's Board of Tourism and its Fisheries Department. The children of *Vicissitudes* are, as such, the wards of the postcolonial island-nation, and its institutions of art, of economy, and of commerce. When *Vicissitudes* made its rounds on the internet as a tribute to the kidnapped and enslaved Africans that did not survive their experience of the Middle Passage and (were) drowned, the sculptures of the children became the wards of history. Beyond these custodial relations that span Grenada's 344 square kilometers and infinitely beyond them along cybernetic lines of online slavery commemoration, the figures of *Vicissitudes* nurture a third relation: in deCaires Taylor's words, "they belong to the sea."¹ Ten years into their post on the Grenadian seabed, the 26 sculptures of children nurture an extraordinary intimacy with the vast Atlantic that homes them. They have grown into being there: the sculptures are teeming with life, their original brown-gray concrete decorated by swathes of pinks and purples, their first skin of smooth stone now a surface of textures blossoming, of coarse gaping pores and antlers erupting from shoulders, from eyes, and as crowns. Two years prior to their submergence, Hurricane Ivan shook the ocean floor on which they now stand, overwhelming Grenada with the deaths of 12 people and damaging 90% of the island's homes.² The World Bank assessment report of the damages emphasizes the projected suffering of the island's tourism, as 70% of the supporting infrastructure of the island's crucially attractive beaches and shores was damaged.³ Having swept over the island as devastation, so too did Ivan scour the coastal reefs.

DeCaires Taylor's underwater sculptures are bodies of relief: an intervention in the conceptualization of sea as the site for human exploitation. Their immersion is performed as the inversion of the plunder of overfishing or the contamination of pollution. The sculptures, solid anatomies of a pH-neutral concrete composed of marine grade cement, sand and micro-silica, grow into entirely new ecosystems: artificial reefs to assuage the threat to natural coral reefs from environmental distress, climate change, and tourism.⁴ In Grenada, the 2006 submergence of the

26 sculptures of *Vicissitudes* is a gesture of redress; an attempt at reconciliation with the damage of natural disaster on not only the human society of the surface but crucially also the life that endures below it. Informed by the writing of Édouard Glissant, I read *Vicissitudes* as an act of myth-making—"a prophetic vision of the past"⁵—that contributes to a Caribbean network of Glissantian poetics. *Vicissitudes* activates and is animated by the environment, or *entour*, to "establish a continuum between the natural environment and its historical surrounding."⁶ When *Vicissitudes* comes to belong to the sea, deCaires Taylor's environmentalism activates "the subterranean convergence" of Caribbean histories and nurtures their extension through tragedy into inventive renewal of life in poetry.⁷ As British-Guyanese poet Fred D'Aguiar writes in *Feeding the Ghosts*, "Those bodies have their lives written on salt water. The sea current turns pages of memory."

They Belong to the Sea

The children of *Vicissitudes* have travelled, moving first from sculptor deCaires Taylor's terrestrial working space on Grenada to its western seabed, topographically held by the cupped palm of Moliniere Bay. Their second travel required none of the cranes, heavy metal, or divers of the original relocation. Their face photographed and digitized, the sculptures came to adorn deCaires Taylor's professional website, and, from there, circulated the web. In April of 2012, graphic designer Gabrielle Smith's online platform "the:nublk," dedicated to showcasing the contemporary creative production and producers from Africa, the African Diaspora and the Caribbean, featured *Vicissitudes* as a "tribute to fallen African slaves."⁸ A Google search of "deCaires Taylor Middle Passage" yields some 150,000 results. The:nublk explains *Vicissitudes* and deCaires Taylor's surrounding Grenadian sculptures as "a monument created to pay homage to the hundreds of slaves that sought freedom or were forced to jump overboard slave ships travelling through the Middle Passage from West Africa to the Americas and the Caribbean."⁹ This analysis accompanies a description of the work as a project of marine science. The site, which lists its location as the dual London/Grenada, reports on the storm damage endured by Moliniere Bay in recent years, and explains the sculptures' purpose as artificial reefs wherein ocean life is to proliferate, an intervention in the culture of "overuse" of water activities. The images accompanying this post feature the sculptures in the early stages of their submergence – barring some seaweed "socks," the bodies are still smooth, clean concrete. Still discernible in these photos are the features of the 26 children—we see that the sculptures are not 26 unique casts, but rather casts of 14 identical girls and 12 identical boys. The girls stand slightly taller than the boys, and wear a headband, her straight hair drawn back into a bun. The boy wears shorts, his hair is curly, his nose wide. They are both life-size casts of children "of diverse ethnic backgrounds."¹⁰ The same sculpture composition as seen on deCaires Taylor's own website renders indiscernible this diversity: the girl's facial features have sprouted sponges and hydrozoans, *Demospongiae* grows as a mask across the boy's face, broadens his nose, his lips.

Writing for Duke University's "The Black Atlantic" site, Davide Carozza notes that the structural steel supports of the sculpture's "weakest points, where hands grasp" look like shackles.¹¹ So too does Carozza account for the question of ethnic diversity—that is, the girl not being visibly black—in case this persists despite her spongy mutation: it

does not undermine a reading of *Vicissitudes* as about the slave trade so much as it reminds us that the legacy of the tragedy is a shared one, and one that very much remains a relevant force in the modern world.¹²

The colonial and plantation histories of Grenada—the “Island of Spice”—have resulted in a population of which 82% are descendants of enslaved Africans, and a minute 1.6% represents the island’s indigenous precolonial populations, which have been Arawaks and Island Caribs (a 2001 census reported 125 Caribs to be living on Grenada). These histories and their currency in even the island demographics alone enhance the legibility of *Vicissitudes* as a tribute to the Middle Passage.

Three months after their initial post on *Vicissitudes*, the nublkl shares an email response to their inquiry into the sculptures’ intended meaning from deCaires Taylor. “It was never my intention to have any connection to the Middle passage,” he writes, “Although it was not my intention from the outset I am very encouraged how it has resonated differently within various communities and feel it is working as an art piece by questioning our identity, history and stimulating debate.”¹³ So although *Vicissitudes* was not sculpted intentionally into the historical mythos of colonial and plantation history, deCaires Taylor affirms the sculptures’ multiple interpretations. The sculptor absents himself in a Barthesian gesture. By “refusing to assign to the text a ‘secret’: that is, an ultimate meaning,” as Barthes writes and deCaires Taylor enacts, the author or sculptor liberates the text.¹⁴ The sculpture is to be understood in its multiplicity: as a text liberated of its author, per Barthes’s prescription, *Vicissitudes* “consists of multiple writings, issuing from several cultures and entering into dialogue with each other, into parody, into contestation [...] The unity of a text is not in its origin, it is in its destination.”¹⁵ I proceed, emboldened by Barthes’ methodological insights, to study the unity at this destination. Barthes locates this destination as the reader, deCaires Taylor locates it as the ocean floor: “as soon as we submerge the sculptures, they’re not ours anymore, because as soon as we sink them, the sculptures, they belong to the sea.”¹⁶

The Archive as a Death Sentence

Davide Carozza’s contemplation on the sculptures opens with their paradox: “*Vicissitudes* is not a work about the Middle Passage. Except, of course, that it is.”¹⁷ I hope to qualify this obviousness by considering Katherine McKittrick’s commentary on the issue of a decolonial scholarship vis-à-vis archives of anti-black violence, 2014’s *Mathematics Black Life*. At the centre of this issue stands the challenge of engaging with the black diasporic archive, which McKittrick quotes Saidiya Hartman to define as “a death sentence, a tomb [...] an asterisk in the grand narrative of history.”¹⁸ Most pertinent for reading *Vicissitudes* in the context of the Middle Passage and, by extension, bringing it into relation with archives housing “the tolls of death and violence” would be McKittrick’s question: how “do we think and write and share as decolonial scholars and foster a commitment to acknowledging violence and undoing its persistent frame, rather than simply analytically reprising violence?”¹⁹

Mathematics Black Life surveys “the knowable (black objecthood)” and “the untold (black human being)” insofar as these poles are affirmed by scientific archival evidence of the histories of the Middle Passage and the plantation. “The death toll becomes the source” when the only records from which to remember and retrieve black history are the registers of enslavement, of anti-black violence and murder.²⁰ The violence of and in these tolls necessarily conditions the way in which the analyses hereof are written today when these dwell on moments of extreme terror in efforts to “reclaim and recuperate black loss and somehow make it all the less terrible.”²¹ To illustrate the problematics of these processes of attempted reclamation and recuperation, McKittrick notes the persistent evocation of the photograph “The Scourged Back, 1863.” The image portrays a formerly enslaved black man whose back is turned to reveal the scars of whipping – the photograph was taken after the man identified as “Gordon” escaped to become

a Union soldier in the Civil War. McKittrick explains that for those immersed in the scholarship of black studies, of plantation history, the image of Gordon has become ubiquitous to the point of being predictable. The danger here is that, “if we are not very careful, the image becomes so ordinary that the pleasures of looking, again and again, incite a second order of violence.”²² This visual practice was to rouse sympathy in white people with photographic evidence of the gruesome suffering that—in their terrible extremity—resonated more strongly than accounts of enslavement by enslaved people themselves. The reproduction of Gordon’s image attests to the centering of the slave master’s narrative—as the visuals of mutilation of black people by white people affirm the agency of the white and the inhuman objectification of blackness, privileging the narrative of white supremacy over narratives from the enslaved that affirm black humanity and subjectivity. The knowable—the violent objectification of blackness—eclipses the untold.

The Known and the Uncertain

Proceeding from the foundation of McKittrick’s crucial cautionary criticism, I attempt a reading of *Vicissitudes*’ science and creativity as a tribute to the Middle Passage. This reading engages with the archive only to humble its glorification of colonial agency, and exalts especially those moments of black life that the archive denies by way of absenting them: “what is not there is living.”²³ *Vicissitudes*, literally teeming with life, reads as the reparative imagining of that which we do not know. If we allow the speculated “shackles” to serve only as the steely wire connection to the domination of white colonial agency, we invert the asterisking procedure that has historically centered this at the expense of black life. Instead, the narrative emphasized is that of an environmental exposure that does not weather a body into nothing, or cut into flesh to reduce and mutilate, but that augments and mutates. The strength of *Vicissitudes* amid ocean currents, their literal blooming into life, their nearness to the coast, their standing upright in shallow water, are all refusals of those narratives that would have drowning be the only way in which Caribbean history features the sea.

This is certainly not to undermine the tragic reality of the lives lost and taken by way of drowning, only the suggestion of truths beyond this, alongside it, hidden within it. A viable translation for McKittrick’s “knowable” and “untold” variables as the objectification of blackness and black humanity, respectively, features in Martinican poet-philosopher Édouard Glissant’s *Caribbean Discourse* as the chapter “The Known and the Uncertain.” The same dichotomy that features in *Mathematics Black Life* finds here its articulation in the metaphor of the slave ship, but importantly not in absolute terms. Glissant’s writing departs from the idea that the Middle Passage marks the moment of the profound change of a people—Africans of today elusive specificity—into another people, a diasporic process unique in immigration history. This is not simply the mutilation that the archives of historical presence would prescribe, but a transformation, truly. This happens aboard the slave ship, but not in the travel logs of its captains, the journals of sailors, or the registers of slave traders. Those archives host the “known,” the agency of whiteness in the history of the Middle Passage and, by extension, of the Caribbean: the history of the ship, a history of presence—enslavement as the origin story of a black Caribbean.

Glissant does not divert our pursuit for origin as such: there is something to the ship beyond the archives of colonial orchestration. Here, beyond is below. There are no travel logs, journals, or registers that archive the existence in the hold. The existence that experienced the Middle Passage not aboard the ship, or on the sea, but in the hold, and “in” the sea. This lack of archival writing is the absence that is “living”: the living that the overrepresentation of the archive has made impossible. Glissant’s poetics of the uncertain refuse the authority of the archive, and resist the narrative of the Middle Passage as the successful making of death-as-origin. The Middle

Passage, he writes instead as transfer, the process of transformation: a population “change[d] into something different, into a new set of possibilities.”²⁴ To encounter these iterations of life and possibility, Glissant guides us to the environment: that which the archive negates is memorialized through landscape: “the trees, beaches, and sea winds at as keepers of the past.”²⁵ The content of this memorialization is in Glissant’s Caribbean discourse always multiple, “effervescent with intermingled histories, spread around, rushing to fuse without destroying or reducing each other.”²⁶ The strength of deCaires Taylor’s work as memorialization is not the sculpture *an sich*: not what the composition is, but what it will be in fusion, the effervescence of futures it was designed to host and sustain.

Vicissitudes – Everything is Alive

Glissant’s contemplation on the unknown is ultimately summarized in his epitaph: Rien n’est vrai, tout est vivant: *nothing is true, everything is alive*.²⁷ Like *Vicissitudes*, the inscription has come to host some variable life forms of the Caribbean: in “Glissant’s Graves,” Valerie Loichot notes that “rust, salt winds, and maritime moss [have] already altered the golden inscription.”²⁸ In deCaires Taylor’s giving the sculptures to the sea and thereby surrendering any claim to definitive meaning, we find the paradoxical affirmation of this riddle. Submerged, *Vicissitudes* invites us to reckon with the impossibility of exhaustively reading the object to extract any one truth, and humbles the archivist. Absolutely alive, the sculptures interact with the context introduced to them—ocean water, Demospongiae, but also Caribbean theory. I suggest their relationship to the Caribbean not purely as a tribute to its history but rather as an invitation to renew our trust in Caribbean invention, natural and human. *Vicissitudes* is stone, they are submerged at the whim of the artist but in this submersion they are invented again, this time by and in conspiracy with lifeforms at which we might guess, but the future of which over which we hold no certainty. The sculptures exist beyond the archive, and in any attempt to catalogue them, they would out- and overgrow their filing. The entanglement of the statues with history and the inevitability of this reading—“of course it is” (earlier quote)—is not a definitive link meant to close the circle between the Middle Passage and now as a memorial. Rather, the collaboration between deCaires Taylor’s 26 and their surroundings present an opportunity to encounter the unknown and guess at what could be, activating the imagination of Caribbean Sea futures.

Reading Fanon, David Marriott articulates invention as a sort of “extravagant expenditure... it accomplishes an interruption, a new signification of existence,” and as the opposite of “petrification.”²⁹ My reading of *Vicissitudes* suggests the same: these sculptures of solid cement are de-petrified in their submersion when they outgrow their original form in a process we can ultimately neither predict nor determine. Those markers to which we assign specific meaning today—the specific features from which we may infer contextual ideas about race and gender—will be unavailable, opaque to us as the project comes to belong more and more to the ocean. They are stone, they may be read as history, but are alive on the ocean floor. The collaboration between *Vicissitudes* and the sculptures’ surroundings evokes in this way the later poetics of Glissant, the *entour*, as the site testifying to the “fluidity between the natural and the cultural,” the artificiality of the ocean surface as a border between the two.³⁰ Loichot writes that “for Glissant, the symbolic mapping of landscape occurs in poetry, which in turn becomes part and parcel of the *entour*. *Entour* blurs and even annuls the division between cultural productions and landscape.”³¹ *Vicissitudes* does just this: in belonging to the sea, the division between sculpture and ocean life is annulled, and the symbiosis provides redress to the entanglement of nature and culture. Relieving the natural coral reefs of damage from tourists, *Vicissitudes* manipulates tourism away from the invasive establishment of high-rise hotels built at the expense of

(non-human) island life to support it instead. As a poetics of the Middle Passage, the aesthetic statement suggests redress, life after or instead of death, and the affirmation of the *entour* as “keepers of the past... witness to a past with no written archive.”³²

Vicissitudes’ overgrowth as extravagant expenditure, the exploration of life and possibility in the *entour*, I interpret as truly the work of decolonial writing. We read a revision of the Middle Passage that does not elide its violence, but humbles the absoluteness hereof, insisting that the Caribbean is not consumed by death; that the project of objectification may have attempted to determine but does not define the invention and possibilities in the hold. These possibilities have proliferated in the space that is uncertainty, condemned to this subterranean ambivalence by the dominion of the known but by way of this same suppressive exile, surviving it. Caribbean history as a subterranean uncertainty implies an isolation from the constellations of terranean safety: “those plateaus in time from which the West has benefited,” and to proceed “without the help of that collective density that is the primary value of an ancestral cultural heartland.”³³ To visit the Middle Passage as subterranean and account for the paradoxes contained herein – the maneuver of identifying this “painful notion of time and its full projection forward into the future”—Glissant calls a *prophetic vision of the past*.³⁴ The contradiction of prophecy and history speak here to the complexity of the latter in the Caribbean: to feel our way through the uncertain, those histories that we do not know, requires divination. In writing, in art, this divination finds its expression in myth.

Somewhere between History (with a capital H, Glissant distinguishes this as the linear construction of events that narrate Western supremacy and centrality, condemning other cultures to its sidelines) and the uncertain, myth emerges. It both obscures and clarifies,³⁵ a dual process that eludes both the convenience of realism as well as reduction by exhaustive analysis: it clarifies the unknown but does not mitigate its inherent obscurity. It is always one knowing variable of many. I suggest *Vicissitudes* is one such variable. As myth, it reads as a vision of a past we do not have access to: that secret way of life just below the ocean’s surface, where wrists were shackled but hands may also have been held. It is a prophecy of life: of generativity and of renewal, of yielding to the passage of time but remaining present and grounded in the face of these unknowable tides and currents. *Vicissitudes*, as sculptural marine science or scientific visual art, challenges the earthy foundation of Western colonial civilization when it weds culture to nature, and knowledge not to the claiming of life-sustaining space from the “non-human” domain but to contribute to this space instead. The “line” of the ocean surface that might otherwise be drawn as the nature/culture divide is in the submergence of *Vicissitudes* instead acknowledged for its turbulence and changeability, its fabrication as a border is decolonized. *Vicissitudes*’ submarine community affirms nature as a part of the vast expanse of historical diversity, flanked not by the travel log entries and slave registers of History with a capital H but rather situated *in* this historical diversity; the sea as history. This affirmation of history as multiple doubles as the allusion to an effervescence of futures: memorialization in transformation to something out of History’s purview. The symbiosis of *Vicissitudes* guarantees the dissolution of the piece’s anthropocentrism into something more-than-human, the sea transforms the simple composition into prophetic vision of the Caribbean past History, after Man. Reading *Vicissitudes* as memorial unsettles the constructed sovereignty of History, and will eventually surrender human history altogether to its entanglement with the course of non-human life, projecting more-than-human futures.

There should be no denying of the sea’s engagement in Caribbean human culture: even those indigenous modes of life inaccessible to us now were protected by its intimidating fortitude in the precolonial Western imagination. It took a philosophical revolution in the thought of Christopher Columbus and the revision of God’s providential grace to strip away the sea and reveal the islands to the surface, ultimately meaning their subjection to colonial torment.³⁶ In

one reading of many, *Vicissitudes* stages the appropriated imagination of this immersion myth: the image of 26 children, submerged in the Caribbean Sea and wearing the masks of their environment, exist in the deep blue concealment from the colonial gaze. The sculptures, when read in relation to the Middle Passage, deviate from its archive of colonial violence to provide instead a riveting visual portfolio of redress in creation and animation: the grey representations of the past bloom into the vibrant colors of prophecy: pink and purple sponges, green and yellow algae, infinite polyps promising regeneration of submarine roots, flowers, sentience. As a prophetic vision of the past, *Vicissitudes* allows us to visualize relation and creativity beyond the ubiquity of grueling colonial conditions. Moreover, the sculptures of 26 flowering children express reparative visions in the Caribbean today, the islands that culturally and ecologically thrive as a testament to the absolute possibility of life after the colonial sentence of death.

Coral reefs are thought to be the home of a third of the world's marine species, but climate change and the exploitation of the ocean by humankind threatens to destroy 80% of them by 2050.³⁷ Jason deCaires Taylor's *Vicissitudes* is an urgent and important intervention in this prophecy of decay: the creative support of life amid industries (aggressive tourism, overfishing, pollution) of death. *Vicissitudes* represents an environmental counter-culture that reroutes tourism and engenders the procreation of marine life. A reading of the work as a model for Glissant's language of past and prophecy suggests multispecies climate futures outside the legacy of History: redress by way of the surrender of the known—the colonial, the anthropocentric—to the renewal the sculpture enacts. Upon the establishment of this supportive eco-art, the sculptures have come to belong to the sea and—photographed and uploaded—various online platforms, which honor the art's depth and ambivalence with readings that activate its nascent contexts and which in turn are inspired with environmental futures. When the sculptures are extended into the historical relations of their submarine location, they stage a reparative reversal of its violence. They may symbolize a prophetic vision of relief from the archive of colonial violence and the visual culture of black objecthood by inventing a mythical diversion from the former and fundamentally contesting the sovereignty of the latter. *Vicissitudes* is literally teeming with life, ever in renewal: art that enters its environment to sustain it, an oceanic travel that is transformed by the world it inhabits rather than transforming this space with its claim on it. In History, Western man imposed a culture of death when they conquered the sea to colonize the island constellations it hid in the basin between Americas. In the sea as historical diversity, deCaires Taylor and a dedicated team of Grenadian volunteers and curators submerge their mythical creations to invent symbiotic colonies of an innumerable, unknowable diversity of life forms.

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PART VI

Ruptures/Insurgencies/Worldings

“The rupture exists,” writes Arundhati Roy, speaking from Delhi’s lockdown during COVID-19. “And in the midst of this terrible despair, it offers us a chance to rethink the doomsday machine we have built for ourselves. Nothing could be worse than a return to normality. Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next.”¹

As with the pandemic, all the more so with climate breakdown, the impacts of which are ultimately infinitely farther-reaching, even if the subject has been largely sidelined in the media recently with the arrival and spread of the coronavirus. Do we continue down the path of destruction—driven by the avaricious growth economy, forever wars, expanding extraction and fossil fuel use, and mounting social inequalities—or enter the portal into another world—of socio-economic justice, renewable energy, a decarbonized economy, and multispecies flourishing?

The science is clear: we have less than a decade left to cut emissions by half or face catastrophic warming of the planet, which will place civilization itself at risk, with large-scale agricultural failure and drought bringing food and water shortages, poverty and death.² It is urgent now to change everything: how we live and eat, how we make our stuff, how we work and travel, how we organize our economy and energize our utilities. This insurgent demand for a rupture, answering the Leftist slogan that “another world is possible,” might also involve a new-found historical consciousness regarding long-existing suppressed worlds—those founded variously upon Indigenous cosmovisions, ecocentric traditions, Afrofuturism, communitarian governance, and non-property relations. As Potawatomi scholar Kyle Powys Whyte describes the environmentally volatile and dangerous present, it may very well resemble what his “ancestors would have likely characterized as a dystopian future,” one part of a longer story, not novel, but rooted in centuries-long and still ongoing settler colonialism and its destruction of human-nonhuman relationships which are otherwise at the center of Indigenous life.³ In order to survive what may be a transitional, yet highly disruptive, period of modernity, he and many other Indigenous writers, land and water protectors, scientists and environmentalists point to native conservation efforts that work to restore correct relations, at once steeped in traditional knowledge from the past and lived in the present, as one possible way forward.

The sciences—and particularly Western varieties—are indispensable resources, but may also be inadequate in providing the kinds of radical transformations necessary to address and stem climate breakdown, much less to forge emancipatory worlds otherwise, evident from the fact that ample scientific data has of yet failed to turn the tide of environmental damage in sufficient ways.⁴ The world-altering *emergency* of climate breakdown demands the *emergence* of new imaginaries, social formations, and societal organizing principles (both keywords stemming from the Latin *ēmergere*, meaning to rise up or out of), which requires imagination to see otherwise and creativity to invent differently. Culture and the arts, as the sites where values in common have been generated throughout history (including through healthy processes of conflict and debate), have a crucial role to play. As contributors have argued throughout this volume, art and aesthetic practices can help to unsettle the familiar and make room for experimentation outside the strictures of technocratic and solutions-oriented approaches, which have largely dominated climate science, design, engineering, media coverage, and policymaking to date. Creative work grounded in lived realities and addressing their many contradictions head-on, can help resist escapism (whether utopian or dystopian) and the temptations of a debilitating eco-melancholia. As critical and vital resources, the arts can assist in overcoming the challenging and paradoxical formulation of climate justice positions and praxis in an unjust world of unsustainable capitalism, thereby pulling the not-yet—as well as the oppressed, marginalized, silenced, and submerged—into existence.

The challenge before us is undeniably political. The road maps to a livable future, established through decades, even centuries, of struggle, exist. Most notably and recently, in the U.S. and U.K., paradigm-shifting and radical approaches to the Green New Deal (GND)—contrary to liberal, green capitalist varieties—challenge the roots of climate change by adopting system change in economic, political, and social registers, envisioning the democratization of energy, labor, technology, and agriculture. Such transformation is guided by the values of commonwealth, public goods, equitable inclusivity, multispecies flourishing, universal care, and the welfare of people over profits.⁵ Building upon environmental justice commitments of the last few decades—including the “Principles of Environmental Justice” penned by delegates of the First National People of Color Environmental Leadership Summit in 1991;⁶ as well as the grassroots struggles of peasant and subsistence-farming movements worldwide; and anticapitalist ecosocialist principles—the GND recognizes that the climate change challenge must transcend siloed approaches and solely technocratic solutions.

Representing simultaneously a green repurposing of the economy, a labor politics of antiracist equity, an inclusive redistribution of resources and production, and a decarbonizing and demilitarizing phase-shift, the GND, indeed, touches all sectors of society. According to one of the co-authors of a leading 2018 GND articulation, U.S. Senator Alexandria Ocasio-Cortez explains in her brilliantly illustrated, “Message from the Future,” that “we can be whatever we have the courage to see,” including a new world of ecological sustainability, clean energy jobs, and social justice.⁷ The blueprint—really a work-in-progress and site of ongoing political struggle—must necessarily be global, including the participation of such major economies as Brazil, India, and China, and ultimately all other states, and doing so by following the principle of climate debt (according to which developed countries owe a debt of techno-financial aid to all others negatively affected by the former’s two centuries of capitalist and colonial fossil fuel domination, in order to assist with global climate mitigation and adaptation).⁸ As such, the GND foregrounds a just transition, especially when joined in solidarity to the Indigenous-led decolonial Red Deal: “a program for Indigenous liberation, life, and land—an affirmation that colonialism and capitalism must be overturned for this planet to be habitable for human and other-than-human relatives to live dignified lives.”⁹

The urgency of this program remains valid even if our worldwide system of shared governance, democratic regulation, and accountability—most closely modeled within the United Nations—is, at present, woefully inadequate to guide the process ahead. Indeed, in forwarding the GND, we can expect massive resistance by the powerful elite, deeply invested in present and near-future fossil-fuel capital expansion and its resulting inequalities. Think-tanks, industry lobbying groups promoting doubt and denial, a political class dependent upon billions in campaign funding, a corporate-friendly media—this politico-financial nexus is working on overdrive to preserve and extend capitalist growth and guarantee short-term profits for the few, while ensuring long-term climate disaster for the many. Meanwhile, the disasters mount. Hurricanes (intensified owing to anthropogenic climate change), wildfires (in areas of drought and global warming), flooding (worsened by melting polar ice and extreme weather), pandemics (with new zoonotic pathways releasing viruses owing to factory farming, global food markets and transportation systems), and corresponding economic catastrophes (growing joblessness and financial indebtedness), are placing life as we know it in jeopardy. All of which makes radical transformation more urgent than ever, which can only be driven by a massive, multiracial, global social movement insurgency.

What is needed is the rapid and coordinated organizing of people power on the level of a World War II mobilization, as such environmental groups as 350.org, the Climate Mobilization, Extinction Rebellion, Climate Justice Alliance, and the Indigenous Environmental Network are calling for. Just as the original New Deal of the 1930s was accompanied by massive investment in public works, large-scale infrastructure and building programs, and the arts, today's GND demands the greening of infrastructure, technology, and energy systems, as well as unprecedented participation in movements of collective creativity and radical imagination achieved in and through public culture, social programs, and education. The goal is nothing less than global-scale societal transformation, envisioned and joined by an arts of common welfare. Whereas artists have often provided aesthetic legitimacy and beautification for dominant social and political classes and their institutions, there are also plentiful examples of cultural practitioners working toward radically emancipatory goals in support of the many, including within egalitarian, decolonial, and revolutionary cultures alike.¹⁰

In this last section we focus on contemporary practitioners—activists, artists, and social movement leaders, often in some innovative combination thereof—who are advancing such goals, providing creative visions of life otherwise, founded on social justice, decolonial commitments, and environmental and multispecies flourishing. Even while ethnonationalist, xenophobic, and authoritarian capitalist formations continue to intensify conditions of economic inequality, extractive violence, and antidemocratic social repression worldwide—from the Philippines to Brazil, from the U.S. to Israel, from Russia to Hungary, from Saudi Arabia to China—we recognize that collective organizing is also nonetheless growing and coming from some unexpected quarters these days. This is particularly evident in relation to emergent socio-environmentalist formations. Indeed, a new and multiracial generation of younger activists internationally associated with the Sunrise Movement and Fridays for Future are organizing for climate justice and the GND in significant ways.¹¹ In the U.S., March for Our Lives is organizing to end rampant gun violence. Following decades of stagnation, newly vibrant anticapitalist movements, such as the Democratic Socialists of America, are advancing radical visions for the future founded on multiracial, working-class, and ecosocialist solidarity. And Black Lives Matter has spurred the largest protests in U.S. history, gaining resonance worldwide, against police brutality and systemic racism, organized behind a platform that powerfully articulates the necessary tenets of a radically intersectionalist modeling of climate justice: “We stand in solidarity with our international family against the ravages of global capitalism and anti-Black racism, human-made

climate change, war, and exploitation.”¹² With these social movements and activist formations, and with their many varieties of visual-cultural practice and creative proposals, we can see through the portal opened by present emergency, and begin to make the transition to futures of liberation. Sometimes these are even being practiced already in the experimental present, or newly reanimated in traditions long repressed by cultures of extractive capital, colonialism, and the afterlives of slavery. While the elite few will oppose all such efforts, the struggle against oppression will never end and the many have a world to win.

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THE WORK OF LIFE IN THE AGE OF EXTINCTION

Notes Towards an Art of Aliveness

John Jordan

Nero Culture: On Fiddling and Watching the World Burn

Her hand rises up out of the swirling sea. Dark eyes fix deep blue sky. She's drowning, not waving. Water is pushing life out of her lungs, but she just wants to be alive, she coughs and squirms. She's travelled so far to get here. Her home is on fire, the climate has broken down, droughts have brought hunger, the fields are becoming deserts, the wars never stop and she is in search of life, that's all. But Fortress Europe has made sure she never reaches your beaches with their bronzing bodies and sweet smell of sun cream. Her darker body will wash up on the golden sand days later, when the tourists have gone back to their hotels and after the tides are tired of playing with it. You are moved by the TV pictures of the crowded boats and the drowned children. You are moved to make a work that speaks of how Europe's migration policies are killing the exiled. You cover the columns of a theatre with thousands of orange life jackets. You are Ai Weiwei. When asked why you helped design Beijing's *Bird Nest* Olympic stadium for the very government that has repeatedly repressed and censored your work, you replied that it was because you "loved design." Do you love it more than life?

The Arctic is at times 20 degrees Celsius warmer than it should be at this time of year. The ice is melting so fast that scientists say it is literally off the charts. Hurricane Ophelia, which hit Ireland in October 2017 was off the digital maps prepared by meteorologists who never expected such a large storm to be so far north-east, the images of half the storm literally disappeared from their computers. The waters are rising and the climate tipping points are looming, you are moved. You transport hundreds of tonnes of arctic ice that has broken off the ice shelf to Paris during the United Nations Climate Summit. You leave them to melt in the street. You are Olafur Eliasson. Apparently, your studio does not 'make things' but 'ideas', but that does not stop you selling your wire and lightbulb football lampshades for 120,000 pounds to the rich.

In this era of extinction (or more exactly this era of extermination: of life by the economy), art has become another technology of separation. We could call it *extractivist art*, pulling value out of life, disaster, rebellion, whatever is a fashionable topic at the time, and regurgitate it into unsituated detached objects or experience elsewhere. Anywhere in fact, as long as the codes of the world of art function there.

Disabled by the trap of representing the world rather than transforming it, the artist's creativity goes into showing us the crisis, reflecting and commenting on it, rather than attempting to overcome it. It's as if someone has set your home on fire and instead of trying to extinguish the

blaze you take photos of the flames. What kind of separation takes place in our minds, that when faced with such an emergency we think that simply more images, more performances *about* the crisis will make a difference? There is no dearth of pictures of the nightmare, simply a lack of radical collective actions to escape it.

Why design a dance piece about food riots when your skills as a choreographer could help crowds of rebels move through the streets to avoid the police? Why make an installation about refugees being stuck at the border when you could design tools to cut through the fences? Why shoot a film about the dictatorship of finance when you could be inventing new ways of money-less exchange? Why make a performance about the silence left where there were once songbirds, when you could be creating an ingenious way of sabotaging the pesticide factories that annihilate them? Why continue to feed the zoo of the art world when your creativity could be stoking the rebellion? Why not desert this Nero culture, which fiddles whilst the world burns (Figure 35.1)?

No artists or activist, playwright or philosopher, architect or designer has ever had to work in such a moment in history where our future is not what it used to be and it is easier to imagine the collapse of life on Earth than imagining reinventing the right ways to live. The IPPC, the UN climate scientists not known for their revolutionary positions, wrote in 2018 that if we want to avoid the worst of the climate catastrophe we had 12 years left for “rapid, far reaching and unprecedented changes in all aspects of society...”¹ A recent European Commission policy paper ended with the analysis that if we go beyond 1.5 degrees: “we will face even more droughts, floods, extreme heat and poverty for hundreds of millions of people; the likely demise of the most vulnerable populations—and at worst, the extinction of humankind altogether.”²

For the majority world, the collapse has already happened, but the scientific community is increasingly thinking that we are faced with a total collapse of civilization, most possibly in the lifetime of those of us who are reading these notes. Faced with this we must revolutionize so much of our existence, including art, which for far too long has been perceived as the very ground zero of what it meant to be “civilized,” human even.



Figure 35.1 Penelopi Thomaidi, *Police Descend on the Zad*, 2018

We've Had 200 Years of Art, and the World is Getting Worse

"Art as we have generally understood it, is a European invention barely two hundred years old," writes Larry Shiner.³ For most of human history and for most of human cultures there was no word to describe what many of us now call art. Then something unprecedented happened, what some have called, a Copernican revolution in art. It started around 1750 at the very onset of another revolution, the industrial capitalist one—when for the first time the process of making things became independent of human or animal power, of place and seasons, of weather, wind, water and sun rays.

In this new fossil fuel age, the only restriction to the ceaseless energy that the manufacturing technologies needed to produce an infinite variety and number of objects with minimum effort and time was the availability of coal. The Capitalocene had begun, the part per million of CO₂, 280 ppm, that had remained relatively stable for 10,000 years began to surge, all concomitant, according to cultural theorist Mark Fisher, with the appearance of the "'invisible plague'⁴ of psychiatric and affective disorders" that have become so prevalent in our time.

As our culture began to burn its ancient fossils and build its factories, art works which once had specific purpose and place became separated from their functional contexts and enclosed for silent and reverential contemplation within the new concert halls and museums, of the rising middle class. Art, which had long been a process of cooperative collaboration, became the creation of individual genius. But before we visit this great of rupture in art, let's rapidly sketch this revolutionary period.

First, to create dependance on the new economy, the shared fields, rivers and forests—the commons—had to be enclosed and privatised. The right to harvest firewood or medicinal herbs, to cut trees for building your houses or put your milking cow out to graze, were ripped away from the commoners. The ancient forms of peasant livelihood—made up of entangled co-creating communities involving a diversity of participants in fertile self-generating systems of giving and receiving—were uprooted. In commoning, notions of 'resources' and 'users' did not exist, in fact 'using' and 'caring' were one and the same thing.

There could be no difference between using a place and looking after it; because the highest goal of the commoners, the mutual long-term vision, was that the commons was to continue to give life, to remain fertile, to keep unfolding and flourishing. (This happens to be the higher goal of every living being in the biosphere, the hunger for life that is life, which is the aliveness that exists embodied in the cells of your fingers and in the oak trees outside, but we will come to that later.) Peasant culture fostered community (human and more-than-human) cohesion and cooperation, but the new religion of universal progress would have a very different goal: its god machine, "The economy," had to grow endlessly and to do that life had to be conquered in the war of competition, of all against all. The principle of commodity had subsumed that of community.

Enclosure "was worse than ten wars" was how an English commoner described the process in 1804.⁵ By enclosing the commons people not only lost their access to a sustainable livelihood, but they also lost inner emotional experiences, since the common land had tended to be the places of ritual and celebration. As the land was taken, the practices of reverence—from harvest feasts to winter carnivals, solstice rites to fertility dances around the maypole—died. The pre-industrial year was set to the cyclical soundtrack of numerous seasonal feast days, but as industrial capitalist culture took root, and the factory owners devised ways to destroy the autonomy and attachments of the commoners; not only was land stolen, but time too. In 1834 the governor of the Bank of England reduced the number of public holidays from 36 to four. Most of the holidays had involved not just stopping work, but coming together to strengthen the bonds, between

the human and the more-than-human communities of bodies, via wild parties or powerful rituals, and sometimes an orgiastic cocktail of the two.

As Sylvia Federici shows, in *Caliban and the Witch*, concomitant with the rise of capitalism and the enclosures was the war against women, where the church and state forced their bodies, via the threat of being burnt at the stake, into becoming working tools of capitalist reproduction by systematically undermining their power and autonomy.⁶ According to Federici, the world had to be 'disenchanted' in order to be dominated. Belief in magic—which was based on an animistic conception of nature, where the cosmos was an interdependent living organism, where every plant, being and body was a sign with sense and meaning and where matter and spirit, body and mind, were one—had to be destroyed.

Using the witch hunters' vivid propaganda, including lurid details of the orgiastic rituals of the Sabbats, men were taught to fear the power of women, whose key social roles as healers, midwives, and soothsayers were incompatible with a capitalist, rationalist world view and the discipline of work. The emerging proletariat was divided along gender lines in order to transform anger over the feudal system into forms of misogyny that would set the stage for the witch-trials, and open the way for the hierarchies that constituted the very class rule that would be the pedestal upon which the new invention of art would sit.

The modern idea of art evolved amongst the mostly male elite in the metropolises of colonial Europe and soon spread to colonize imaginations everywhere. It was constructed out of the social institutions of the Enlightenment—forms of life that were expressions of an ideology that imagined life made up of mechanistically determined passive objects, dead matter understandable only on rational grounds. Any subjective sensitive feelings were suspicious distortions of the 'objective' measurable reality which could only be understood if it was dissected, and the observer detached from it. And so life was voided of any immanent creativity, because it was made up of machines.

For thousands of years art meant any human activity of everyday life, which could include shoe-making to verse writing, horse breaking to governing, vase painting to cooking, medicine to navigation even, as long as—and this was the key—it was performed with grace and skill. With the new idea of art, things that were considered part of the traditional concept of art began to be ripped apart: artists from artisans, genius from skill, the beautiful from the useful, culture from nature, art from life.

The activities and genres that were chosen to rise up the ladder—elevated from the ordinary enjoyment of rural and popular culture, toward the realm of the 'polite' arts of refined metropolitan pleasure—were painting, poetry, theatre, music, architecture and sculpture. Now claimed to be self-contained, these often contextless works assumed a quasi-religious state and their makers achieved heroic status. The activities pushed down the ladder and out of the public eye, however, were the useful situated things, such as wheelwrights and potters, women's house worlding crafts: cooking, tapestry, embroidery, weaving—or anything entertaining: popular songs, storytelling, folk dancing—which would break the calm and contemplation with its rough loudness. The power relations amplified during the witch-hunts were being upheld in the name of the brand new definition of "aesthetics," which was no longer linked to increasing our capacity to perceive with our senses, but a contemplative aloof, refined intellectualized sense of taste for a polite elite.

In the 1750s there were no concert halls or museums; by the end of the century they were key institutions of the state across Europe and had developed their own market and public. This new notion of a universal art was pushed worldwide by missionaries, armies, entrepreneurs, dealers, and intellectuals as one of the engines of progress. Without these violent rifts, the practices and institutions that make up the art system of which many of us are a part would collapse.

And in the metropolises today this art continues to be a key weapon of another form of enclosure, displacing people and homogenizing neighborhoods via gentrification.

We have now had 200 years of art and the world is getting worse. As we begin a revolutionary shift as great as that two centuries ago, towards a new post-capitalist age free of fossil fuels, we need to look forward to an art that is not simply a mirror to life, but enables life to live more, an activity that reclaims art's ancient power, its magical capacity to transform the world by dissolving back into life.

Illegal Lighthouses and Useless Airports

It's raining. That's not the right word. It's more like drizzle, rather half-way between drizzle and mist. Let's call it *mizzle*, a beautiful in-between state, between liquid and wind, vapor and fluid. My hands are wet; they slide on the handrails. I'm nearly at the top; there is a last little steel ladder to climb. I flip the switch (Figure 35.2).

The lighthouse lamp begins to turn. Caught by its bright beam, the *mizzle* begins to dance, white ghostly clouds of light swirling in the night. The beam turns faster than most lighthouses. But we are not on a normal lighthouse. In fact we are 50 km away from the sea, 20 m above an old, squat stone farmhouse in the middle of 4000 acres of fields, forests and wetlands, in a place that French government called "the territory lost to the Republic... the outlaw zone."



Figure 35.2 Jim Citoy's art, *Zad Lighthouse*, 2018

Those of us who inhabit this land call it the Zone à Défendre, the “Zone to Defend”: the zad. Even the French press now call it “a concrete utopia,”⁷ and in the best tradition of anti-perfectionist utopias, it is messy, precarious, unpredictable and indeterminate, just like life itself. To me it is home, a territory where I finally understood the force that comes when you dissolve the gaps between art, politics, and everyday life, where beauty and usefulness are reconciled. Somewhere where I realized that the most beautiful thing was trying to protect and enable life itself, and that the best way to do that was to truly inhabit a place, and let it inhabit you.

If the government had had its way, and resistance had not emerged from these lands— with their 9 springs and 222 kms of hedgerows, newts and water voles, peasant farmers and dragon flies—would have been sucked dry and covered in tarmac. The dawn chorus that sometimes wakes us would have been replaced by the deafening growl of jet engines. Instead of the sweet smell of summer hay the westerly winds would be wafting the sharp reek of kerosene. And right here, instead of an illegal lighthouse constructed by a ragged band of shipbuilders, artists, homeless kids, activists and anarchists, there would have been a control tower, built by multinational infrastructure company Vinci, for their brand new “Great Western Airport,” 30 km to the north of uber-cultural French city of Nantes, which already has an international airport.

Since 1965, the year I was born, handfuls of men in government buildings and corporate headquarters have imagined an airport here. With their bulldozers they thought that they could destroy the complex relationships between the millions of beings that share these lands. The links between the crested newts and the pond plants whose leaves they use to wrap and camouflage their eggs, between the oaks and the mushrooms that share their minerals, between the peasant farmers and their prairies. They wanted to replace all that with another non-place, erasing all the human and more-than-human communities and stories that were here before, destroying everything particular and special about this land. The prairies under the lighthouse would have become no different to the runways of Heathrow or JFK, Dubai or Delhi. Another climate-wrecking infrastructure, planned for a bygone fossil fuel age in which mobility was more important than getting to know a place.

There were 40 years of fierce struggle against the airport, by a cross-fertilizing, co-transforming composition of peasants, locals and activists of every flavour. In 2009, the first French Climate Camp set up on the land and an open letter of invitation by local residents for people to squat the empty buildings and put their lives in the way of the infrastructure project was read out: “To defend a territory, you have to inhabit it,” they wrote. The climate camp folded up its tents and marquees, a couple of dozen people stayed, building huts, squatting empty farms, planting gardens, constructing bakeries, making links with resisting peasant farmers and local villagers and even setting up pirate radio station that squatted the airwaves of the airport builder Vinci’s radio station. The zad came into being and the resistance ripened into one against the airport *and* its world. Fighting and building, creating new worlds in the way of the old, the yes and the no, began to merge.

In 2012, the machines and squadrons of police come to build their airport, but thousands of disobedient bodies put themselves in the way. Bodies hung in the trees to stop them being felled, farmers blocked the roads with their tractors, and the old French art of the barricade blossomed. A month into the evictions, 40,000 people from all over France converged to rebuild a resistant hamlet, revenging the 12 farmhouses the state had knocked down. Then the police attacked the hamlet, and the resistance exploded. When the French state realised that we were prepared to fight with our lives and that they were not politically ready to take lives to build their airport, the operation was halted.

A handful of police remained until the spring of 2013, but then disappeared and no police or any government officials returned for over six years. The government hoped that without them the resistant community would collapse into chaos—how wrong they were. On the 4000 acres

a laboratory of commoning unfolded involving 80 different living collectives and over 300 people, all squatting the land and buildings, attempting to live a post-capitalist life without bosses, gurus, directors, or leaders. More and more extraordinary homes rose out of the earth with no planning permissions restricting the imagination of the builders, medicinal herb gardens and orchards were planted where runways were planned, a tractor repair workshop set up, a timber mill provided wood from the forest for our buildings, a brewery and banqueting hall took shape, medic and legal support groups were convened, sound studio was opened for all to learn to rap, a blacksmith forge, tannery and shoemaker set up shop, a zad newsheet was distributed weekly, a flour mill ground our wheat for the bakeries and a dairy produced radical Camembert. It was a concrete experiment in taking back control of our everyday life. Experimenting new forms of life together is a messy difficult process, never easy but compelling in its intensity, and when you no longer outsource your problems and needs, everyday life goes from being unthinking automatic behavior, to being a question of technique, of skill and grace: of art (Figure 35.3).

We need a technique of life, an ‘art of living’, claimed philosopher-activist Michel Foucault. Rather than “‘something which is specialized or which is done by experts,’” he asked, “‘couldn’t everyone’s life become a work of art? Why should the lamp or the house be an art object, but not our life?’”¹⁸ During one of the many assemblies that organizes life on the zad, one of the half a dozen farmers who refused the compulsory purchase of his farm for the airport said: “Whether we like it or not we have become more than ourselves.”

But this kind of attitude requires a certain mindfulness and presence to worlds. It means learning to inhabit one’s territory, knowing its stories, sensing the texture of things. This discipline of attention, this deep sensibility to doing and being, is in itself a form of care-giving. It requires presence, here and now, working with what is at hand rather than waiting for some moment of perfection. It means letting go of fixed ideologies in favour of sensing situations.



Figure 35.3 A new Zad assembly hall is carried 3 km after the old one is destroyed by the French State, April 2008

Source: Photo by Nata

Such presence means that we know where our food comes from, where the nearest spring erupts, what species of mushroom spreads beneath our feet. It senses the weather changing on our skin; it feels the tidal pull of the full moon on our bloodstream. A deep presence means that we notice when the local song birds fall silent, we mourn when butterflies no longer pepper the prairies, and we cannot just watch the bodies of migrants washing up on the shores of the Mediterranean. Paying attention is the essential ingredient of the art of life.

Aliveness: The Art of Commoning

Its song reminds me of a strange mix of 1990s modem sounds, a nightingale on speed and lo-fi effects from 1980s Space Invaders games. It speeds up, slows down, repeats phrases, it's a Melodious Warbler, no bigger than my fist, and able to imitate dozens of other birds. It replays and mixes samples from species in Europe and Africa, where it winters.

I'm finishing this chapter from our caravan, outside the tiny Warbler sits at the end of a branch and sings its entire body out to the sky. The enlightenment logic, further amplified by Darwin's view that life is war, would tell us that this uniquely weird and beautiful song was just an advertising jingle, a soulless soundtrack saying "Come fuck me" or "Fuck off," just another sonic weapon in the battle of biological survival and efficiency.

But biologists all over the world are increasingly observing that life is not war, but a vast commons and that describing it as an art rather than a machine makes more sense. Living bodies, from cells to blue whales, seem not to be assemblages of blind egoist machines dictated by genes, but a commons of mutual transformations. Life is a swarms of entangled sensing and feeling flesh interpreting and expressing life.

"There can be no dualism," argues biologist turned philosopher Andreas Weber, "because the fundamental dimension of existence is already shared: it is *aliveness*, the desire to connect with touch and body in order to create fertile communities of mutual flourishing, the members of which experience their identities as self."⁹ It is a give and take, becoming self-through-other and always yearning aliveness, an interiority always reaching out toward that which brings more life and away from that which brings toxins and death, whether a root searching for water or worm squirming away from poison, life is making choices based on values, life is meaning- making and its goal is to keep life going in the long term.

If the warbler is able to imitate other species, then this mirroring, representing, and arranging the replay, suggests to ethologists that the bird's behavior has the ability of abstraction. It experiences that there is self *and* world and perceives that it can act on this world according to a personal point of view, a sensitive inwardness, embodied aliveness. Its song isn't just a deterministic sequence of cause and effect, but an individual self freely expressing its feelings of aliveness.

Before 200 years ago, the opposite of art was neither craft nor entertainment, but nature. Culture was not nature and vice versa. It seems the biological revolution that we are living through today turns even that on its head, perhaps nature is an art after all – it is feeling becoming form.

What do we want our descendants to think when they look back at this period in history in 200 years' time? If *homo sapiens* hasn't joined the extinction list by then. Will they see that our culture kept turning away from life, or will they hear about a revolution that turned towards life and in so doing healed art, put it back together again. "Art," Weber writes, "is no longer what separates humans from nature, but rather it is life's voice fully in us. Its message is not that beauty has no function. It is rather the essence of reality... Feeling is never invisible; it takes shape and manifests as form everywhere in nature. Nature can therefore be viewed as feeling unfurled, a living reality in front of us and amidst us."¹⁰

The zad's laboratory of commoning continued to flower, but in January 2016, the state said they would return in the autumn to finally evict and build their airport, threatening that up to two-thirds of the French Gendarmerie would be mobilized. As a dissuasion we responded immediately with 500 tractors, 1000 cyclists and 20,000 disobedient bodies blocking the huge bridge across Lathe river Loire, with a banquet. Then a month later in February, 60,000 bodies partying on the local motorway, then training in direct action for 1000 people and finally, in October, just at the peak of when eviction threats, a ritual disguised as a demonstration. 40,000 people came and brought walking sticks and staffs, which they stuck in the ground, making a pledge that they would return to defend the zad. "We are here, we will be here!" they promised. As the tens of thousands of sticks were thrust into the soil, a cathedral-like medieval-style oak barn, built during the summer by 80 traditional carpenters, was raised. The festivities continued late into the night. The magic worked. That government never came. That time, anyway.

A new government, under Macron, arrived and in January 2018, France's new prime minister appeared on live TV and announced the abandonment of the airport project. In the same breath, however, said that all those illegally occupying the land would be evicted by springtime. At 3.20am on April 9, we were woken by the gut-wrenching ripping roar of the police helicopter and 2500 gendarmes attacking the zone with armoured vehicles (APCs), bulldozers, rubber bullets, drones, 200 cameras and 11,000 tear gas and stun grenades, injuring over 300 of us in under a week. At the time it was France's biggest police operation since May 1968, all because, as the anthropologist David Graeber wrote, "the French state could not let an example of a place run without police, via bottom up forms of organising, against capitalism and the ravages of our natural world, continue."¹¹ After destroying over 40 of our living spaces a cease-fire was negotiated, and we are now being forced to 'legalise' our farms and lives. For more than a year now we have been creatively hacking their bureaucracy in order to keep our use of the land as a commons.

I lit the lighthouse tonight to celebrate the holding of the assembly of users (where the commoners, those who use the land, gather to decide the modality of its use). We don't light it every night, only on special occasions: perhaps a full moon, a friend being released from prison, a community rite of passage or to celebrate the feast day that we have declared for the day of the victory against the airport. I climb down the zigzagging wooden stairs that cross the white skeleton of the cut-down electricity pylon that forms its base. A ship-like gangway links the structure to our communal library, a nod to the mythical city of Alexandria, with its wonders of the world—its lighthouse and great library. When the Indian activist and physicist Vandana Shiva visited us she gave a talk sitting on the steps of the library:

if we want a future, we want life, and that life has to be in common, you are a laboratory that shows how the future can be cultivated through reclaiming our place on the land and our humanity through creativity...

she said, gesticulating upwards, "the zad has become a lighthouse for showing us how we should be living."

The zad has become an international icon of an imperfect, but beautiful utopia in resistance. Countless people hold its picture in their minds, like one might carry the image of a powerful work of art. It's a crack that lets in some light in these dark times. The airport will only ever be a negative shape here now, and perhaps one of the great arts of the future is this, to transform the Capitalocene's dreams of destruction and enclosure into absences. Holding back the monoculture machine, decolonising a place from capital, opening it up as somewhere that enables

forms of life to flourish, connect and differentiate: that is what is beautiful. That is the aim of an art of life. And those aims, the goals of the commoners, are no different from the aims of life itself.¹²

Notes

- 1 *Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C approved by governments*, 2018, www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/
- 2 Nafeez Ahmed, “The Collapse of Civilisation May Have Already Begun,” *Vice Motherboard*, November 22, 2019, www.vice.com/en_uk/article/8xwygg/the-collapse-of-civilisation-may-have-already-begun
- 3 Larry Shiner, *The Invention of Art: A Cultural History* (Chicago: The University of Chicago Press, 2001), 3.
- 4 Mark Fisher, *Capitalist Realism: Is There No Alternative* (London: Zero Books, 2009), 35.
- 5 Kirkpatrick Sale, *Rebels Against the Future: The Luddites and Their War on the Industrial Revolution—Lessons for the Computer Age* (New York: Addison-Wesley, 1995), 35.
- 6 Silvia Federici, *Caliban and the Witch: Women, the Body and Primitive Accumulation* (New York: Autonomedia, 1998).
- 7 Catherine Vincent, “Notre-dames-des-Landes: Zone à décrypter,” *Le Monde*, July 6, 2019, 28.
- 8 Michel Foucault, *The Foucault Reader*, ed. by Paul Rabinow (New York: Pantheon, 1984), 350.
- 9 Andreas Weber, *Enlivenment: Towards Poetics for the Anthropocene* (Cambridge, MA: MIT Press, 2019), 44.
- 10 Andreas Weber, *The Biology of Wonder: Aliveness, Feeling, and the Metamorphosis of Science* (Gabriola Island, BC: New Society, 2016), 195.
- 11 Authors translation, David Graeber, “Preface,” in *Éloge des Mauvaises Herbes: Ce que nous devons à la zed*, ed. Jade Lindgaard (Paris: Les Liens qui Libèrent, 2011), 7.
- 12 These notes will be expanded into a book with Vagabonds/Pluto press in winter 2021.

THE POLITICAL ECOLOGY AND VISUAL CULTURE OF THE PACIFIC CLIMATE WARRIORS

Carol Farbotko and Taukiei Kitara

This chapter will offer a political ecology reading of the visual culture of the Pacific Climate Warriors, comprised of diverse Indigenous peoples of the Pacific united in climate change activism. Pacific Climate Warrior events are typically characterized by groups of Warriors donning elaborate ceremonial dress and body art of their own Polynesian, Melanesian, or Micronesian culture. The costumes vary, but are visually cohesive and striking, being made from ecological materials found across the Pacific Islands, including pandanus and coconut fiber, shells, feather, and *tapa* bark. Climate activism expressed through the attire and other material culture of ancestors centralizes cultural and biological diversities at risk; but it is also a warrior aesthetic that offers much-needed hope of survival. The pan-Pacific concept of *vaka*—meaning canoe—is deployed to consider the warrior aesthetic as fundamental to a journey by Pacific Island people: a journey towards self-determined, post-carbon futures that remain closely tied to their own ancestors, cultures, and environments.

Introduction

In the Pacific Islands, populations have contributed little to global greenhouse gas emissions. The effects of climate change in this region, however, are far from negligible. In particular, the prospect of sea level rise rendering low-lying, coastal territories uninhabitable is no longer a future scenario. Relocation of many coastal villages is already occurring in Fiji¹ and in low-lying atolls, sea-level rise presents the possibility of entire islands becoming unable to support permanent settlement.² Sea level rise and other climate change impacts, such as changing rainfall and extreme weather patterns, compound existing development challenges in the Pacific Islands region, including limited natural resources and remoteness. Livelihoods, particularly those which are subsistence-based, are at risk, as are water and food security, health, indigenous knowledge, and cultural identity.³

Climate change in the Pacific Islands is widely understood as a matter of climate injustice. Since contributions in terms of greenhouse gas emissions *per capita* are small, Pacific people should not be left to suffer consequences of climate change without reparation and assistance. Leaders of Pacific Island states having been deeply engaged in the international climate change negotiations since their inception, yet climate justice has not been achieved in international climate change agreements.⁴ Despite punching above their weight in the climate change

Conferences of Parties (in terms of economic and population size), the fossil fuel interests of larger states have been difficult to influence deeply enough for transition at scale to alternative forms of energy. While some adaptation assistance is being delivered, reduction in greenhouse gases is not necessarily enough to ensure Pacific Island territory is safe from sea level rise. This problem is commonly known as the “existential threat” of climate change,⁵ triggering calls for radical, transformative change to reduce fossil fuel dependence. This radical change is envisaged to be inclusive of climate justice as well as transformation in energy use, and is being advocated by Pacific Island climate change activists, poets, dancers, singers and sportspeople.⁶

The Pacific Climate Warriors are central to such calls for change. The Pacific Climate Warriors are a social movement formed specifically to work to prevent fossil fuel-induced climate change damage in the Pacific Islands and among its people. The Warriors’ key political goal is to advocate against the continued dominance of fossil fuel interests. The Pacific Climate Warriors, internationally working across the Pacific Islands, Australia, the United States, and New Zealand with the 350.org climate activism network, is arguably the foremost Pacific climate activist group. Their work raises awareness of the impacts of climate change on Pacific Island people, as well as directly intervening in the fossil fuel economy, and inspiring others to act to bring about major changes in energy systems. Ultimately, the Warriors insist, there must be a complete and just transition to renewable energy. Campaigns include statements such as “Rise for Climate to Build a Fossil Free World” (see Figure 36.1). The Warriors’ activism is characterized by non-violent direct actions, performance arts, and prayer. Non-violent direct actions have included a peaceful blockade of coal ships by canoe, and sit-ins at financial organizations that fund fossil fuel enterprises. The Pacific Climate Warriors also organize events that involve speeches about climate change impacts, prayers, and choreographed performances of song and dance. The latter include both traditional and contemporary Pacific performance arts.

A significant feature of the Pacific Climate Warriors’ movement is their striking visual presence. Pacific Climate Warrior actions, events and promotional materials are typically characterized by the Warriors donning elaborate ceremonial dress and body art of their own Polynesian, Melanesian, or Micronesian culture. Costumes speak directly of the Pacific Islands, involving natural materials sourced from Pacific Island environments such as pandanus and coconut fiber, shells, feather, and tapa bark. Also featured are Pacific-style fabrics for shirts, dresses, and sulus (sarongs), often printed in bright colors with tropical motifs such as flowers. The costumes vary, but are often highly intricate, and unwaveringly visually cohesive and striking, being made from ecologically and culturally important materials found across the Pacific Islands. This chapter will explore various ways in which climate activism expressed through the visual culture of Pacific ancestors centralises cultural and biological diversities at risk without reproducing an often externally imposed victim identity. The result is a warrior aesthetic that offers much-needed hope of survival.

The chapter is structured as follows. First, we provide a brief descriptive account of the Pacific Climate Warriors and their activism on climate change. We also consider their warrior aesthetic as a rejection of climate victimhood that has been noted by a range of researchers as a strong theme in the Warriors’ work.⁷ Then, we turn to a key event in the Pacific Climate Warriors activism, namely, the direct action against coal ships in Australia using hand-built canoes. The political and material significance of the canoe—*vaka*—in Pacific Island cultures is discussed. *Vaka* facilitates understanding of the Pacific Climate Warrior movement as a journey toward post-carbon futures that remains closely tied to knowledge of ancestors, cultures, and environments. We close by briefly providing an interpretation of ways in which two individual Warriors are on a journey with ancestors, cultures, and environments to enact their climate activism.

The Pacific Climate Warriors

The reading of the Pacific Climate Warriors offered here is based on observations made during attendance at public Pacific Climate Warrior events in Brisbane, Australia in 2018 and 2019, as well as analysis of photographs and narratives of Pacific Climate Warriors produced by the organization and 350.org and others and shared through social media (e.g. Figures 36.1 and 36.2). It is also informed by academic analyses of the Pacific Climate Warriors activism.⁸ Events in Brisbane attended were Rise for Climate #PacificPawa Climate Change Cultural Event, which was held in the center of Brisbane city on 8 September 2018, and Breaking Ground #Frontline Truths, also featuring performances, in suburban Brisbane on 3 April 2019. The second author, Taukiei Kitara, a climate change activist from Tuvalu now living in Brisbane, was a speaker at the first event.

The Pacific Climate Warriors are comprised of both Pacific Island citizens, and people of Pacific Island ethnic heritage who live abroad, either temporarily (for example, as international university students) or on a more long-term basis. The movement is a network, fluid in membership and working across national and regional boundaries, reflecting the mobility of many Pacific Island people across island and diaspora communities, particularly in Australia, New Zealand and the USA.⁹ It can be characterized as a youth-led movement, making strong use of social media.¹⁰ McNamara and Farbotko¹¹ and George¹² discuss the prominent role of females in the Pacific Climate Warrior movement. Each performance and action features a roughly equal mix of males and females, and oratory roles in particular are taken up in accordance with talent and skills with little differentiation by gender. The Pacific Climate Warriors govern their activities by way of a council of elders, comprised of both male and female Warriors who were involved in the earliest of the group's campaigns.

Steiner discusses the interconnectedness of performance, environment, culture, and identity in Pacific climate change activism enacted in performance. The Pacific Climate Warriors convey strongly the reality of Pacific Island cultures as “intimately connected to their islands,” and, in a



Figure 36.1 Rising for our Ancestors, 350 Pacific, Nihmei, Vanuatu, 2018

changing climate “the loss of those islands means the loss of their entire environmental heritage.”¹³ In many Pacific languages, there is no word for Nature, but land, water and sky and their interconnectedness and uniqueness are significant. Knowledge of land, sea, and sky dictates that if one of the three is eliminated or not functioning well then disaster will happen.¹⁴ Pacific Climate Warriors can thus be understood as fighting for the well-being of earth, land, and sky, which are interconnected, rather than simply for themselves alone. Steiner¹⁵ explains how Pacific islanders in various artistic performances using song and dance have centralized “the rich environmental heritage that their islands have nurtured, they have expressed what it would mean to lose that heritage and those islands, and they have called on all the world to work together to prevent further loss.” The costumes of the Warriors in particular are intricate and eloquent about this heritage, being made from ecologically significant materials that carry culturally significant meanings, such as a coconut frond skirt signifying dynamic motion of a canoe.¹⁶ Songs and dances narrate the life, culture, and ancestors as inseparable to the Oceanic world of land, water, and sky.

The Pacific Climate Warriors, it has been argued in several studies, offer a powerfully embodied counter-narrative to the victim identity that has burdened the climate change struggles of Pacific Island people:¹⁷

The narrative of Pacific Islands as inescapably lost to rising seas is often tied to representations of the affected populations as passive victims of climate change. The Pacific Climate Warriors actively reject this stance and offer a positive alternative vision of climate-threatened communities—“We are not drowning, we are fighting”. Their campaign articulates a culturally grounded narrative of strength, agency and courage in the face of potential displacement.¹⁸

Moving away from outside representations of Islanders as mere victims in a far and rising sea, they have come to embrace their own identities as warriors with the power to rise up ... to make their voices heard and to effect change.¹⁹

The visibility of the Warriors in particular is powerful in its rejection of Pacific Island people as climate change victims. Pacific Island people are often represented in externally produced images as people in flooded homes—seemingly desperate for humanitarian assistance.²⁰ However, the Pacific Climate Warriors counter victim imagery with visions of undeniable strength. George notes “to support their claim that ‘we are not drowning, we are fighting’, the Pacific Climate Warriors present themselves visually, and rhetorically, as engaged in battle to defend their islands.”²¹ In Figure 36.1, for example, male warriors display strength in a collective show of raised weaponry, direct eye contact, open mouths ready to cry out in battle, bare chests and arms, coconut-oiled skin, and battle-ready postures. In Figure 36.2, a female and a male warrior proudly display the physical strength of their arms, gazing fearlessly and directly, even while draped in heavy mats and a large *tapa* cloth. In fully ecologically sourced costumes, the link between strength and environmental heritage and culture is clear. Further examples of this aesthetic abound in Pacific Climate Warrior social media.²²

Vaka

A key event in the history of the Pacific Climate Warriors occurred on 17 October 2014 in Newcastle, Australia, which is the site of the world’s largest coal port. Here, the warriors, with support from hundreds of local Australian residents, paddled out in traditional canoes and kayaks, to stage a blockade on the coal industry. They successfully prevented two coal ships passing through the port. The Pacific Climate Warriors in the canoes represented a diverse set of Pacific

countries—Fiji, Kiribati, Papua New Guinea, Republic of the Marshall Islands, Tokelau, Tonga, Tuvalu and Vanuatu—and each activist was dressed in the full ceremonial attire of their homeland. The elaborate costumes were all made from natural products from the Pacific Islands, some dyed to be brightly colourful, some in the earthier dried grass and ochre tones traditionally found in tapa cloth and pandanus woven mats. There was face paint and tattoos, with beautiful head-dresses made from feather or shells, necklaces made from shark's teeth, pandanus grass and woven skirts, and tropical flowers adorning hair. The result was a powerful warrior aesthetic of ocean-going mobile climate change fighters, ready to battle huge ships.²³

The canoes used during the blockade were built in the Pacific Islands using traditional methods and brought to Australia via cargo ship specifically for the action. Canoes, known throughout many parts of the Pacific Islands as *vaka*, provide a strong link from the Pacific Climate Warriors to culture, ancestors, and ecologies. According to Sinavaiana and Kauanui, *vaka* is a key concept in understanding ongoing journeys, both figurative and literal, among Pacific people.²⁴ Significant in these journeys are both decolonization and fighting the forces of industrialization that cause climate change.²⁵ Decolonization in the Pacific is a process that

continually questions and deconstructs the foundations of knowledge and thinking that have shaped... everyday lives, in relation to political, religious, economic and social issues, and at the same time reconstructs knowledge and life in a way that is unique and distinct to the Pacific people.²⁶

Many Indigenous peoples in the Pacific practiced wide-ranging forms of oceanic mobility, underpinned by their canoe-building and navigational knowledges. These knowledges became threatened when imperial territories were imposed. Pacific worlds thus 'shrank' and the "expansiveness of trans-Pacific trade and movement was replaced with sanctioned contraction and isolation."²⁷ The *vaka* as a central feature of climate change activism highlights climate change as only the most recent and insidious layer of colonialism, amid ongoing attempts to reclaim the oceanic spaciousness of Pacific worlds.

The importance of the *vaka* in many Pacific Island cultures commenced with the double-hulled voyaging canoes, the vessels with which the Pacific Islands were first explored and settled:

Vaka were the world's first ocean-going craft. Not until thousands of years later would successful ocean-going vessels be developed in other parts of the world. *Vaka* were traversing the ocean highways of the Pacific long before people of Europe had the ships or skills to venture out of sight of land. For the people of the Pacific, *vaka* were more than just boats: they were the material and spiritual vessels that had carried a people—and their way of life—to new lands across the sea.²⁸

Vaka has, since settlement, been important as a way for a people to define their identity and their destiny in their sea of islands.²⁹ The ancestors of many Pacific Islanders were the first in the world to navigate out of sight of land. This happened, according to archaeologists, when they first canoed out of the Solomon Islands towards Fiji, Samoa and Tonga more than 3000 years ago.³⁰ This feat was possible with a thorough knowledge of wind, tides, ocean creatures, astronomy, and their interconnectedness.³¹ Although through colonization such knowledge was threatened, under the auspices of the Polynesian Voyaging Society (PVS) and other groups, ancient building, navigating, and seafaring skills that enabled settlement and subsequent oceanic voyaging have been revived.³² Hence the *vaka* in the Pacific Climate Warriors blockade of Newcastle port must be read within the history of regional cultural revival and decolonization

of oceanic agency and identity, which groups such as the PVS embody.³³ In the context of the Warriors, Goodyear-Ka'ōpua points out that:

the Pacific Climate Warriors not only underscored the ways that imperialist industrial projects harm Indigenous Pacific cultures, but they also drew upon those very cultural practices of renewing connections with lands and waters in order to engage in direct action struggle. Long before the confrontation at Newcastle in 2014, young activists had been learning skills of canoe building from their respective elders... Restoration of ancestral knowledges continues to be an important part of enacting alternatives to settler colonial, capitalist enclosures.³⁴

Thus, the Pacific Climate Warriors are resisting powerful forces of colonialism and capitalism, by taking the time to learn the canoe-building craftsmanship of their elders and all their ancestors, knowledge which was highly threatened by European colonization. They are also forging new pathways for their people. The vision of *vaka* against coal-ships, built and navigated by young Pacific Islanders in the ceremonial attire of their ancestors, embodies a direct battle, not so much between “tradition” and “industrialization” as between cultural and political identity on one hand, and fossil fuel capitalism on the other. The Warriors manage a double manoeuvre through the performance-based, visual nature of their activism. They are both fiercely protective of their ancestry, their culture, and their land, and yet they are also non-violent, future-oriented, politically astute global citizens. In Figure 36.2, for example, the canoe paddle evokes both movement and stillness, battle and peace. The male and female warrior are both deeply connected to culture and ancestors, fully clothed in the material culture of their islands. But they are also forward-looking, ready to take on the future. Seated on the shore, they are ready at the battlefront against sea level rise. But their battle is not waged only against the rising sea, it is against non-human fossil fuels and the depersonalized technologies and systems (such as coal-ships, banks and national economies) that support their production. Ultimately, the Newcastle blockade, dominated by the powerful image of Pacific Climate Warriors in canoes, adorned in traditional costumes, draws attention to the convenient mask of invisibility worn by those who run, and profit from, coal-ships.

Climate Activism as Journey

Pacific culture is known to be an important resource for those at risk of climate change.³⁵ A strong sense of political agency and identity will not disappear with territory becoming uninhabitable.³⁶ The Pacific Climate Warriors raise recognition of the importance of ancestors, ecology, and culture in claiming their rights to climate justice. They nurture a contemporary Pacific Island visual and material culture that embraces ancient roots, being sourced from their local island environments and used in island cultures since settlement, to craft ceremonial attire as well as canoes, mats, utensils, weapons, and tools. The past deeply informs Pacific modes of resistance to what is often colonialism in new forms, as Hawaiian scholar Trask explains:

We know our future lies in the ways of our ancestors, not in the colonial world of *haole* experts... We do not need, nor do we want, to be “liberated” from our past because it is the source of our understanding of the cosmos and of our *mana*.³⁷

Holistic knowledge of culture and environment is central to the journey towards the post-carbon future for the Warriors. For example, in order to make a pandanus skirt that tells a story of a canoe journey in a dance, it is necessary for there to be understanding of how to harvest pandanus sustainably and to weave its fibers, and this is often a collective effort. Such knowledge is passed down through the generations. The Pacific Climate Warriors are not only harnessing and displaying knowledge in choosing to don ceremonial attire for their fight against climate change, they are storing, sharing, and protecting it. Their actions and performances can be read as part of a journey that ensures the continued strengthening of connections to ancestors, cultures, and environments, even in the face of climate change. Thus, Pacific Climate Warrior activism is not only resistance, it is restoring, harnessing, and nurturing traditional knowledge in new ways, a process of learning what it means to be a Pacific Island leader in a rapidly changing world.

Moemoana Schwenke, a Samoan living in Australia, for example, is one of the few females in the world who is a *Siva Afi* (fire dancer). Schwenke has chosen to learn the ways of the fire dancer. She is committed to channelling the spirit of warrior ancestors, as well as channelling

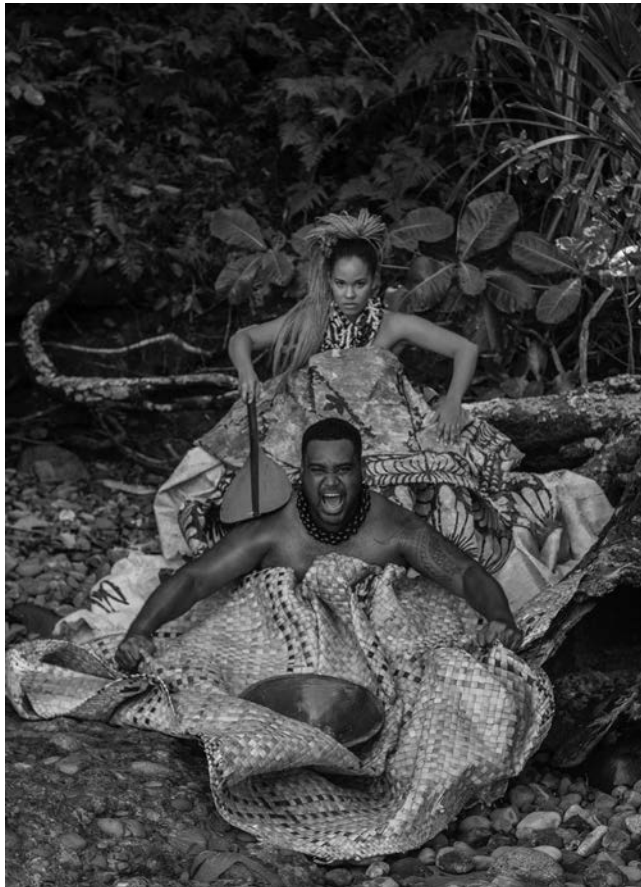


Figure 36.2 Lutunatabua 350 Pacific Australia, 2019

her own inner warrior through fire-dancing, which promotes her courage and fearlessness.³⁸ Schwenke performed a solo fire dance at Breaking Ground #Frontline Truths, displaying the skills learned through many hours of practice. Her link to ancestors through warrior-like fire dancing is intricately bound up in ecological embeddedness:

When I dance the rhythm of wooden log drums echos my heartbeat and the heartbeat of my Pacific Island people, alive, full of love, sacred and free. I am able to embrace my culture, to chant the songs of my ancestors and to express my cultural heritage and identity. I am inspired by the environment and all sources of the earth we as humans rely on, therefore I am very spirited about issues like sea level rising in the Pacific as a result of climate change.³⁹

For Robati Harrison, an Australian of i-Kiribati and Scottish parentage, memories of his maternal grandmother in Kiribati, “one of the strongest women” he knows, and her attachment to her island, embodied all of his fear about the potential loss of Kiribati territory to rising sea levels at Breaking Ground #Frontline Truths. Wearing tropical flower garlands on head and shoulders, he made a speech about Kiribati homes being washed away while his grandmother’s frailty encroaches with her advancing years. His speech emerged into unscripted sobs. Harrison’s display of raw grief offered a new way of understanding what a Climate Warrior’s strength entails. Grief begets strength to speak in public, to share loss with strangers, and to continue the fight against fossil fuels. In speaking of the prospect of his grandmother’s grave and other sacred sites being washed away, the audience was invited by Robati Harrison to help to prevent further loss, to take strong action on climate change.⁴⁰

Both Schwenke and Harrison are members of the Pacific Island diaspora, living in Australia. Their connection to their home islands and ancestors is not an everyday physical reality, but emerges in part through their activist practices. As members of the Pacific Climate Warriors, they are on a journey in their climate activism, like the *vaka* voyages of ancestors thousands of years ago. Theirs is an active choice to learn new and old ways to nurture their powerful, knowledgeable, beautiful, and sustainable Pacific Island cultures.

Conclusion

The Pacific Climate Warrior movement brings together the ancient with the contemporary, through storytelling, weaving, song, dance, and, in particular, costumes and canoes. The diverse cultures of the Pacific Islands share a history woven into land and marine ecologies, in the vast, connecting space of the Pacific Ocean and its islands, which helps to form a collective sense of people and place, and, in turn, a powerful regional climate activism. In this activism, wooden drums echo heartbeats, women perform the dangerous fire dances of their male ancestors to draw attention to the overheated earth, and men weep the tears of their grandmothers, sharing the risks to their ocean home with ancestors as well as the global community. Traditional canoe-building craftsmanship is relearned in order to prevent coal being transported to distant markets to be burned. Climate change resistance expressed in these ways centralizes cultural and biological diversities at risk. It is a warrior aesthetic that offers strong hopes of survival, in terms not only of the physical safety of Pacific Island people, but also their lands and cosmologies. The Pacific Climate Warriors are navigating *vaka* journeys towards self-determined, post-carbon futures that remain closely tied to their own ancestors, cultures, and environments.

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FROM INSTITUTIONAL TO INTERSTITIAL CRITIQUE

The Resistant Force that is Liberating the Neoliberal Museum from Below

Emma Mahony

This chapter makes the argument that a further iteration of institutional critique – what I term “interstitial critique” after Simon Critchley’s radical political strategy of opening interstitial distances in the state—has emerged in the wake of the Deepwater Horizon disaster in 2010. In an era of climate crisis, interstitial critique holds the museum to account for its complicity—through the receipt of corporate sponsorship—in perpetuating climate change, precarious working conditions, and, ultimately, the white supremacist, colonial narratives that underscore these related grievances. It does so by infiltrating the museum with an anarchic force from below, a force whose ultimate goal is to liberate the museum from the nefarious influence of its corporate sponsors and reclaim its cultural commons for the public good.

Introduction

In June 2010 Tate Britain’s annual summer party had a special emphasis, it was celebrating 20 years of corporate sponsorship of the Tate’s permanent collection displays by British Petroleum (BP). The timing of this public show of gratitude could not have been more fortuitous for BP given that two months earlier, on April 20, the BP-operated Macondo Prospect drilling rig exploded, killing 11 workers, injuring 17 and discharging 4.9 million barrels of oil into the Gulf of Mexico. Two months later, as the champagne flowed at Tate Britain, crude oil continued to spill into the Gulf of Mexico at a rate of 95,000 barrels per day.¹ By taking the decision to publicly endorse BP at a moment when the weight of public opinion was firmly stacked against them for causing one of the most significant eco-catastrophes of modern times, Tate, I argue, unwittingly catalysed an anarchic force from below.

This force would act relentlessly against Tate and spread to other museums in Europe and the US for their complicity with the state-corporate apparatus, particularly the petrochemical industry and its legacy of environmental violence. In the UK, this force was first unleashed by the collective Liberate Tate when they hijacked Tate’s 2010 Summer Party to perform a re-enactment of the Deepwater Horizon disaster. While twelve members of the collective performed a tarring and feathering ritual at the museum’s entrance, two female members, going by the pseudonyms Toni Hayward and Bobbi Dudley (after the former and current CEOs of BP, Tony Hayward and Robert Dudley), gained access to the party. Once inside, the imposters

released bags of an oil-like substance, which they had concealed under the full skirts of their party dresses, over the pristine gallery floor. Surrounded by party goers who initially mistook their creative infiltration as part of the evening's programme of events, Toni and Bobbi donned plastic overalls bearing the BP logo and began a "clean up" by using their shoes to scoop the oil into their handbags. Addressing horrified onlookers Toni offered the reassurance that, "compared to the size of the gallery this is a tiny spill, a drop in the ocean," and Bobbi added, "We'll definitely have it cleaned up by August." Similar remarks had been made by their namesakes in press interviews following the Deepwater Horizon explosion, and the imposters intentionally pathetic efforts at a "clean up" were intended to recall BP's frustratingly slow response to capping the oil spill and cleaning the sea water it had contaminated.²

Liberate Tate's first unauthorized intervention at Tate Britain, titled *Licence to Spill* (2010), was followed by a six-year campaign of creative infiltrations calling on Tate to sever its links with BP. The campaign ended successfully in 2016 when BP announced that they would not be renewing their sponsorship agreement with Tate. In solidarity with the actions of Liberate Tate, a number of affiliated collectives began to emerge from 2012 in the UK, each with a remit of emancipating public cultural institutions from petrocultural agendas. They include The Reclaim Shakespeare Company, Shell Out Sounds, BP-or-Not-BP and BP Out of Opera.

Across the Atlantic, the actions of Liberate Tate-inspired Natural History Museum (NHM), a pop-up museum initiated by the collective Not An Alternative. NHM's interventions call on US museums to present exhibitions that reveal the role the fossil fuel industry has played in accelerating climate change, and to remove climate change deniers from their boards. To date, their actions have been instrumental in the removal of David Koch from the board of the Smithsonian's National Museum of Natural History in 2016.

A more predominant focus of this anarchic force in North America has seen collectives, including Working Artists for the Greater Economy (W.A.G.E), Occupy Museums, Debt Fair and BFAMFAPhD, attempt to redress the precarious labour practices that shape the US art world. Gulf Labor Campaign (GLC), and their splinter group Global Ultra Luxury Faction (G.U.L.F), focus on pressuring the Guggenheim into taking responsibility for the horrific labour conditions endured by the migrant workers building the infrastructure for the Guggenheim franchise in Abu Dhabi. It should be noted, however, that not all of these US collectives engage in creative infiltrations, GLC focus on tactics such as boycotting and direct negotiations, leaving their offshoot G.U.L.F to stage creative infiltrations, which have included projecting messages onto the exterior of the Guggenheim in New York in 2014, which variously read: "Art Is Not a Luxury" and "1% Museum."

This chapter puts forward the argument that the "resistant force," first ignited by Liberate Tate in 2010, has grown and morphed into what can arguably be understood as a new iteration of institutional critique. I refer to this wave as "interstitial critique" after Simon Critchley's meta-anarchic strategy of resistance that is situated at an *interstitial* or internal distance to the state and its institutions. I argue that this anarchic resistant force has been embodied by a coalition of artist-activist collectives that infiltrate the museum from below in order to open spaces of resistance within it.

From Institutional to Interstitial Critique

To make the case that the collectives I discuss constitute a distinct iteration of institutional critique, it is necessary to briefly examine the evolution of this critical movement through its generational phases. Although its focus is on the art field, the development of institutional critique was not isolated from the social and political conditions that each subsequent phase

encountered. The first wave of institutional critique emerged in the late 1960s against the backdrop of anti-Vietnam War and pro-civil rights movements, as well as women's liberation and gay rights. It saw artists talking back to power (the art museum) from a position of inferiority (as an artist), and holding the museum to account for its abuses of its power.³ These first-generation artists attempted to expose the mechanisms, power structures and politics of the bourgeois-capitalist institution of art through a critique operated from the outside.

The premise for the second wave of institutional critique, which emerged in the 1980s as a subset of critical postmodernism, was the recognition that the agency of the first wave was undermined by virtue of the fact that it was authorized by the same art institution it sought to critique. This second wave also responded to pressing social and political concerns of the time, which included the collapse of communism and the spread of neoliberalism, the Chernobyl disaster, the AIDS epidemic, and the emergence of racial and sexual minority groups. As with the first wave, it had a number of focuses, including intervening in and rewriting the colonial and white supremacist narratives that shaped museological display, highlighting gender and racial inequalities in the art museum, and commenting critically on the corporatization of the museum.

The first and second waves diverged in their understanding of the role the artist played in the critique they were enacting. Where the first wave was delineated by the artist performing a critique *against* the art institution (talking back to power), in the second wave, this framework expanded to include a critique of the artist *as* an institutionalized figure, where they simultaneously questioned their own relationship to power.⁴ In her 2005 article "From the Critique of Institutions to an Institution of Critique," Andrea Fraser makes the argument that the recognition of the artist's complicity in their critique signalled the institutionalization of artistic critique and therefore also its negation. While adhering to her original position that all activities within the art system are subsidized by its "engines of inequality" and perpetuate that same inequality, Fraser revises her stance in her 2011 article "1% C'est moi?," where she allows for alternative forms of participation that actively withdraw their cultural capital from the art market.⁵ Here she takes account of a body of literature coming from critics, including Jonas Ekeberg,⁶ Nina Möntmann,⁷ Simon Sheikh,⁸ and Raunig and Ray,⁹ that rallied against her original position to make a claim for third wave of institutional critique that emerges in the late 1990s.

As the nature of this third wave is the subject of some disagreement, I will discuss it here as two distinct phases: "new institutionalism"¹⁰ and "instituent practices."¹¹ The key distinction is that new institutionalism focuses on reforming public art institutions from within, and instituent practices focuses on artist-activist practices that flee the art system to operate outside its economic structure. New institutionalism emerges in the late 1990s against the backdrop of the crumbling welfare state and the shift towards neoliberal policies in European nation-states. These political developments saw steadily diminishing state subsidies for public cultural institutions, coupled with governmental pressure to increase their revenue streams from the private sector. The critical riposte that emerges in response to their incremental corporatization, saw museums and galleries such as the Rooseum in Malmö, the Nordic Institute for Contemporary Art (NIFCA) in Stockholm, and the Museu D'art Contemporani (MACBA) in Barcelona adopt self-critique in an attempt to measure the concordance between their radical programmes and their operational structures.

It quickly emerged that there are limitations to the extent to which state institutions can enact self-critique insofar as they are ultimately accountable to local politicians, state funding bodies and corporate donors. For Raunig, the limitations of the type of critique called for a revised model of institutional critique.¹² His solution was to propose a double movement of critique, whereby the critical institution enacts both a self-critique, and is open to critique

coming from an outside and “uninvited” position whenever its actions are deemed to fall short of its good intentions. This so-called “outside,” which is in direct conflict with Fraser’s original view that “we are trapped in our field” (2005), draws its agency from an extradisciplinary relationship with the field of activism, specifically the new intersectional social movements that emerge out of the alter-globalization movement.

Raunig’s “instituent practices” combine the tropes of historical institutional critique with social critique, thereby escaping beyond the institutions of art, where Fraser draws her territorial boundaries. Moreover, they describe this critique as “transversal”—in so far as it moves between the fields of art and activism—as opposed to an “anti-art gesture.” Raunig’s thinking draws on the Autonomous Marxist strategy of exodus, which advocates a flight from the state institutional landscape in order to institute alternative constituent institutional forms outside its remit of control. These institutions are self-organized with horizontal operational structures, and their goal is not to acquire cultural capital in the art system, but to bring about social change.

This is a significant divergence from new institutionalism, which adheres to Chantal Mouffe’s strategy of “engagement,” which sees critico-political artistic practices and institutions operating *within* the public art institutional landscape and employing its methods of dissemination in order to transform it into a site of counter-hegemonic resistance.¹³

Interstitial Critique

Interstitial critique emerges in response to the growing consensus that neoliberal globalization is plunging Planet Earth toward a catastrophic climate crisis. In keeping with the genealogy of institutional critique where the focus is on art’s institutions, interstitial critique doesn’t directly target corporations for their environmentally damaging and unethical business activities; instead, it holds the museum to account for permitting these corporations to “artwash” their tarnished reputations through association with highly respected public museums.¹⁴

Unlike the preceding waves of institutional critique, which adhere to either the strategy of “engagement” or “exodus,” interstitial critique emanates from Critchley’s radical political strategy of assuming an “interstitial distance” to the state, which he proffers as a vital alternative to these discourses. It is Critchley’s proposition that the state form is here to stay; its revolutionary overcoming or withering away is not tenable, at least not in the near future. Contrary to the strategy of exodus, then, which advocates a retreat from state-territory, Critchley calls for a “semi-retreat,” one that aims to better the state or “[...] better attenuate its malicious effect.”¹⁵ He therefore locates his politics of resistance *within* state territory but at an internal distance to it, where its aim is to radically disturb and undermine the state from below. It functions as an “antipolitics” that seeks to turn the state’s machinations against it, in order to bring about political change.

In line with the politics of resistance Critchley promotes, interstitial critique negotiates the strategies of engagement and exodus, in order to forge its own unique critical territory in relation to the neoliberal art museum. It also both shares ground with and distances itself from earlier iterations of institutional critique. Like Raunig’s instituent practices, it borrows from the tactics mobilized by new social movement culture, specifically their use of creative disruptions from below and intersectional practices. Unlike instituent practices, however, the proponents of interstitial critique are not willing to abandon the state institutional landscape to neoliberal influences. They acknowledge that in order to effect change, critique must operate from *within* the coordinates of the hegemonic culture. As the names of these collectives underscore—*Liberate*

Tate, BP *Out of Opera*, Shell *Out Sounds*—their goal is to reform and ultimately liberate the museum from the nefarious influence of its corporate sponsors in order to reclaim their cultural commons for the public good.

However, they are also equally aware of the instrumentalizing capacity of the neoliberal state on its public institutions, and therefore seek to take up an arm's length distance to it, so unlike new institutionalism they do not attempt to reform these institutions from within, instead they stage creative disruptions from below that draw attention to their complicity in perpetuating climate change, precarious working conditions, and other related grievances. Furthermore, their critique is entirely unsanctioned by the museum it targets, invades or employs as its parasitic host. There is no collusion, no negotiation and no censorship, and this, in part, is where its agency lies.

Just as Crichtley's "antipolitics" advocates using the state's machinations against it in order to bring about political change, the proponents of interstitial critique commandeer the museum's resources—its physical infrastructure, its vernacular, its identity and its cultural capital—to use against it. The internal distance they adopt is underscored by the manner in which they utilize the vernacular of their host institutions as a means to insert their parasitic live interventions seamlessly into their hosts' programmes, while at the same time being completely unsanctioned by them.

The Reclaim Shakespeare Company infiltrated BP's sponsorship of the 2012 World Shakespeare Festival, by commandeering the stage as the plays were about to start and performing their guerrilla interventions in iambic pentameter, while dressed in Shakespearian costumes. Shell Out Sounds was a 15-member pop-up choir that performed protest songs at the start of concerts sponsored by Shell in the Royal Festival Hall until the Southbank Centre ceased its sponsorship agreement with Shell. BP Out of Opera challenged BP's sponsorship of the Royal Opera House's live outdoor screening programme, by staging a series of symbolic "dance offs" between culture and BP just before the screenings were about to commence.

Liberate Tate conceived of their six-year campaign of interventions in Tate to appear as though they are part of Tate's official programme. Moreover, their choice of live art as a medium responded to the emphasis Tate have placed on this medium in recent years. *Hidden Figures* (2014), for example, took place during the Kazimir Malevich retrospective at Tate Modern and comprised of a performance where visitors to the Tate were invited to make shapes underneath a 64-meter square piece of black fabric held aloft by Liberate Tate members. Borrowing its form from Malevich's *Black Square*, which was on display in an adjacent gallery, the intervention both drew attention to the political legacy of *Black Square* and the fact that Tate had repeatedly contravened the Freedom of Information Act, by concealing the details of their financial agreement with BP under "black squares" of redacted text.

Live art is also the medium employed by numerous US collectives, as was the case with the *Precarious Worker's Pageant*, which was staged by members of G.U.L.F. in collaboration with Worker's Art Coalition, Aaron Burr Society, S.a.L.E. Docks and students from Social Practice Queens during the 2017 Venice Biennale. The pageant began with participants "liberating" geometric forms from a model they had constructed of Frank Gehry's design for the Guggenheim Abu Dhabi. Then carrying these DIY geometric shapes, they processed through the streets of Venice to the tune of a lone trumpet player, interspersed with the rhythmic thud of rebar banging off builder's buckets. The pageant ended in the Gallerie dell'Accademia plaza where they repurposed the shapes they had emancipated to create a temporary cultural commons; one that offered an alternative vision for what the museum could be (Figure 37.1).



Figure 37.1 The Precarious Worker's Pageant, Venice, 2015

Source: Photo by Gregory Sholette

Intersectionality and Decolonality

Critchley acknowledges that in the current society of control and surveillance, where the individual's movements are captured on CCTV and tracked through mobile phone use and electronic transactions, it is impossible to keep these interstitial spaces open indefinitely; they must necessarily be fleeting.¹⁶ To these ends, he draws on Mouffe and Claude Laclau's theory of hegemony, and promotes the creation of chains of equivalence between the divergent demands that activist groups, social movements, left-wing political parties, and trade unions mobilize, in order to advance a cohesive and powerful counter-hegemonic force.

This realization has not escaped the proponents of interstitial critique. Despite what might be interpreted as a focus on single issues, intersectionality is central to their practices. They acknowledge that the institutional liberation they seek cannot come about from any single victory, but that it necessitates a sustained and coordinated campaign enacted by a coalition of collectives, employing a multitude of tactics and creating an ever-expanding network of resistance over a period of time.

In December 2015, one such coordinated action was staged by a coalition comprised of artist-activists (including Liberate Tate and Not and Alternative) and environmental activists from around the world. Their intervention, which coincided with the United Nations Climate Talks taking place in Paris, targeted the Louvre for accepting sponsorship from Total and Eni. A group of six art activists spilled an oil-like substance onto the museum floor and then proceeded to walk through it barefoot, leaving a trail of oily footprints in their wake as a reminder of the insidious legacy oil money has on public museums. A simultaneous action took place outside the museum in front of the iconic IMP pyramid, where hundreds of climate change activists held up black umbrellas that spelled out the message "Fossil Free Culture."¹⁷

In solidarity with Indigenous peoples on the front lines of climate injustice, the demonstrators outside the Louvre also laid a red line of fabric at their feet. This action is indicative of a move toward the recognition of indigenous and colonized peoples as the potential new political subject for the twenty-first century. While the term “indigenous” might not immediately suggest itself as universal, Not An Alternative point out that: “The failure to value black and brown life, the inability to conceive living with and in diverse egalitarian communities, becomes the incapacity to value human life at all.”¹⁸

The cause of the Indigenous and colonized peoples, then, brings together the various grievances and demands around ecological crisis and precarious labour articulated by the proponents of interstitial critique. The US collectives G.U.L.F. and Not An Alternative refer to this universal struggle as the critical project of “decolonality.” G.U.L.F. understand decolonality as a framework through which the specificities of the single-issue campaign can remain intact, while acknowledging a shared political position.¹⁹ As such, they understand their interventions in the New York Guggenheim as a gateway into related struggles that encompass climate change and colonialism on a global scale.²⁰ There is a position shared by multiple critical thinkers including T.J. Demos,²¹ Naomi Klein,²² and Nicolas Mirzoeff,²³ who hold that the climate crisis which presents today has deep-rooted connections with colonialism and racism. They point to how the petrocapiatalist economy has systematically exploited the land of indigenous communities and built their refining plants adjacent to poor coloured neighbourhoods, thereby disproportionately effecting some human subjects over others.

Conclusion

This chapter makes the argument that the anarchic force from below that was first unleashed by Liberate Tate in 2010 can be read as a new iteration of institutional critique, because of the manner in which it actively engages with the genealogy of institutional critique, and reappraises and negotiates the weaknesses of its previous iterations. It does so by staging creative infiltrations in the museum that act from below to open up temporary spaces of resistance around which counterpublics, capable of pressuring the museum into rewriting its neoliberal narrative, and ultimately liberating it from corporate agendas, are formed.

Aside from its not insignificant victories against individual fossil fuel corporations, and its success in removing climate change-denying board members and donors from US museums, a more significant victory interstitial critique has achieved, is the manner in which it is succeeding in splitting the museum from within. As Not An Alternative point out, many museum workers side with the cause of the artist-activist collectives targeting the institutions they work for, thereby creating “double-agents” inside the museum.²⁴ This is evidenced in recent developments in a number of New York museums where unionization drives have taken place, including at the New Museum and the Guggenheim. Museum workers are also calling for the removal of trustees whose business practices are in conflict with the ethics of the museum. In November 2018, one hundred employees at the Whitney Museum signed a letter to their director calling for the removal of weapons manufacturer Warren Kanders from the museum’s board on the grounds that his company Safariland had supplied tear gas canisters to the US military for use against migrants (including women and children) attempting to cross the US–Mexican border.

These developments highlight how this interstitial force has ignited a solidarity between the artist-activist collectives holding the museum to account from below, and the labour force—typically precarious, low-paid and ununionized—that forms the central backbone of these institutions. For Gregory Sholette, the collusion of precarious museum employees with these collectives was always a likely outcome given that many of them are art school graduates, who

would be conversant in the vernacular of institutional critique. He claims that the “...critical endowment” they carry with them “...is coming home to roost from deep inside the institution itself.”²⁵

More recently, the demographic of the counterpublics interstitial critique is capable of producing, has extended to the highest echelons of museum management. In 2019, the artist Gary Hume, in his capacity as a judge of the 2019 BP Portrait Award at the National Portrait Gallery (NPG) in London, called on the gallery to sever its sponsorship deal with BP, and the British Museum trustee, Ahdaf Soueif, handed in her resignation in protest over a number of issues, including the museum’s continued acceptance of BP sponsorship and the repatriation of looted artefacts from Britain’s colonial past.

Expanding this solidarity between those collectives infiltrating the museum from below (with their intersectional links to decolonality and climate justice), and workers inside the museum (at all levels), is likely to be the most successful route to achieving institutional liberation. In the process, a new, more effective and transformative model of institutional critique is taking shape, what I term “interstitial critique.”

Notes

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- 3 Gerald Raunig, “The Double Criticism of parrhesia: Answering the Question ‘What is a Progressive (Art) Institution?’,” *eipcp* (April 2004): 11. <http://eipcp.net/transversal/0504/raunig/en>.
- 4 Andrea Fraser, “From the Critique of Institutions to the Institution of Critique,” *Artforum* 44, no. 1 (September 2005): 278.
- 5 Andrea Fraser, “L’1%, c’est moi,” *Texte Zur Kunst* 83, September, 2011: 126–127.
- 6 Jonas Ekeberg, “Introduction,” in *New Institutionalism, Verksted No. 1*, ed. Jonas Ekeberg (Oslo: Office for Contemporary Art Norway, 2003).
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- 8 Simon Sheikh, “Notes on Institutional Critique,” in *Art and Contemporary Critical Practice, Reinventing Institutional Critique*, eds Gerald Raunig and Gene Ray (London: MayFly Books, 2009).
- 9 Gerald Raunig and Gene Ray eds, “Preface,” in *Art and Contemporary Critical Practice, Reinventing Institutional Critique*, ed. Gerald Raunig and Gene Ray (London: MayFly Books, 2009).
- 10 Jonas Ekeberg, “Introduction,” in *New Institutionalism, Verksted No. 1*, ed. Jonas Ekeberg (Oslo: Office for Contemporary Art Norway, 2003).
- 11 Gerald Raunig, “Instituent Practices: Fleeing, Instituting, Transforming,” in *Art and Contemporary Critical Practice, Reinventing Institutional Critique*, eds Gerald Raunig and Gene Ray (London: MayFly Books, 2009).
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- 13 Chantal Mouffe, “Critique as Counter-Hegemonic Intervention,” *eipcp* (April 2018). <http://eipcp.net/transversal/0808/mouffe/en>.
- 14 Mel Evans, *Artwash: Big Oil and the Arts* (London: Pluto Press, 2015).
- 15 Simon Critchley, *Infinitely Demanding: Ethics of Commitment, Politics of Resistance* (London/New York: Verso, 2007), 117.
- 16 Simon Critchley and Miguel Á. Hernández-Navarro. “Simon Critchley in Conversation with Miguel Á. Hernández-Navarro,” in *Scandalous? A Reader on Art and Ethics*, ed. Nina Möntmann (Berlin: Sternberg Press, 2013), 37–38.
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- 20 G.U.L.F., "On Direct Action: An Address to Cultural Workers," *e-flux Journal*, July 5, 2015. <http://supercommunity.e-flux.com/texts/on-direct-action-an-address-to-cultural-workers/>
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- 23 Nicolas Mirzoeff, "It's not the Anthropocene, it's the White Supremacy Scene, or, the Geological Colour Line," in *After Extinction*, ed. Richard Grusin (Minneapolis: University of Minnesota Press, 2018).
- 24 Not an Alternative, "Institutional Liberation," *e-flux Journal* 77 (November 2016). www.e-flux.com/journal/77/76215/institutional-liberation/.
- 25 Gregory Sholette, "Coming Home To Roost: How a New Wave of Institutional Critique Confronts Our 'Bare Art World', from 'Deep Inside the Oikos,'" paper for the Unconference organized by Evanthia Tselika and Dr Chrystalleni Loizidou at the University of Nicosia Research Center, Cyprus, May 2019.

BENEATH THE MUSEUM, THE SPECTER

Steve Lyons and Jason Jones for Not An Alternative

Museums are in crisis, facing escalating pressure to drop fossil fuel sponsors, remove robber barons and war criminals from their boards, repatriate stolen objects, and topple racist monuments, dioramas, and displays. Formed from the extractivist reasoning that fuels climate chaos, museums are grounded in an unfolding history of oppression from which they cannot be extricated. They are complicit in the twin projects of capitalism and settler colonialism, caught in a web of colonialist and capitalist relations whose dynamics disproportionately immiserate the lives of poor Black, brown, and Indigenous peoples. While museums monumentalize and objectify the historical violence of capitalism and settler colonialism, they are not only keepers of the dead. They are haunted by a specter—the specter of primitive communism, a collective mode of life that neither capitalism nor settler colonialism could fully manage, contain, or eradicate. This mode of life sustains a relation to the land that is fundamentally incompatible with the capitalist world (Figure 38.1).

Capitalism relates to the natural world as a frontier for growth, as raw material to be extracted and turned into profit or waste. The alternative, as Glen Sean Coulthard articulately suggests, is

*for land in the material sense, but also deeply informed by what the land as a system of reciprocal relations and obligations can teach us about living our lives in relation to one another and the natural world in non-dominating and non-exploitative terms.*¹

This non-capitalist relation to the land persists despite a centuries-long war against it precisely because it cannot be accommodated by capital. It constitutes the impossibility at the core of the capitalist world, existing and insisting as a specter that haunts its institutions and infrastructures.

Jodi Dean has argued for the need to develop a partisan politics of climate change: “Rather than trapped by our fascination with an (always illusory) anthropocenic whole, we cut across and through, finding and creating openings. We gain possibilities for collective action and strategic engagement.”² We see the museum as one apparatus in which such a partisan politics can be grounded. This is possible only if we begin with the stance that the museum is split, not equivalent to the capitalist and colonial practices and values on which it was founded. The split institution is not determined by capitalism. It is struggled over. This struggle sets the stage for institutional liberation, which we have described as a practice of institutional seizure that generates counterpower by strategically mobilizing the power institutions already have.³ This chapter proposes a political



Figure 38.1 The Equestrian Statue of Theodore Roosevelt outside the American Museum of Natural History after it was splashed with a red liquid by the Monument Removal Brigade, October 27, 2017

Source: Photo by Eric McGregor

theory for institutional liberation in the terminal crisis of climate change. If museums take the side of the spectral threat to capitalist and settler-colonial domination, then they can be established as sites for thinking beyond the capitalist enclosure. This requires, first, that we refuse the lure of holism driving dominant fractions of environmental thought.

There Is a Gap in the Oikeios

Responding to the failure of the concept of the Anthropocene to accurately assign the primary agent of planetary change, Jason W. Moore has argued that we talk about our era as the Capitalocene, where capitalism, not humanity, is the driving force of ecological change. Moore argues that by seeing the entanglement of capitalism and nature, we can attend to its dynamic relation to the *oikeios*—his term for “the creative, generative, and multi-layered relation of species and environment” that makes up the planetary home.⁴ Just as nature provides the raw material for capitalist accumulation, capitalism *produces* nature as a real abstraction: nature as an extractable, commodifiable, manageable raw material that can be bought, sold, represented, destroyed, or protected. Arguing that the Cartesian dualism of Nature/Society is “directly implicated in the colossal violence, inequality, and oppression of the modern world”⁵ by virtue of its capacity to externalize nature as an object to be extracted and turned into profit and waste, Moore proposes an alternate concept of nature, which he terms the “web of life”: “the ‘web of life’ is nature as a whole: *nature* with an emphatically lowercase *n*. This is nature as us, as inside us, as around us. It is nature as a flow of flows.”⁶ Moore’s theoretical distinction between Nature and the web of life helps to explain the decisive shift in liberal environmentalism over the course of the past several decades. For most environmentalists today, nature is not simply understood as

the dominion of the non-human. It is an ecology to which we contribute, and to which we can hold our impacts accountable. If capital *N* Nature demands an ethics of *protection* and *conservation*, the web of life demands our *contribution*. Our capacity to contribute to nature's ecological balance requires that we reduce our individual and institutional carbon footprints.

In conceptualizing capitalism as a world-ecology, Moore reflects a broader ecological turn in the environmental humanities, which finds in ecology an antidote to dualism. The concepts of the Anthropocene, Capitalocene, Plantationocene, or Chthulucene all follow from the same idea: that, whatever its origins, and whatever forces prevail, there is no outside to the *oikeios*.

Wrestling with the connectedness of people and things, thinkers in this paradigm seek to acknowledge the existence of human, non-human, and inhuman feedback loops at a planetary scale, to establish connections that make porous the capitalist world's operative divisions. Frédéric Neyrat traces the principle at the root of this theoretical tendency—that *everything is connected to everything else*—to Barry Commoner's 1971 book *The Closing Circle*. Informed by cybernetics, this hugely influential book "shows that feedback loops connect each part to the totality of the system (what affects one part affects the other)."⁷ As an attempt to overturn colonial science's traditional prioritization of substances over relations, this project is viewed by its advocates as a means of bringing critical theory in line with Indigenous ways of knowing—a distinct mode of thought that constituted colonial science's historical other. However, a brief examination of the history of ecological thought reveals that ecology is no less bound up in the project of colonial expansion and capital accumulation than was its dualist precursor.

In the book *Imperial Ecology*, Peder Anker charts the development of ecological discourse as it emerged as a privileged framework to not only address questions in the natural sciences, but also address the social, economic, and political problems confronting the British Empire since the late nineteenth century. The term "ecosystem" was coined by Arthur George Tansley, a British botanist and Oxford University professor whose own research and editing in the early twentieth century were crucial to the expansion of ecological methodology into the fields of sociology and psychology. The research of Tansley and his Oxford colleagues was born from a conservationist ideal that served to justify and legitimize British expansion in the colonies:

The aim of their research was to empower the social order of their patrons in various colonial agencies or commercial companies by ordering the economy of nature so that it could serve the social economy of British imperialism. This was achieved by rendering the ecological order of nature into an order of knowledge suitable for managerial overview. This aerial view on nature, society, and knowledge—the master perspective from above—was at the very core of British ecological reasoning.⁸

For the Oxford ecologists, the discipline of ecology was thus not only a means to map and classify relations between organisms in the interest of objective scientific inquiry. It was also a means to manage nature's economy according to the interest of the imperialist state. As a systematic methodology for mapping the relation between organisms, ecology was central to the economization of nature. Guided by both colonialist and capitalist imperatives, ecology was also wielded as a tool to control nature by pacifying traditional Indigenous practices that the imperial power could not understand.⁹

Anker is not alone in drawing connections between ecology and capitalist political economy. Jeremy Walker and Melinda Cooper have suggested how more recent advances in complex systems theory, most notably the influential work of ecologist C.S. Holling, have marched in lock-step with neoliberal economic thought. Charting the structural compatibility of Holling's complex systems theory and Friedrich Hayek's late theory of spontaneous market order, they

argue that the holism of contemporary ecology, as well as its insistence on the inherent instability of ecosystems, is only a step away from neoliberal capitalism's dominant conceptualization of resilience, risk management and crisis adaptation.¹⁰

The question is not whether or not the theory adequately breaks from the inheritance of capitalist or colonial thought—ecology, like Nature, has its dark side—but how it orients our perspective on the terrain of struggle. In its drive to subsume and manage antagonistic forces, much ecological thought gives form to what Alberto Toscano calls the “logic of pacification,” a structural capacity to “shift from external-contradictory differences to internal and harmonized ones.”¹¹ Oil companies operationalize this logic when they factor the costs of public pushback into their infrastructure development plans, mobilizing “risk mitigation” strategies to neutralize Indigenous resistance to fossil fuel infrastructure.¹²

In contrast to the revolutionary traditions of Marxism and anarchism, which recognize antagonism and class struggle as motors for political change, ecological thought frequently envisions politics as network management.¹³ It is not surprising that ecology emerged as a dominant metaphor for thinking relations under capitalism in the neoliberal era. It pictures a world in which there is no gap, no other—the very world invoked by Margaret Thatcher's routine claim that there was no alternative to economic liberalism. The supposition that “Capitalism makes nature. Nature makes capitalism”¹⁴ results in a naturalization of capitalist domination, strengthening the dominant ideology that makes it, as the common saying goes, “easier to imagine the end of the world than to imagine the end of capitalism.” The *oikeios* is the capitalist world.

Ecology offers a framework to interpret relations between capitalism and nature, allowing us to make sense of climate change as a project of capital. The problem is that while ecology can picture the capitalist world, it also participates in the active repression of the gap in it. Our premise is that there remains a gap in the capitalist world that the framework of ecology cannot recognize. Non-capitalist modes of life persist and insist, within and against.

Haunting the Individual

The answer to the problem of the gap is not to disregard the web of life in favour of its precursor. There is no dispute that the enlightenment concept of Nature was complicit in capitalist and colonial violence, and to return to it would be to disregard decades of critique from within the environmental movement. As Andreas Malm points out, “[t]he prototypical wilderness subject is a white male bourgeois individual,” whose identification with wild nature “symbolically re-enacts his conquest of the world.”¹⁵ Malm's perspective is provocative because, despite his targeted critique of the concept of wilderness, he is not prepared to completely disregard it: “The fact that the ruling ideas about wilderness are the ideas of the ruling class is no more reason to dispense with that category than the same fact about democracy or freedom or justice for that matter.”¹⁶ For him, the concept points beyond the anthropocentric fantasy of a constructed world, acknowledging how the supreme power of nature dwarfs that of capitalism. If nothing else, the focus on wilderness renders the capitalist system contingent and vulnerable: “[P]laces with a high degree of wildness still hint at the possibility of life beyond capital.”¹⁷

Malm refuses a central tendency in contemporary ecological thought, which he has characterized as its “dissolutionism”: the erasure of the boundary between nature and society. For him, binaries are “analytical equipment,” and the binary of Nature/Society retains both analytical and political utility in the context of the climate crisis.¹⁸ In arguing for a concept of nature as *other*, Malm invokes Immanuel Kant's analytic of the sublime, which, for both radical and liberal critics, has been roundly critiqued for reinforcing the very ideological foundations of capitalism's extractivist reasoning. Kant argues that the terrifying, overwhelming, disorienting experience of

sublime nature produces not only fright, but also a moment of transcendence that results in the ultimate validation of the individual. Sightings of the sublime “raise the energies of the soul above their accustomed height, and discover in us a faculty of resistance of a quite different kind, which gives us courage to measure ourselves against the apparent almightiness of nature.”¹⁹ The encounter with nature’s incalculable power *produces* the omnipotent individual subject precisely by threatening its obliteration. From the perspective of capitalism, the sublime will always reinforce capitalist relations of domination—a logical reason why scholars in the environmental humanities have persistently steered clear of it.²⁰ However, the sublime also names the otherness that the individual is recruited to manage, identifying in nature a profound threat to bourgeois individualism.

If for Kant, the sublime power of nature constituted the other to the rational individual, for Sigmund Freud, it was the unruly crowd. Jodi Dean reveals how Freud’s work in *Group Psychology and the Analysis of the Ego* (1921), as well as in his primary interlocutor Gustave Le Bon, pit the individual against the crowd. Le Bon’s influential 1895 study *The Crowd: A Study of the Popular Mind* shaped the modern discourse on crowd psychology, arguing that when absorbed by the crowd, the individual loses control of his reason, forgets his individuality, and reverts to his most primitive state. For Le Bon, the revolutionary uprising of the crowd was approaching:

The claims of the masses are becoming more and more sharply defined, and amount to nothing less than a determination to destroy utterly society as it now exists, with a view to making it hark back to that primitive communism which was the normal condition of all human groups before the dawn of civilization. The divine right of the masses is about to replace the divine right of kings.²¹

Le Bon points to the “primitive communism” imagined to have preceded Western civilization, aligning with Marx’s own diagnosis of a communitarian ontology, which interprets the human as a social animal.²² In *Group Psychology*, Freud builds on Le Bon to ask both what unites people in a crowd and what holds them together. Freud’s answer, as Dean puts it, follows from his interpretation that *the unconscious is a crowd*: “Moving from many to one, Freud’s explanation encloses the directed intensities of Le Bon’s crowd into an individual unconscious. Collective desire is reduced to an amplification of frustrated individual desire.”²³ From this perspective, it is the *leader* who assembles and directs the crowd according to his individual desires. Against Le Bon, Freud writes that man is “an individual creature in a horde led by a chief.”²⁴ He defends the ground on which the politics of liberalism were established.

For Freud, there is no such thing as collective desire, only the desire of individuals. Consequently, for him, the crowd is competitive by nature. In the absence of collective desire, a charismatic “chief” must necessarily impose his desires on the crowd. Freud’s invocation of the language of tribal governance points to the work of ideological enclosure on Freud’s own thought. Constructing the chief as individual, Freud actively disavows the threat of primitive communism that was revealing its force both in the streets and in the colonies at his time of writing, while reflecting an alignment with the project of settler colonialism, which recognized individuation as a weapon against the collective and communal modes of life supporting Indigenous Nations before and during colonization.

Unearthing the long tradition of resistance to settler colonialism within the territorial boundaries of the United States, Nick Estes offers insight on the perspective from which the settler saw both Indigenous people and Indigenous land. Settler colonialism was not only a project of dispossessing Indigenous peoples of common land, but also an assault on the collective bonds that held Indigenous Nations together in their relation to the slivers of land which they

continued to inhabit. The process of allotment provides an example of the settler-colonial project of individuation. Allotment was the process of breaking up collectively inhabited reservation land into plots of private property. These parcels were “given” to individual Natives, while “surplus” was auctioned at dirt cheap prices to settlers. Estes writes of the effect of allotment on the national unity of the Oceti Sakowin Oyate, or Great Sioux Nation: “Allotment emphasized individualism, breaking up the tightly knit family units of direct kin and extended relations called the *tiospaye*, isolating them on different plots of land in distant parts of the reservation.”²⁵ Routine violence against Indigenous women was also part of this project of individuation: “White traders and trappers appropriated Indigenous women’s bodies as much as they had appropriated the wealth of the land by harvesting and selling the skins of animals. The two practices went hand in hand.”²⁶ The degrading material and psychological toll of individuation was built into the settler-colonial project of enclosure.

Freud’s claim that man is “an individual creature in a horde led by a chief” represses the violence of individuation. When understood as an assemblage of individuals, a crowd can be broken up, disciplined, managed, or eradicated by force. A culture can also be exterminated. However, as Dean makes clear, when we disidentify with the individual enclosure, we can see that the leader does not speak on behalf of the collective but *posits* a gap that is struggled over: “The crowd doesn’t desire the leader; the leader incites and directs the desire of the crowd.”²⁷ The leader is not a hypnotist, but is “hypnotized by the idea”—an idea that always exceeds the person who believes it.²⁸ The leader can be substituted for another person, or even a common name, icon, or flag. The *idea*, rather than the charismatic leader, is what governs the crowd. And the idea cannot be killed.

What Is Inalienable?

Kant’s analytic of the sublime and Freud’s theory of crowd dynamics are two sides of the same coin. They construct the individual as a bulwark against a threatening collective other. The story of capitalism and settler colonialism’s attempt to eradicate this abject other—be it Indigenous or communist, human or non-human—is not only the history of the capitalist world, but also the history of the gap in it. To speak of the gap in the capitalist world is to insist on a common that has not been enclosed by capitalism, a suggestion that notably breaks from Marx’s thesis on primitive accumulation, which took the “violent transformation of noncapitalist forms of life into capitalist ones” as a historical phase in the development of capitalism.²⁹ What remains following primitive accumulation is a world ravaged by capitalism, turned into profit and waste. Numerous challenges to this thesis have emerged in feminist and decolonial Marxist traditions, where, building on David Harvey’s reading of Rosa Luxemburg, thinkers such as Silvia Federici, Glen Sean Coulthard, and George Ciccariello-Maher, among others, have reconceived primitive accumulation as an incomplete and ongoing process of dispossession.

Coulthard challenges Marx’s theory of primitive accumulation on three counts: First, Marx’s *temporal* framing of primitive accumulation, which stages the violent expropriation of common land as a stage in the development of capitalism. Second, Marx’s original commitment to modernist developmentalism, which led the author to claim primitive accumulation as “a historically *inevitable* process that would ultimately have a *beneficial* effect on those violently drawn into the capitalist circuit.”³⁰ Third, Marx’s insistence on the *violent* character of primitive accumulation. Coulthard argues that a shift in perspective—from one that prioritizes the capitalist relation to one that prioritizes the colonial relation—enables the development of a theory of primitive accumulation that can attend not only to the persistence of violent dispossession under neoliberal capitalism, but also to the fact that “violence no longer constitutes the regulative norm

governing the process of colonial dispossession.”³¹ The flipside of Coulthard’s critical rereading of Marx is perhaps the most provocative: in a world devastated by capitalism, elements of non-capitalist life can be defended from the siege of primitive accumulation.

One reason, as Estes explains, is that for Indigenous peoples, the natural world is inalienable. Describing the perspective adopted by Water Protectors who gathered to block construction of the Dakota Access Pipeline’s controversial Missouri River crossing in 2016, Estes writes:

Mni Sose, the Missouri River, is one such nonhuman relative who is alive, and who is also of the Mni Oyate, the Water Nation. Nothing owns her, and therefore she cannot be sold or alienated like a piece of property.³²

By this, Estes is not suggesting that the Missouri River had evaded capitalist accumulation until the Army Corps of Engineers approved plans to route the Dakota Access Pipeline under it. Other pipelines cross under the river. Railroads cross over her. Industries line her shore and pump waste into her. Since the nineteenth century, she has been an important shipping channel for everything from commodities to ammunition. The Pick-Sloan dams, constructed from the 1940s to the 1960s to provide electric power as well as irrigation and flood control for the agricultural industry in Missouri River states, turned the river against its original custodians, flooding seven Lakota and Dakota reservations and dispossessing their already displaced and dispossessed inhabitants. What Estes means is that when seen from the perspective of the Oceti Sakowin—a perspective that understands land, water, and animals as living non-human relatives—the Missouri River is not reducible to its expropriation by the capitalist state.³³ To state that water is inalienable is to posit a truth claim—not a falsifiable hypothesis in the manner of colonial science, but an unfalsifiable claim demanding a specific political and ethical response from the collective that it hails into being. It conjures a subject that is *true to it*.

Geographies undergo historical transformations, and as the climate changes, rivers dry up. However, just as burial grounds remain burial grounds even after their contents are exhumed by archaeologists or bulldozed by oil companies, water remains, despite its periodic desecration, an inalienable excess to capitalism and settler-colonialism’s war on the common. Recent Indigenous-led movements to protect water against the extraction industry make this emphatically clear: water is alive in the material sense, but it is also sacred. The concept of the sacred oriented modes of non-capitalist life for centuries, in defiance of capitalist and colonial rule. It continues to foster the courage of revolutionary anti-colonial movements today. This concept works to establish a beyond to the material world in which to posit collective belief.

Where Indigenous anticolonialism anchors collective belief in the natural world, communist movements anchor belief in the proletarianized many, locating a beyond to the world of capitalist domination in the specter of communism. When, at the start of the *Communist Manifesto*, Marx and Engels posit that “A specter is haunting Europe,”³⁴ they are not referring to existing communist party infrastructure (the party does not yet exist), but to the red threat recognized by the ruling class. The specter, as an absence that insists from within the capitalist world, connects living communists to their ancestors—the primitive communists of pre-capitalist times—and their descendants, those who have yet to take up the cause. The specter of communism holds up the living communists, orienting them toward a communist future. It gets embodied in the strikes and working-class uprisings to which Marx and Engels referred, but also in the ceremonial practices of Indigenous Nations, performed in defiance of settler law. Like the sacred waters, the specter is inalienable. It adopts the form of a prosthesis in the material world, but it cannot be reduced to the prosthetic form that it takes.³⁵ When it appears, it links the dead to the living, holding open the gap of collective desire (Figure 38.2).



Figure 38.2 Tribal leaders and members of the public touch a totem pole carved by Jewell James and the House of Tears Carvers during a Totem Pole Blessing Ceremony organized by the Lummi Nation in Portland, Oregon, August 24, 2016

Source: Photo by Paul Anderson

The Specter Is in the Object

In “The World Is Already without Us,” Alberto Toscano asks the question, “why are photographs of manufactured landscapes so often depopulated?”³⁶ Addressing the erasure of labor in the contemporary landscape photography of Edward Burtinsky amongst many others, his examination could be expanded to address the more widely critiqued genre of nineteenth-century American landscape painting, which likewise erased the presence of the Indigenous human and non-human inhabitants who tended the land according to a non-capitalist relation until and after settler occupation. These representations, reflecting both the reification of labor and the reification of nature, actively repress the specter that haunts them in the present. For Marx, the concept of the commodity follows a congruent structure: it is an object that both embodies and invisibilizes the labor that produces it. It reifies an entire system of production, of private property, capitalists, and workers, as well as the “iron laws” that make the system a system. Like the museum, the nineteenth-century landscape painting, or the contemporary manufactured landscape, the commodity tells the story of what is extinguished in its making.

Toscano’s account of the dialectic of extinction and resurrection latent in the labor process presents a key for thinking about what it might mean to conjure the specter that haunts the natural history museum. Reflecting on the “hidden abode” masked in the commodity form, the mounting dead labor concentrated in commodities as they travel through the production process, Toscano clarifies that

the fact that they are indeed products of past labor is, in Marx’s colorfully crude metaphor, ‘as irrelevant, as, in the case of the digestive system, the fact that the bread is the product of the previous labour of the farmer, the miller and the baker.’³⁷

The project of resurrecting dead labor is not equivalent to resurrecting labor history:

When living labor power seizes these products, these things, and ‘awakens them from the dead’, as Marx declares, it is not as past but as present use value within a labor process overdetermined by the empty, homogenizing time of exchange value.³⁸

The work of conjuring the specter in the land or in the natural history museum follows from this: the specter is awakened not as past but present use value, not as traumatic reminder but as prophetic guide for revolutionary work.

The museum is constituted through the same dialectics of extinction and resurrection as is the commodity. It represses the outside in the objects it contains, overdetermining them in its taxonomic, display, and interpretive protocols. It works to convince itself that it has captured the objects it contains. It does this by means of individuation, by separating the objects in its collection from their original uses and from the communities that cared for them, and by processing them as specimens, trophies, and rare goods. From the perspective of the modern individual—which is also the perspective of the capitalist state—this is interpreted as an effective, unilateral process of extinguishing, not one part of a dialectical struggle that includes a possible resurrection. From this perspective, the individuated object is an *object of desire*—a fetish severed from the source.

But the museum object also holds the potential to become an *object cause of collective desire*: when the object’s sacredness is presupposed by a collective, it stands as a beacon for collective belonging, embodying the non-capitalist excess of the capitalist enclosure. The sacred can be desecrated but not destroyed. When the museum object is recognized as imbued with the power of the sacred, it stands for the non-capitalist gap in the institution, activating the museum divide.

The project of institutional liberation emerges from the perspective of the gap. It attunes the partisan gaze not to the power of the enclosure but to the sublime threat to it. It is from this perspective that a partisan politics can be lodged into the capitalist world ecology. Such a politics is the necessary precondition for militant collective action on climate crisis. By orienting our gaze to the spectral threat to the capitalist world, we enter the dialectical struggle between extinction and resurrection, awakening the non-capitalist power in the capitalist world. When we see this non-capitalist power, we see it everywhere. As the object cause of desire, it produces the collective desire for collectivity in us. It opens a gap, holds us in common, and concentrates counterpower as we organize around it.

Notes

- 1 Glen Sean Coulthard, *Red Skin, White Masks: Rejecting the Colonial Politics of Recognition* (Minneapolis: University of Minnesota Press, 2014), 13.
- 2 Jodi Dean, “The Anamorphic Politics of Climate Change,” *e-flux Journal*, no. 69 (January 2016): www.e-flux.com/journal/69/60586/the-anamorphic-politics-of-climate-change/.
- 3 See Not An Alternative, “Institutional Liberation,” *e-flux Journal*, no. 77 (November 2016): www.e-flux.com/journal/77/76215/institutional-liberation/.
- 4 Jason W. Moore, *Capitalism in the Web of Life* (London and Brooklyn: Verso, 2015), 4.
- 5 Moore, *Capitalism in the Web of Life*, 2.
- 6 Moore, *Capitalism in the Web of Life*, 2–3.
- 7 Frédéric Neyrat, *The Unconstructable Earth: An Ecology of Separation* (New York: Fordham University Press, 2018), 146.
- 8 Peder Anker, *Imperial Ecology* (Cambridge, MA: Harvard University Press, 2001), 5.
- 9 Anker, *Imperial Ecology*, 39.

- 10 See Jeremy Walker and Melinda Cooper, "Genealogies of Resilience: From Systems Ecology to the Political Economy of Crisis Adaptation," *Security Dialogue*, vol. 42, no. 2 (2011): 143–160.
- 11 Alberto Toscano, "Powers of Pacification: State and Empire in Gabriel Tarde," *Economy and Society*, vol. 36, no. 4 (November 2007): 601.
- 12 See Kai Bosworth, "The Dakota Access Pipeline Struggle: Vulnerability, Security and Settler Colonialism in the Oil Assemblage," in Mary Thomas, Mat Coleman, and Bruce Braun, eds, *Settling the Bakken Boom: Sites and Subjects of Oil in North Dakota* (Minneapolis: University of Minnesota Press, forthcoming). See also Shiri Pasternak and Tia Dafnos, "How Does a Settler State Secure the Circuitry of Capital?" *Environment and Planning D: Society and Space*, vol. 36, no. 4 (Summer 2017): 739–757.
- 13 Bosworth, "The Dakota Access Pipeline Struggle," 608.
- 14 Moore, *Capitalism in the Web of Life*, 18.
- 15 Andreas Malm, "In Wildness is the Liberation of the World: On Maroon Ecology and Partisan Nature," *Historical Materialism*, vol. 26, no. 3 (2018): 4.
- 16 Malm, "In Wildness," 9.
- 17 Malm, "In Wildness," 27.
- 18 Andreas Malm, *The Progress of This Storm: Nature and Society in a Warming World* (London and Brooklyn: Verso, 2018), 186.
- 19 Immanuel Kant, *Critique of Judgment*, second edition, translated by John H. Bernard (New York: Cosimo Books, 2007), 75.
- 20 An exception is Christopher Hitt, who, after identifying the "scholarly neglect on the part of ecocriticism to interrogate the discourse of the sublime," argues that the concept of the sublime is not "fundamentally or intrinsically maleficent." See Christopher Hitt, "Toward an Ecological Sublime," *New Literary History*, no. 30 (1999): 605.
- 21 Gustave Le Bon, *The Crowd: A Study of the Popular Mind*, second edition (New York: The Macmillan Company, 1897), xvi.
- 22 Karl Marx, *Grundrisse: Foundations of the Critique of Political Economy (Rough Draft)*, translated by Martin Nicolaus (London and New York: Penguin Books and New Left Review, 1993), 84.
- 23 Jodi Dean, *Crowds and Party* (Brooklyn and London: Verso, 2016), 105.
- 24 Dean, *Crowds and Party*, p. 109.
- 25 Nick Estes, *Our History is the Future: Standing Rock versus the Dakota Access Pipeline, and the Long Tradition of Indigenous Resistance* (London and Brooklyn: Verso, 2019), 154.
- 26 Estes, *Our History is the Future*, 82.
- 27 Estes, *Our History is the Future*, 111.
- 28 Estes, *Our History is the Future*.
- 29 Coulthard, *Red Skin, White Masks*, 8.
- 30 Coulthard, *Red Skin, White Masks*, 10.
- 31 Coulthard, *Red Skin, White Masks*, 15.
- 32 Estes, *Our History is the Future*, 15.
- 33 Estes, *Our History is the Future*, p. 16.
- 34 Karl Marx and Friedrich Engels, *The Communist Manifesto* (1847) (London: Pluto Press, 2017), 47.
- 35 Tim Fiske, "The Spectral Proletariat: The Politics of Hauntology in *The Communist Manifesto*," *Global Discourse*, vol. 2, no. 2 (2011): 20.
- 36 Alberto Toscano, "The World Is Already without Us," *Social Text*, 127, vol. 34, no. 2 (June 2016): 111.
- 37 Toscano, "The World Is Already without Us," 114.
- 38 Toscano, "The World Is Already without Us," 114.

OUR HOUSE IS ON FIRE

Children, Youth, and the Visual Politics of Climate Change

Finis Dunaway

A middle-aged white man stands in the path of an onrushing train. “Global warming,” he calmly states. “Some say irreversible consequences are thirty years away.” As the train races toward him, its whistle blaring, the man continues, “Thirty years? That won’t affect me.” With blithe indifference, he steps off the track, only to reveal a young white girl about to be struck by the barreling locomotive. Bedecked with blond curls and wearing a white dress, the girl signifies innocence and vulnerability. She stands all alone, motionless on the track. The camera zooms in closely on her face. Helpless and devoid of agency, the girl cannot protect herself from the fast-approaching climate crisis.¹

In 2006, when the Environmental Defense Fund (EDF), a mainstream US organization, released this TV spot, its president announced: “Global warming has reached the point where it threatens the world we leave our children and grandchildren. This campaign is a wake-up call about the urgency of the problem.” Partnering with the Ad Council, the nation’s preeminent public service advertising organization, EDF sought a powerful visual symbol to make spectators feel emotionally engaged with the crisis. “We need to jolt people a bit,” one of the ad’s directors explained. “To think that a child today will have to bear the consequences of our apathy in years to come should be shameful and scary. If this doesn’t hit everyone where it hurts, nothing will.”²

Although she never speaks in the ad, the vulnerable child issues a silent call for spectators to act. She stares directly at the camera, pleading that someone will rescue her. At the end of the spot, textual messages flash across the screen. One sentence announces, in white letters, “There’s still time,” followed, in red, by the address for EDF’s “Fight Global Warming” website. Visitors to the site could calculate their own carbon footprints and find tips on how to reduce their personal carbon emissions: switching to compact fluorescent lightbulbs, adjusting their thermostats, driving less. “One of the points of our advertising campaign,” EDF’s chief scientist emphasized, “... is [to] point out to consumers that they can actually make a significant impact on this problem over the short-term by just making very simple changes to their lifestyles that will actually save them money.” EDF simultaneously sought to spectacularize and personalize the climate crisis: the child in front of the speeding train signalled the looming danger, while the website prescribed individual remedies to combat planetary catastrophe.³

2006 is often considered a watershed moment in public understanding of climate change. Soon after the debut of the EDF ad, the cover of *Time* magazine featured a photograph of a lone polar bear perched on floating ice, gazing uncertainly at the surrounding sea. Like the girl on

the train track, the polar bear on melting ice appears as another innocent victim of global warming. Later that spring, Al Gore stunned moviegoers with *An Inconvenient Truth*. Reviewers described the film as “an emotionally rich, visually entertaining story,” a climate change documentary that made you feel “scared out of your wits.” Throughout the film, Gore framed global warming in terms of intergenerational ethics. “Future generations,” he said at the end, “may well have occasion to ask themselves, ‘What were our parents thinking? Why didn’t they wake up when they had the chance?’ We need to hear that question from them—now.” Many reviewers echoed his argument about intergenerational responsibility. “In 39 years, I have never written these words in a movie review,” the legendary film critic Roger Ebert proclaimed, “but here they are: You owe it to yourself to see this film. If you do not, and you have grandchildren, you should explain to them why you decided not to.”⁴

By 2018, though, when the Intergovernmental Panel on Climate Change (IPCC) released its starkest report yet about climate change, it was abundantly clear that adults were not coming to the rescue. Global carbon emissions continued to rise, despite the popularity of *An Inconvenient Truth* and the repeated warnings of the IPCC, despite the heatwaves, wildfires, and dying oceans, despite the melting glaciers, rising sea levels, and species extinctions, despite the hurricanes and floods, droughts and desertification, despite the climate refugees and loss of human life. Writing in the afterword to his 2019 book, *Losing Earth: A Recent History*, Nathaniel Rich observed: “We... know that the coming changes will be worse for our children, worse yet for their children’s children, even worse still for their children’s children, whose lives, our actions have demonstrated, mean nothing to us.”⁵

Greta Thunberg was three years old when *An Inconvenient Truth* was released. As she grew up in Sweden and learned about climate change, she became increasingly demoralized and distraught. It became too overwhelming to deal with the knowledge of the worsening threats to the Earth’s biosphere and to realize that older generations were not doing enough to address it. “I was so depressed. I didn’t see any point of living, because everything was just so wrong,” she explained. In 2018, the fifteen-year-old decided to take action: she began protesting in front of the Swedish Parliament building in Stockholm. At first, she stayed there all alone, on the cobblestone steps, the girl with the pigtails holding her hand-painted sign: “Skolstrejk för Klimatet” (School Strike for Climate). She had no idea that her action would inspire an international movement. By early 2019, a series of school strikes took place in over 100 countries worldwide. Thrust into the media spotlight, Thunberg chastised leaders gathered at a UN climate conference: “You say you love your children above all else, and yet you are stealing their future in front of their very eyes... You are not mature enough to tell it like it is. Even that burden you leave to us children.”⁶

By becoming active agents in the climate struggle, Thunberg and countless youth around the world have rejected the passive role in which children are often cast—standing alone on the train tracks, anxiously awaiting rescue. They have repudiated the hollow promises, the piecemeal solutions, and the misguided fixation on green consumerism. They have challenged older generations to recognize their own denialism and to face up to the severity of global warming. Refusing the status of mere symbols, they are trying to direct the world’s attention to the fierce urgency of the climate crisis. Not just Thunberg and the climate strikes, but the Green New Deal, the Sunrise Movement, and other organizing efforts, many of them led by children and youth, all signal an effort to move beyond the emotional symbolism of the past and push for transformative changes before it is too late.

The 2006 global warming campaign designed by EDF and the Ad Council followed familiar visual tropes: both their focus on the vulnerable child and their emphasis on personal, green

consumerist actions have long figured prominently in mainstream environmental imagery. Although pictures of children in peril have been deployed by a wide range of political movements—from campaigns against child labor to civil rights protests—specific reasons account for their ubiquitous presence in environmental visual culture. Such images not only appeal to audience emotions and elicit parental concern, but also provide a way to visualize the long-term, accretive nature of environmental risk. Many environmental problems—including radioactive fallout, species loss, and climate change—are slow-motion disasters, not easily rendered in the spectacle of media coverage. Pictures of children, when paired with explanatory texts or narration, provide a strategic way to address this representational challenge. The images signal their need for protection in the face of escalating ecological danger, and call upon older generations—the presumed viewing audience—to protect them from harm.⁷

During the Cold War, for example, the US-based peace group SANE (the Committee for a Sane Nuclear Policy) produced a series of newspaper ads that visualized the harmful effects of radioactive fallout on children's health and the environment. One ad shows three white kids, all sporting open-mouthed smiles and shiny white teeth. The text below, though, undercuts the carefree image. "Your children's teeth," it warns, "contain Strontium-90." Delivered with scientific certitude and directed at parents, the ad fused fact with feeling, reason with emotion. SANE used images and texts to galvanize public opposition to nuclear testing by demonstrating the gradual accumulation of Strontium-90 in children's bodies.⁸

SANE ads presented white children as emotional emblems of the future and as visual signs of universal vulnerability. No place, the ads asserted, not even the lily-white suburbs, were immune to radioactive risk. Throughout the history of modern environmentalism, popular images have often ignored racial and class inequalities to foreground white people, especially children and women, as the prime victims of ecological danger. From pictures of white people wearing gas masks during the first Earth Day in 1970 to the EDF climate campaign, white bodies have signified universal vulnerability. These images have nurtured support for environmental protection, but have also masked the unequal burdens of environmental harm.⁹

Al Gore and director Davis Guggenheim joined EDF in linking the climate crisis to children's futures. At a key moment in *An Inconvenient Truth*, Gore stands before a large graph that tracks the rise in carbon dioxide levels and the corresponding increase in global temperature readings. He then steps on a mechanical cherry picker that elevates him to the current carbon dioxide concentration. "In the next fifty years," he remarks, "it's going to continue to go up... When some of these children who are here are my age, here's where it's going to be." By referring to children, he presents the visual display of quantitative information as something other than lifeless statistics; the escalating numbers become menacing markers of ecological risk, disturbing data points that pose a grave threat to the future. Like the EDF ad, Gore frames the climate crisis in universal terms, ignoring the structural inequities that produce environmental injustice, including the disproportionate impact of global warming on particular places and human communities.

Both the EDF campaign and *An Inconvenient Truth* followed another familiar pattern: portraying individual action and green consumerism as the prime modes of environmental citizenship. Beginning with the rise of popular environmentalism in the late 1960s, activists emphasized how people's everyday lives were enmeshed in larger ecological systems and encouraged personal action to protect the environment. Most environmental activists viewed individual responsibility within a broader framework: they protested government policies and corporate production decisions that polluted the air and water. The mainstream media, though, frequently severed individual responsibility from questions of power to make all consumers seem equally culpable for the environmental crisis. In the decades that followed, neoliberal ideas enshrined the

market as the ultimate expression of citizen power. From popular guidebooks listing what you could do to save the planet to the media packaging of Earth Day 1990, lifestyle decisions and the marketplace became the dominant sites of environmental activity. The producers of popular environmental imagery framed recycling, green consumerism, and other personal actions as providing individuals with both a sense of political empowerment and a therapeutic dose of environmental hope.¹⁰

These ideas shaped popular framings of global warming. To help rescue the little girl from climate catastrophe, EDF recommended individual action. Similarly, *An Inconvenient Truth* encouraged viewers to change their lightbulbs, carry reusable bags to the supermarket, and, if they could afford to, buy hybrid vehicles. “I don’t know about you,” the popular food writer Michael Pollan observed, but for me the most upsetting moment in *An Inconvenient Truth* came long after Al Gore scared the hell out of me, constructing an utterly convincing case that the very survival of life on earth as we know it is threatened by climate change. No, the really dark moment came during the closing credits, when we are asked to... change our light bulbs. That’s when it got really depressing. According to Pollan, the “immense disproportion between the magnitude of the problem” and the “puniness” of Gore’s proposed solutions “was enough to sink your heart.”¹¹

The green consumerist promises that shopping could ward off climate change and protect innocent children also appeared in corporate advertising. In 2007, Philips Electronics heralded the compact fluorescent light bulb as a meaningful way for consumers to save the planet. The commercial begins with images of melting glaciers. “The Arctic ice is shrinking at a record pace,” the narrator explains. “Electricity used by lighting is one of the biggest sources of CO₂ emissions.” Viewers may have expected to see a polar bear, but instead a white human baby appears, adrift on an ice floe. As the baby looks up, his eye reflects the sun’s intense glow, which then morphs into an electric light shining on a city street, presumably a compact fluorescent manufactured by Philips. In a cheery fashion, the narrator concludes: “Simplicity is a light bulb that can help change the world.” The baby, no longer endangered in the Arctic, appears comfortably protected by his white mother and father, who smile and snuggle the child, the affluent nuclear family sheltered from the climate crisis. In this commercial and other popular media texts, environmental hope becomes the convenient truth of consumer culture.¹²

Change your light bulb, save the planet: such popular messages are easy to ridicule, but they perform important cultural and political work. By placing exaggerated faith in the market and in the power of consumers to solve global warming, they foster a subtle, but insidious form of denialism. Even as they acknowledge that anthropogenic climate change is real, the problem, they unwittingly suggest, is not that bad, not yet. If all consumers have to do is make a few minor changes, then surely global warming must not pose an existential threat to humans and the ecological systems that sustain them. These comforting consumerist messages divert attention from the urgency of the crisis.

“It is worse, much worse, than you think,” David Wallace-Wells began his 2019 book *The Uninhabitable Earth*. “The slowness of climate change is a fairy tale perhaps as pernicious as the one that says isn’t happening at all.” Just as the girl on the train tracks is infantilized, made to appear passive and helpless, viewing audiences have been robbed of their agency, have not been told the extent of the problem, have been subjected to fairy-tale claims about how to avert catastrophe. The quick fixes and green consumerist nostrums obscure the extent of the crisis and betray a shallow emotional commitment to the issue. The indignation that Thunberg and other activists express is a response to this form of denialism, a falsely optimistic vision that infantilizes the public, that denies collective agency at the very moment it is needed.¹³

A year after the release of *An Inconvenient Truth*, Bill McKibben and several Middlebury College students founded 350.org to move beyond the “individual-driven message in vogue

among environmentalists.” Rather than urging consumers to shop their way to ecological salvation, 350.org leaders stressed that “‘it’s not light bulbs, not Priuses’,” but “‘large systemic change’ that is truly necessary” to reduce greenhouse gas emissions. We thought that one of the reasons why there was so little action against climate change was not because people weren’t scared of it, but because it felt so big and each of us felt so small that it seemed pointless to do anything, McKibben explained. “So we decided that we would try to make people see that they were part of something very large.” Through YouTube videos and social media, 350.org activists have portrayed the climate movement as a multiracial, intergenerational struggle. They picture people from diverse backgrounds joining together, uniting in collective opposition to pipelines and other development projects, calling for divestment from fossil fuel interests, and demanding that politicians and world leaders take bold action to ensure a stable climate for the future. Children, youth, and young adults appear in this imagery not as passive victims of impending disaster, but as active, empowered participants in collective struggle.¹⁴

Thunberg’s school strike, photographed and circulated through news and social media outlets around the world, repudiated the conventional images of the helpless, powerless child. Her protest followed years of grief and sadness. “Some people can just let things go,” she explained, but I can’t, especially if there’s something that worries me or makes me sad. I remember when I was younger, and in school, our teachers showed us films of plastic in the ocean, starving polar bears and so on. I cried through all the movies. My classmates were concerned when they watched the film, but when it stopped, they started thinking about other things. I couldn’t do that. Those pictures were stuck in my head.” She attributes her relentless focus and inability to let things go, to the way her “brain works.” “Because I have Asperger’s syndrome, she explained to an interviewer, “so I work a bit different. I see things black and white.” Thunberg embraced Asperger’s as an empowering condition, something that allowed her to glimpse difficult truths and maintain intense focus. Unable to move on and forget the shocking images of planetary crisis, Thunberg emerged from her years of despair determined to act. She was inspired by students in Parkland, Florida, who protested US gun laws following the 2018 mass shooting at their high school. Six months after the Florida massacre, she began her strike. Thunberg questioned the shallow emotional engagement and facile hope peddled by many leaders. Adults keep saying, ‘We owe it to the young people to give them hope.’ But I don’t want your hope... I want you to act as you would in a crisis. I want you to act as if the house is on fire. Because it is.¹⁵

Thunberg’s forceful warnings and repeated protests in public spaces set her activism apart from the emotive symbolism of the vulnerable child, yet her background—an affluent white youth from northern Europe—no doubt helped propel her into the limelight. As the Nigerian-born writer Chika Unigwe explained, “For years, young people across the world have been campaigning to draw attention to the crisis our planet faces, and to tackle it. Yet it seems the media is only interested in one young climate activist.” Thunberg’s sudden celebrity falls into the trope of the white savior, a media narrative that disregards the long-term, collective struggles of diverse peoples to address the climate catastrophe. Reducing the movement to a single charismatic figure ignores the history of frontline communities building intersectional movements for climate justice. In much of the media coverage, Greta standing alone in front of the Swedish Parliament turns into Greta leading the global movement. Instead, her activism should be seen as part of a larger network of grassroots and transnational organizing that began long before she became a climate icon.¹⁶

As the climate strike movement mobilized grassroots actions around the world, some politicians and pundits chastised student protesters for being nothing more than “pawns,” used by “professional adult activists as part of a cynical political strategy.” The kids were misinformed. They had no right to force themselves into public debate. If they felt compelled to protest, they

should do it on the weekend and not skip school. These critiques were similar to the insults hurled at young African American protesters during the US civil rights movement. When they marched in the streets, when they endured racist violence, and when they were arrested by Southern police officers, their motives were questioned. Many commentators charged that African American children and youth were being manipulated by their parents and other adults; they assumed that these young people could not understand what was at stake in the civil rights struggle. Yet the evidence reveals a completely different story. According to the visual culture scholar Martin Berger, “The testimony of children active in the civil rights movement suggests that they not only understood the goals of the movement but that they were motivated in part by empathetic connections with past and future generations.” Just as civil rights protesters understood their actions in an intergenerational framework, the climate protestors disrupted the routines of daily life to fight for a livable future. The school strikers claim that voting and other traditional forms of politics are not enough. They believe that the decades-long failure of political leaders to address the ever-worsening climate crisis indicates the need for more assertive protest.¹⁷

The young activists are not just skewering adults with generational shame, but are also imagining and trying to create a sustainable future. To do so, they argue, means confronting not just the obvious denialism of the fossil fuel industry and right-wing politicians, but the more subtle denialism of those leaders who call for incremental policy changes but do not endorse the rapid decarbonization called for by climate scientists. It also means avoiding the universalizing rhetoric of mainstream environmentalism, which tends to hold everyone equally responsible for—and equally vulnerable to—climate change. These activists focus instead on the power relations that have caused the crisis and the social inequities that determine its uneven effects.

In the US, many of their efforts have coalesced around building support for the Green New Deal. In early 2019, a multiracial group of children and youth involved in the Sunrise Movement and the Bay Area’s Youth vs. Apocalypse organization showed up at the San Francisco office of Democratic Senator Dianne Feinstein, urging her to vote for a Green New Deal resolution. Feinstein rebuffed the group, sternly lecturing the kids on her extensive knowledge and political experience. When she counseled them on the need to go slow and accept gradual change, one young activist referred to the most recent IPCC report: “Some scientists have said we have twelve years to turn this around.” When Feinstein claimed that the US does not have enough money to pay for the Green New Deal, another responded: “We have come to a point where our earth is dying, literally. And it is going to be a pricey and ambitious plan that is needed to deal with the magnitude of the issue.” On Twitter, the Sunrise Movement described the senator as reacting “with smugness + disrespect. This is a fight for our generation’s survival. Her reaction is why young people desperately want new leadership in Congress.” A video of Feinstein’s treatment of the young activists went viral, demonstrating the power of smartphones and social media to distribute amateur-produced imagery to mass audiences. No longer a single white child awaiting rescue, such images present the burgeoning movement of multiracial climate activists demanding fundamental change.¹⁸

What would a Green New Deal look like? *A Message from the Future with Alexandria Ocasio-Cortez*, a seven-minute animated film released in April 2019, attempted to answer that question. The film was narrated by Representative Alexandria Ocasio-Cortez, a woman of Puerto Rican descent who decided to run for Congress after participating in the Indigenous-led struggle at Standing Rock, a fight against the colonialist violence of the proposed Dakota Access Pipeline. The film includes a brief history of fossil-fuel-industry-backed climate change denialism. “We lost a generation of time we’ll never get back,” Ocasio-Cortez explains, “entire species we’ll never get back, natural wonders gone forever.” She pauses to consider the tragedy of Hurricane

Maria in 2017. Maria “destroyed the place where my family was from, Puerto Rico. It was like a climate bomb. It took as many lives as 9/11.” The film frames the slow-motion catastrophe of climate change not as some distant threat, but rather as an accretive violence that had already entered the present, wrecking harm on ecosystems and vulnerable human communities.¹⁹

A Message from the Future imagines the 2020s as “the decade of the Green New Deal.” Time-lapse footage shows the hands of artist Molly Crabapple, as she paints scenes of this future world. Looking back to 2019, Ocasio-Cortez remarks: “I was a freshman in the most diverse Congress in history, up to that point... I will never forget the children in our community. They were so inspired to see this new class of politicians who reflected them, navigating the halls of power.”

Throughout the film, children are mentioned—not as helpless victims of the climate crisis, but as vibrant participants in the struggle to build a just and sustainable future. Describing the changes of the Green New Deal, Ocasio-Cortez highlights the plan’s impact on children from the multiracial district she represents. “That group of kids from my neighborhood were right there in the middle of it all, especially this one girl, Ileana,” she says. “Her first job out of college was with AmeriCorps Climate, restoring wetlands and bayous in Louisiana.” Crabapple’s painting shows Ileana standing in a newly verdant landscape, holding a shovel and wearing a hard hat (Figure 39.1). In the background, workers dismantle a fossil fuel pipeline, a relic of the past economy, while others plant mangroves to regenerate the land.

A Message from the Future does not simply paint a rosy picture of the world to come: it acknowledges that calamities will still occur, even if major reforms are implemented soon. “Those were years of massive change,” Ocasio-Cortez explains. “And not all of it was good. When Hurricane Sheldon hit southern Florida, parts of Miami went underwater for the last time.” The film emphasizes the need for a just transition to a decarbonized future. Rather than presenting the environment as an isolated, stand-alone entity, *A Message from the Future* views global warming as interconnected with questions of social justice. It envisions policy measures to support the ecological and economic security of racial minorities and other marginalized groups, to ensure that real-world children like Ileana will inherit a livable and more equitable future.



Figure 39.1 Frame capture from *A Message from the Future* with Alexandria Ocasio-Cortez, directed by Kim Boekbinder and Jim Batt, 2019. Illustration of Ileana restoring wetlands by Molly Crabapple
Source: Used by permission of Molly Crabapple

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The vulnerable child has long figured prominently in popular environmental imagery. The growing bodies of young children, their innocent faces, their lack of agency: all these ideas and assumptions have helped infuse emotion into the environmental cause, have mobilized public concern through the strategic blending of science with spectacle. Even as these images have advanced the environmental agenda, though, they have often hindered more far-reaching visions of change by promoting consumer actions, technical fixes, or piecemeal legislative reforms. The climate crisis reveals the urgent need to move beyond the limits of mainstream environmental imagery.

Throng of children and youth participating in climate strikes and other protests around the world, Ileana restoring wetlands: these images and actions break from the conventional portrait of the vulnerable child to position young people as active participants in an increasingly growing, intergenerational, and intersectional climate movement. Against the overt and subtle forms of denialism, against the intransigence and short-sightedness of political leaders and the fossil fuel industry, they call for bold action to slow the effects of climate change.

At the end of *An Inconvenient Truth*, Al Gore imagined a future in which children asked their parents why they didn't act when they had the chance. That future has now arrived, as diverse groups of young people are joining with older generations to organize and fight for climate justice.

Notes

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- 4 *Time*, April 3, 2006, cover. *An Inconvenient Truth*, directed by Davis Guggenheim (Hollywood: Paramount Pictures, 2006). Pat Aufderheide, review of *An Inconvenient Truth*, *Cineaste*, Winter 2006, 50–52 (first quote on 50). Second quote from Richard Cohen, "A Campaign Gore Can't Lose," *Washington Post*, April 18, 2006. Roger Ebert, "An Inconvenient Truth," *Chicago Sun-Times*, June 2, 2006.
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- 6 Amy Goodman interview with Greta Thunberg, "School Strike for Climate: Meet 15-Year-Old Activist Greta Thunberg, Who Inspired a Global Movement," *Democracy Now!*, December 11, 2018, www.democracynow.org/2018/12/11/meet_the_15_year_old_swedish. Greta Thunberg, speech, December 12, 2018, www.fridaysforfuture.org/greta-speeches#greta_speech_dec12_2018.
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- 8 SANE (the Committee for a Sane Nuclear Policy), "Your Children's Teeth Contain Strontium-90" (advertisement), *New York Times*, April 7, 1963.
- 9 Dunaway, *Seeing Green*.
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- 11 Michael Pollan, "Why Bother?," *Saturday Evening Post*, September/October, 2008, 42–45 (quote on 42).
- 12 Noël Sturgeon, *Environmentalism in Popular Culture: Gender, Race, Sexuality, and the Politics of the Natural* (Tucson: University of Arizona Press, 2009), 145; Dunaway, *Seeing Green*, 272–273.
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FROM THE RED NATION TO THE RED DEAL

A Conversation with Melanie K. Yazzie and Nick Estes

In September 2019, The Red Nation, an Indigenous liberation collective, released the Red Deal as a complement to the Green New Deal climate justice proposal. In short order, the Red Deal was enthusiastically endorsed by several influential organizations, including the Democratic Socialists of America (DSA) and the Indigenous Environmental Network.

In November 2019, Subhankar Banerjee sat down with Melanie Yazzie and Nick Estes, co-founders of The Red Nation and co-creators (with their comrades) of the Red Deal, to discuss not so much the proposal itself, which is available on The Red Nation website, but more about how that proposal came to fruition as part of the revolutionary path of The Red Nation.¹

SUBHANKAR BANERJEE: I would like to begin by thanking you, Melanie Yazzie and Nick Estes, for allowing me to be at your home to have this conversation about the proposed Red Deal from The Red Nation. Before we get into discussing the proposal, I would like to ask you a few questions about The Red Nation.

In 2014, you both were doctoral students at the University of New Mexico (UNM) when you co-founded the Red Nation. Today, you both are faculty members in American Studies at UNM, while The Red Nation has become one of the most inspiring collectives in North America building a movement for Indigenous liberation and justice.

Can you tell us about the birth of the collective? What was it like in the early days of the organization when you were just a handful of Indigenous students with little to no financial resources who were dreaming about Indigenous liberation and building a movement to achieve that?

NICK ESTES: Well, we still have little to no financial resources (laughs). The original meetings we had for The Red Nation began around our kitchen table, which actually is that kitchen table over there. And it wasn't just students. Melanie and I were kind of the exception to the rule. Many people who were originally in The Red Nation were just people from the community interested in getting involved.

Our first meetings coalesced around two things: bordertown violence and an Indigenous Peoples' Day campaign in Albuquerque. Environmental justice issues were part of that original plan, but it wasn't something that we had organized around initially.

The bordertown violence work arose after the murders of Cowboy and Rabbit, or Allison Gorman and Kee Thompson, in Albuquerque in July 2014.² The murders brought attention to a lot of issues our Navajo and Pueblo relatives face on the streets. In the aftermath of the killings, we noticed there wasn't a lot of attention to colonialism and anti-Indianism in the way it was being portrayed in the media. So, after those vigilante killings of Cowboy and Rabbit, we felt like we had to do something and so we organized a group to respond to that. We were calling for bordertown justice. That was five years ago this month.

We also began with something that was more symbolic but nonetheless just as important: Indigenous Peoples' Day.³ In a place like New Mexico which has a large Indigenous population with 23 different Indigenous nations, we were perplexed why there was no Indigenous Peoples' Day here. So, we began a campaign in Albuquerque.

The initial bordertown justice campaign and the Indigenous Peoples' Day campaign (which we won) came from the grassroots level, and that is where we remain to this day. Even though we have grown quite significantly, and we have a lot more influence, we never relinquished that foothold in our own communities. We are not just regionally based either. We are now more national and international. We have membership and chapters that are springing up possibly in other countries and influence or support from other places in the world. We have sent multiple delegations to Palestine, for example. A delegation just came back from Venezuela meeting with Indigenous peoples of Latin America.

MELANIE YAZZIE: And, we have a delegation going to the Chiapas.

NICK: Yes, we have a delegation going to the Chiapas for the Second International Gathering of Women Who Struggle organized by the *Zapatista* Army of National Liberation (Ejército *Zapatista* de Liberación Nacional, EZLN).

MELANIE: To build on that—in addition to the vibrant anti-police violence struggle that brought together different progressive, leftist and radical forces in Albuquerque—what was happening more broadly in 2014, if people remember, is that we had just experienced the massive mobilization behind Idle No More in Canada around Indigenous issues. Like The Red Nation, Idle No More was happening primarily in urban places in Canada. The Red Nation had energy from the platform and foundation that Idle No More built in North America for Indigenous liberation struggles.

And, of course, the following year, things exploded. We saw the first iteration of the struggle against the Thirty Meter Telescope on Mauna Kea in Hawaii, and the Gold King Mine spill galvanized support throughout the American Southwest because of the devastation it brought to the water ecosystem that traditional Navajo farmers depend on. The struggle to protect Oak Flat from copper mining in San Carlos Apache lands was gaining international support, and Black Lives Matter protests were taking the nation by storm.

That was the year before Standing Rock popped off, right?

We came into existence in this time when there was something remarkable brewing, I would say, particularly in Canada and the United States. There was a certain kind of energy around all kinds of things: environmental issues; land and water; racism; symbolic violence; state violence; police; incarceration, to name a few. People were making connections between all these issues, especially Black and Indigenous folks.

The Red Nation is part of this larger constellation of struggles that arose at this time to address these issues.

SUBHANKAR: I would add one more thing. Right at that time, 2014–2015, we were also working hard to stop oil and gas exploration and drilling in the Arctic seas of Alaska.

MELANIE: That's right.

SUBHANKAR: You have placed the founding of Red Nation within a vibrant constellation of struggles taking place at the time in North America and around the world. But I want to return to the intimate part of The Red Nation. You were just a handful of Indigenous youth building The Red Nation over pizza—

MELANIE: So much pizza!

SUBHANKAR: You were paying attention and drawing inspiration from all the other struggles that were exploding at the time. However, often what happens with movement building is that something begins and then it gets the flash and not long after it usually collapses. That is not the story of The Red Nation. You have built The Red Nation into a force to be reckoned with. I'm curious to know what were some of your aspirations and ethics during the early days of the collective? What were some of the things that you were talking about then that may give a clue to the resiliency of The Red Nation?

NICK: I guess there are two things I can think of that come to mind. The first is that we didn't start off as a single-issue organization. We have always kept a broader vision of revolutionary struggle as our horizon of liberation which coalesces into explicit anti-capitalist and anti-colonial politics, but not just in the negation of those—colonialism and capitalism—but the affirmation of Indigenous life and lifeways and our relations with each other. I think relationality is very unique to Indigenous experiences. And it has its own kind of tribal specific origins and meanings and concepts. For The Red Nation here, locally, and Melanie can touch on this, it evolves around Pueblo-specific and Diné-specific orientations of what it means to make relatives.

The second aspect of that would be, whenever I write, I try to create things that aren't just relevant to me but would have been relevant to me as a young person, like if someone had approached me with a 10-point program of The Red Nation when I was a 17-year-old living in a really racist and violent bordertown in Chamberlain, South Dakota. During my youth, I felt completely alienated not only from mainstream white society but also from my own tribal community, in many ways because we were living off-reservation, which comes with a whole host of different experiences. The affirmative aspect of The Red Nation is looking at Indigenous experiences in a holistic way and saying that there is no separation between off-reservation and on-reservation Indigenous folks. That is a completely colonial construct that has bifurcated and divided our communities. That construct has also divided our communities along the lines of gender, sexuality, poverty, housing, healthcare, and access to equitable education—the things that we need to live.

MELANIE: Just to elaborate on the relationality piece, we were influenced directly by the queer Indigenous feminism of Diné trans-sisters who were organizing these incredible and political drag shows in Gallup and Albuquerque. We were participating in street-based advocacy for relatives living on the streets. Of course, unsheltered and LGBTQ2 relatives are some of the most heavily discriminated against in Native communities, nationhood building projects, and families. They often have to make new families when their own kick them out and reject them. They've taught us a lot about what it means to be a good relative.

A The Red Nation member also encouraged us to practice *k'é*, which is the Navajo philosophy of kinship. She created a beautiful phrase: “*k'é* does not discriminate.” We started to employ it in

the way we were treating each other internally within The Red Nation, and as the guiding philosophy for how we engage in coalition and form relationships with others, including non-Indigenous folks. I think the queer Indigenous feminist praxis combined with the philosophy of kinship gives us longevity because there is an inherent politics and practice of inclusivity and growth rather than intense factionalism and exclusion that often happens in leftist tendencies.

One other thing. From early on, we wanted to focus on building and inspiring confidence in our people through practicing optimism. We learned this from elders who were a part of different revolutionary struggles in the Global South and Global North. In leftist political culture, there is a strong “cancel culture”—a lot of critiquing, a lot of bickering, a lot of turf wars, mostly on social media. It’s kind of expected of you to participate in this dynamic when you become an “activist” in the United States, and we had to unlearn these habits in our early years after making mistakes. Elders of the struggle taught us that to be a revolutionary means to inspire confidence and optimism—to have genuine revolutionary optimism about the capacity of your people to wage liberation, to enact systemic change and build the future beyond capitalism or colonialism we seek. A lot of the fighting and pessimism about the capacity of our people that happens on social media is counterrevolutionary and deeply destructive.

I find that academics are quite guilty of this behavior, as well.

So, we took this to heart and started to call ourselves “cheerleaders of the movement,” which is cheesy but really true! That is one of the most essential, I think, and indispensable things that The Red Nation does for our people and part of why we’ve stuck around for so long. People comment on it constantly. They are like, “we cannot believe your optimism, how you generate that all the time.”

To be a revolutionary means to be eternally optimistic but optimistic in a way that is grounded in material struggles. It can’t just be an abstract optimism. You have optimism because you are building the revolution and engaging in the struggle. You see the change. You have victories. So, celebrate your victories. We celebrate! A lot of movements don’t celebrate and forget because the world is a hard place to organize and the violence is so intense; it’s hard to see your way through it.

I think celebrating and cheerleading and being optimistic is really what’s given us our resilience. It gives us and our people confidence to keep doing the work.

SUBHANKAR: I think people will read the Red Deal or they may read an article on it from either of you or one of your the Red Nation comrades, and they may see the Red Deal as a significant “document,” but may miss that it actually is grounded in this truly revolutionary and affirmative origin story. Let us call it the origin story of The Red Nation.

I want to now turn to a new thread, the creative aspects of movement building, literary and visual. Having been an avid reader of various texts from The Red Nation—blog posts, press releases, and, of course, the Red Deal—it is obvious to me that writing is taken very seriously by the collective. There is never a sloppy piece of writing coming out of any The Red Nation public communication. The text is always impeccable, whether it is political or philosophical. You both are inspiring writers and The Red Nation regularly organizes writing workshops for youth and comrades. I would have liked to have an in-depth conversation on the significance of writing for The Red Nation, but since this volume is focused primarily on art and visual culture, I would like to ask you at least something about that before we get into the Red Deal.

I’m thinking about three examples where art and visual culture played a significant role in movements for liberation and justice. The Indian People’s Theater Association (IPTA), which was established in 1943. The IPTA comrades were actors, writers, poets, musicians, filmmakers

and a whole host of creative types. But their singular purpose was to advocate for and engage in India's freedom struggle from the British colonial rule. Or, the largely unknown (outside of Alaska) Indigenous-run newspaper *Tundra Times*, which was founded in 1962 by Inupiat activist Howard Rock, in which visual culture played an essential part from day one, largely because Rock was an artist. More than anything else, *Tundra Times* contributed to advocating for and securing important Indigenous rights in Alaska. Or, the more well-known revolutionary art of Emory Douglas and the newspaper *The Black Panther*, which was founded in 1967.

With those examples, I'm curious to know, what role, if any, art and visual culture have played in The Red Nation activities so far? What do you see its contribution as the collective continues to build a movement for the Red Deal?

MELANIE: Want me to take a stab at it first?

NICK: Sure.

MELANIE: The honest answer about what role visual culture has played in The Red Nation is—it's been pretty marginal and that's because we've spent most of our time focusing on building skills around praxis, like how to organize a protest, what it means to build campaigns, how to engage in coalition, how to deal with conflict within the movement, things like that. The practical stuff has occupied most of our time, I would say. And the writing, of course.

But it is changing now. I was elected by my comrades two months ago to be culture desk. Culture desk works in the realm of cultural production; media, press, art, song, protest chants, banners, design, those kinds of things. I'm charged with creating the narrative of The Red Nation. I think for the first time ever we're finally in a place where we've built a strong enough foundation to understand our narrative better than we did two or three years ago when we were still struggling to just get off the ground.

Our track record with visual culture has been dismal (laughs). I'm not going to lie, it's embarrassing. We talk about how embarrassed we are in The Red Nation for the lack of art. I mean, if you look at our fliers from the beginning (even now!), they're really atrocious, visually speaking. So, we have been trying to expand beyond our weakness in visual art to incorporate different genres of communication and dialogue. The podcast is one of those. Conversation is part of that so we're not just writing-based. We are starting to branch out very slowly into a more sophisticated realm of visual narrative.

What's interesting is that—I'll just talk about me and Nick—we are both artists. This is something most people don't know.

SUBHANKAR: Really?

MELANIE: I was almost a studio art major when I was in undergraduate. My mother is a poet, and my father is a brilliant artist with raw talent. He was a silversmith in his earlier years. My sisters are both profoundly artistic. My oldest sister was a major in operatic vocal performance and she's now a brilliant ceramicist. My middle sister is incredibly gifted with drawing. I do a lot of visual art, mostly pastel and pencil drawing and acrylic and water painting. I also come from a singing family. Nick has done a lot of poetry. He is a musician, plays several instruments, was in some bands when he was younger, and designed beautiful zines with the anarchist collectives he belonged to in the Midwest during his younger years.

There's a lot of art in the people who are in The Red Nation but somehow that hasn't quite come out in the politics. What would you say, Nick? Am I wrong?

NICK: I would say that there is—

MELANIE: This isn't a clean answer. I apologize.

SUBHANKAR: This is the answer I'm looking for—an honest answer.

NICK: In Indigenous movements there is this strong art component but it's very commodified and there is a business aspect to it. Since The Red Nation is anti-profit, it doesn't quite gel with our politics. For example, we don't get paid for this work, so when we have needed art, or artists have volunteered to work with us, there's an expectation that we give them money, and we are like we don't have any, we really don't have any money. We barely have enough money sometimes to print stickers and posters and things like that. People don't understand that we don't get paid to write. We understand that people need to make a living, but the expectations for profit around Native art create tensions in the organizing work.

However, we have been honored by some artists, such as Lynnette Haozous, who painted a mural of The Red Nation's 2017 protest against the Entrada, which was the decisive blow to abolish that racist celebration in Santa Fe. Lynnette painted a beautiful and powerful mural at the Museum of Contemporary Native Arts in downtown Santa Fe. So even though the city of Santa Fe hates us, they have to look at us all the time now because they commissioned her as an artist, but they didn't know what she was going to paint (laughter). She, as a Tewa, Diné and Apache woman, painted this memorialization of us. So that was really beautiful and touching.

One thing I will say we have adopted is the "red scarf" as something that signifies who we are (Figure 40.1).

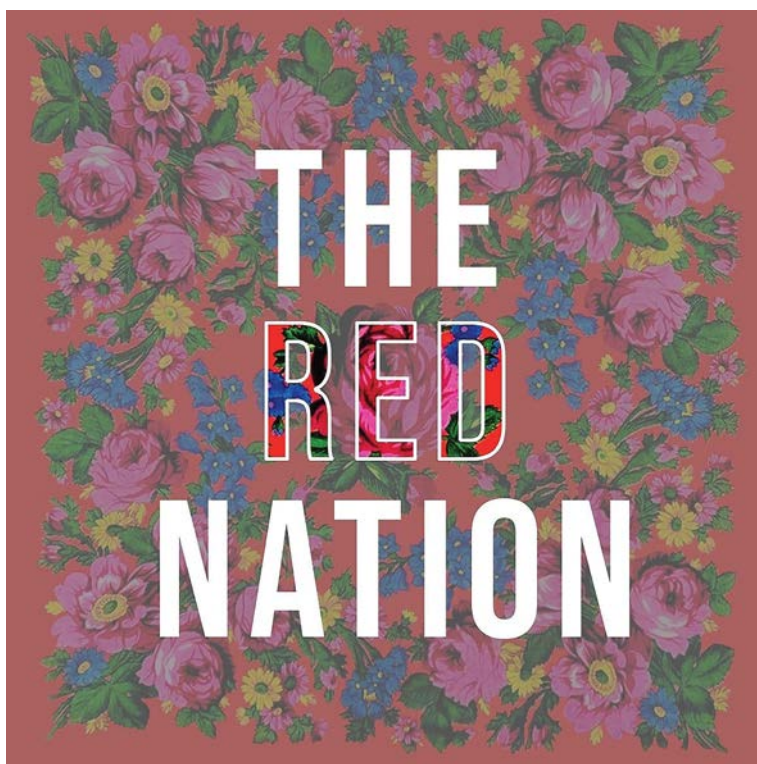


Figure 40.1 The Red Nation, 2020

SUBHANKAR: That is visual culture.

NICK: Exactly. It has its own politics.

SUBHANKAR: And it's intentional.

MELANIE: And there's iconography behind it, too.

NICK: We chose red specifically for us, The Red Nation, but the floral design handkerchief comes from the Big Mountain resistors who took up arms against the United States government when they tried to remove Navajo families from this area for coal mining. I think it was called Big Mountain, right?

MELANIE: Big Mountain up on the Black Mesa region of the Navajo Nation. It started in 1974.

NICK: And so, these Big Mountain grandmothers would wear these scarves and it became very iconic because they waged such powerful resistance against the United States, and it was the matriarchs who led it. That's one aspect of the *sáanii* scarf—

MELANIE: *sáanii* means women in Navajo, plural.

NICK: Also, many of the Zapatista women wear floral scarves as well. While their scarves are multi-colored, we chose red. It's not just because we're The Red Nation—which means the humble people of the earth—but also because of our left-socialist political orientation.

SUBHANKAR: Thank you for sharing the backstory of the red scarf and its direct connection to fossil fuel extractivism and colonial violence in your own nation, Melanie. An inspiring example of how visual culture is being employed by The Red Nation. Would we be able to print the image in the book?

NICK & MELANIE: Yes, of course.

SUBHANKAR: Now, I'll push back a little against one of your comments, Nick. In the early part of this conversation, you suggested that somehow art is this thing that we have to commission and there needs to be a budget which is necessary to pay artists who may work with you and so on.

But as we started talking, it became clear that is really not the case at all. When you are considering writing you are not thinking along that line. You are thinking of writing as a sense of joy, a form of expression, a form of politics. You and your comrades are doing that willingly. It would be wise to consider art and visual culture in that same mode.

Three inspiring women spoke at the opening panel of the Indigenous Knowledges Conference last week at UNM that Professor Jennifer Denetdale convened. Navajo artist and social justice activist Radmilla Cody sang after her remarks. It was so beautiful and powerful. That's what I mean by art. Sorry, earlier I only said visual culture. I mean art in the broadest sense.

And, Melanie, you said that you come from a family of artists and both you and Nick are artists and doing different creative things. Art is not about money. It's life. It's just like writing. It belongs to all of us in all aspects of it.

MELANIE: Thank you for saying that. This is a conversation we haven't had a lot in The Red Nation. I really appreciate this because I think it will encourage us to find a sense of joy and political purpose in our art in the same way we experience joy at a protest and, you know, the joy of just really sticking it to the man! Art can do that, too.

And thank you for pointing out that the scarf and the story of the scarf and the purpose behind it is actually part of the visual narrative of The Red Nation and has deep, profound significance for the generations of struggle that we belong to and come from.

One thing I forgot to say is that The Red Nation has, in fact, inspired several meme pages (see Figure 40.2). Memes are visual culture and incredibly important in the political culture and

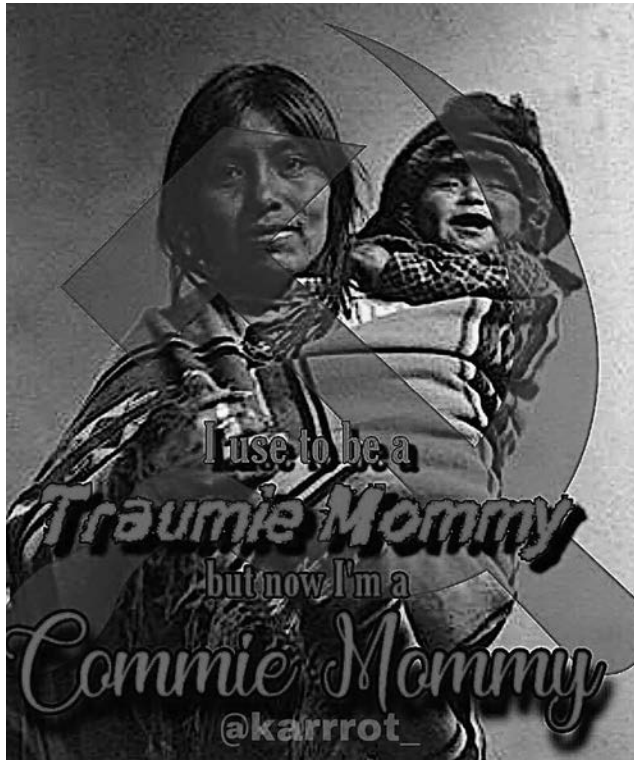


Figure 40.2 Karrot Romero, I used to be a Traumie Mommy but Now I'm a Commie Mommy, 2019

discourse within movements. Our members are obsessed with meme pages on Instagram and Facebook. They're incredibly popular and totally hilarious. Humor—that's one thing we're really good at. We are really good at humor. And that's essential to art.

SUBHANKAR: There are so many things about the Red Deal that I would like to ask you about but alas we are nearing the allotted space for this chapter. So, I would instead focus on only one aspect that is mentioned fairly late in the document and there is no elaboration. Also, the topic has not received any discussion in articles that have come out on Red Deal so far.

It is "multispecies caretaking."

NICK & MELANIE: Hmm...

SUBHANKAR: As the dual entangled crises of climate breakdown and biological annihilation continue to escalate, it would be wise to consider multispecies caretaking, especially one grounded in Indigenous perspectives.

"Traditional Indigenous territories encompass up to 22 percent of the world's land surface and they coincide with areas that hold 80 percent of the planet's biodiversity," according to a report published in 2008.⁴ It is not rocket science then to assert that Indigenous peoples have been at the forefront of caretaking Earth's biodiversity, right?

Can you talk about what “multispecies caretaking” means to you and for the Red Deal?

NICK: I’m usually quicker on the draw at this sort of stuff so I’ll just go first. If that’s ok.

MELANIE: That’s fine.

NICK: I write a lot about this in my book.⁵ And I think it’s also evident in the edited collection on Standing Rock that we wrote.⁶

I’ll talk about buffalo and salmon.

Our treaties, and the 1868 Fort Laramie Treaty, codify rights not just for human beings in Indigenous nations but also for the Buffalo Nation. This is incredibly important because when we, as Lakota people, say we want to uphold the 1868 Fort Laramie, we call ourselves the Buffalo Nation, which we use as an alternative description of ourselves internally and externally.

Right now, you see the first returns of buffalo herds to the Bad Lands.

Also, if we talk about the ownership of animals in relation to capitalism, we need to talk about Ted Turner, who is one of the largest landowners in the world. He owns about 200,000 acres of the treaty territory of our Lakota people. And on that territory, he owns the world’s largest privately owned buffalo herd.

SUBAHNKAR: Which he sells in restaurants and everywhere.

NICK: Yeah, which he sells in restaurants and everywhere.

So, what does land return mean and what does the return or restoration of rightful relations with our animal relatives look like? If just Ted Turner alone was forced to return 200,000 acres of land and also the largest buffalo herd in the world, it would be a huge victory for collective protection and caretaking, not ownership. He owns the buffalo. We want to emancipate them and let them be buffalo on our territory again. That would be a huge victory for us, right?

This gets down to another aspect, which is water. Water is not just *Mni Wiconi*, or water is life. There’s a much larger esoteric connection, an intellectual connection that doesn’t even have a translation into English. For example, our primary constellation is actually a map of the Black Hills. The center of it is Ta Mni, which actually means her water, or their water, which means uterus, and that’s where we believe we came from as Lakota and Dakota people. We understand that water is our first medicine because we’re born in water, in the womb.

That in itself opens up a whole field of thinking about multispecies struggle and defining species not just as Western science identifies them, but also how we, as Lakota people, identify them as alive animate beings. Water itself is a being, so what does it mean to respect it? This goes into the rights of our plant and our animal relatives.

So, when we define water rights, we are not just defining water rights according to industry. We are not just defining water rights according to capitalist production, which currently dictates the legal framework of water rights. What we are trying to say is that to be Lakota people we need our buffalo berries, we need our deer populations, we need our elk populations, we need our buffalo populations, we need our geese populations, we need our medicines such as sweet grass, sage, this whole host of things that have no rights currently under any kind of framework. But if we begin defining their right to water, all those things need water, as well, just as human beings do, and they need water so that we can continue to be Lakota and caretakers of the land. Then it becomes much more expansive—instead of just a rights-based framework, it expands into a holistic Indigenous framework of what it means to live in good relation and balance, or at least striving towards it.

We understand as Lakota people we are not perfect and even our stories show that at one point in time the Buffalo Nation ran away from us because we overkilled them, we overhunted them, we treated them poorly. Our first treaty relation we ever entered into and the term *Wolakota* actually comes from the White Buffalo Calf Woman coming and bringing us back into correct relations with the Buffalo Nation so that we could live together again as relatives because prior to that we were just assholes.

So, the buffalo brought us back together and that's a very important story.

There are other examples where people would actually starve themselves and not hunt or fish for salmon for several seasons because the salmon populations were depleting. The logging industry was a part of the depletion of that salmon population, where *Unist'ot'en* Camp is up right now on *Wets'uwet'en* territory in current-day British Columbia. In an interview with Anne Spice that is in the volume I co-edited on *Standing Rock*, Freda Huson talks about how her people basically went through a fast for several years just so that their animal relatives would come back.⁷ And then the moose came back, the berries came back, the salmon populations came back, the clean water came back, right? But it required sacrifice on the part of the human caretakers of that land to come back. So that's what we're thinking about.

SUBHANKAR: So, this would be an example of multispecies caretaking?

NICK: Exactly.

SUBHANKAR: You both are teary eyed. Melanie, would you like to add something?

MELANIE: As Nick was describing what Freda was talking about, the sacrifice so the salmon and the moose and the berries could come back—it makes me very emotional.

And you know, what we do in The Red Nation—we're politically pretty militant. I think we are well known for that. But the caretaking we do is also militant, it comes from a genuine and deep commitment to life and to our ways of life as Indigenous peoples. There's an immense sense of love and joy to be able to do it. That's why I'm emotional.

Multispecies caretaking is what has brought us back together as Indigenous peoples in this moment in history. It's the water. It's the air. It's the land. Protecting our other-than-human relations has reignited our fire and the traditions of resistance we hold dear to our hearts. That's why you see a politics of caretaking and affirmation coming out of these Indigenous struggles. And it's the message that is flowing through us; being given to us by our other-than-human relatives. We are just the agents.

Notes

- 1 "The Red Deal Part One: End the Occupation," The Red Nation, last modified April 2, 2020, http://therednation.org/wp-content/uploads/2020/04/Red-Deal_Part-I_End-The-Occupation-1.pdf; "The Red Deal Part Two: Heal our Bodies," The Red Nation, last modified April 2, 2020, http://therednation.org/wp-content/uploads/2020/04/Red-Deal_Part-II_Heal-Our-Bodies-2.pdf; "The Red Deal Part Three: Heal our Planet," The Red Nation, last modified April 2, 2020, http://therednation.org/wp-content/uploads/2020/04/Red-Deal_Part-III_Heal-Our-Planet.pdf.
- 2 We have written extensively about bordertown violence. See "Brutal Violence in Border Towns Linked to Colonization," Indian Country Today Media Network, accessed June 18, 2020, <https://indiancountrytoday.com/archive/brutal-violence-in-border-towns-linked-to-colonization-QyWb-MI6rHUOA0w-ZOguXVw>; and "Border Town, USA: An Ugly Reality Many Natives Call Home," Indian Country Today Media Network, accessed June 18, 2020, <https://indiancountrytoday.com/archive/border-town-usa-an-ugly-reality-many-natives-call-home-AyrBxqXFwkKaX-1p3lZJFg>.

- 3 You can read our reflection on winning this victory: “Victory! Albuquerque Declares Indigenous Peoples Day,” The Red Nation, accessed June 19, 2020, <https://therednation.org/2015/10/07/victory-albuquerque-declares-indigenous-peoples-day/>.
- 4 *The Role of Indigenous Peoples in Biodiversity Conservation: The Natural but Often Forgotten Partners* (Washington, DC: The World Bank, May 2008), xii.
- 5 Nick Estes. *Our History is the Future: Standing Rock Versus the Dakota Access Pipeline, and the Long Tradition of Indigenous Resistance* (New York: Verso, 2019).
- 6 Nick Estes and Jaskiran Dhillon, eds. *Standing with Standing Rock: Voices from the #NoDAPL Movement* (Minneapolis: University of Minnesota Press, 2019).
- 7 Anne Spice, “Heal the People, Heal the Land: An Interview with Fred Huson,” in *Standing with Standing Rock: Voices from the #NoDAPL Movement*, eds Nick Estes and Jaskiran Dhillon (Minneapolis: University of Minnesota Press, 2019), 210–221.



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