

Introduction

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Amid contested debates over the proposed Anthropocene epoch, artistic practices have emerged as vital mediums for exploration, response, and denunciation. In this terrain where knowledge produced by the humanities, social sciences, and geosciences converge, the arts stimulate questioning of humanity's centrality within planetary ecosystems. Going beyond merely reflecting conditions, these practices actively reshape shared epistemological and ontological coordinates in an era of existential crisis, provide means to denounce injustices wrought by environmental degradation, and disrupt boundaries, opening spaces to cultivate emergent more-than-human epistemes.

The impacts of industrial activity on the Earth systems have reached an unprecedented intensity, driven in large part by the unconstrained dominance of extractive ways of perceiving the world around us. Over the past decade, critical debates have arisen over how to accurately characterise this profoundly human-altered geological epoch. Since the early 2000s, the proposed Anthropocene paradigm has offered a way to reframe the global impact of industrial activities by seeking the imprinting of human forces into Earth's very geophysical strata. However, as widely contended now, at least within the humanities, this perspective has contributed to homogenising complex, uneven actions by obscuring Western-led modernity's central role fueled by exploitative social and economic regimes (Malm, Hornborg 2014; Todd 2015).

The planetary changes affecting our times manifest across microscopic and macroscopic scales, and through diverse phenomena from the pervasive diffusion of toxic pollutants to mass extinctions and climatic disasters. Their complex entanglements with both human and nonhuman forms of life reveal intricate networks of environmental degradation alongside potential avenues for regenerative futures. Moreover, the varied impacts of these transformations unfold across multiple timescales, stretching from a speculated deep future, where industrial traces will fossilise to permanently

occupy Earth's record, to the immediate present, where daily confrontation with myriad forms of environmental violence occur for humans and nonhumans alike, with disproportionate effects on vulnerable communities inhabiting global capital's sacrifice zones (de Souza 2021; Farrier 2019; Fox 1999; Klein 2015).

Alternative paradigms have emerged to make sense of such mutating planetary reality. Concepts such as the Capitalocene (Moore, Altvater, and Crist 2016), the Plantationocene (Davis et al. 2019; Haraway 2015; Mitman 2019; Murphy, Schroering 2020), and the Wasteocene (Armiero 2021) provide critical frameworks to examine the complex, multiscalar dimensions of these transformations. They highlight the inextricable links between environmental degradation and the exploitative practices of racial capitalism. Meanwhile, fields like ecocriticism, econarratology, and ecomedia studies have provided tools and methods to analyse literary and artistic representations of the ecological crisis and the narrative potentialities of matter, landscapes, and the non-human worlds (Iovino, Oppermann 2014; Cohen, Duckert 2015; James, Morel 2020; Seger 2022; López et al. 2023; Baldacci et al. 2022); while theories of toxicity and chemical contamination attempt to chart the biological ramifications of pollution across bodies and ecosystems (Murphy 2008; Davies 2018; Seger 2022). Together these diverse modes of analysis help us understand how human activities impact the environment in perceptible and imperceptible ways, and how, in exchange, these transformations leave marks in the creative output of the arts.

Moreover, it has become of crucial importance to acknowledge the growing inclusion of nonhuman subjects within the artistic production of contemporaneity, echoing also a recent tendency towards the political and legal subjectification of natural entities (Stilt 2021; Tola 2018). This development prompts a re-examination of anthropocentric foundations underpinning knowledge systems and neoliberal governance, as nonhuman beings increasingly enter into creative and analytical frames, not as passive objects, but as agential co-participants constituting meaning and the worlds we share. Microbial ecologies, technological networks, post-industrial landscapes, water and geobodies, rocks and animals all express ways of knowing and being (see, e.g., Luisetti 2023). The acknowledgement of their ways of being and their worldmaking potential can help us extend the realm of subjectivity beyond the human.

Art harbours the capacity to create spaces that enable the subversion and reconfiguration of dominant systems, yet it also risks being co-opted as a vehicle for greenwashing and perpetuating existing power structures (Demos 2010). At the fertile intersection of art and ecology, this generative potential catalyses a multidimensional field of inquiry and practice. Novel assemblages of knowledge coalesce, fostering collaborative discourses across disciplinary and methodological divides. It is not surprising that artists are incorporating texts from environmental humanities and social sciences into their work, in a constant redefinition and questioning of existing theoretical canons. The writings of influential theorists like Elizabeth Povinelli, Donna Haraway, Bruno Latour, Malcom Ferdinand, Eduardo Kohn, Kathryn Yusoff, Isabelle Stengers, Anna Tsing, Arturo Escobar, Timothy Morton, and many others resonate deeply within the work of artists

across the globe.¹ Likewise, much of the anthropological and humanities scholarly work engaging with issues such as environmental justice, extractivism, and the politics of climate change is increasingly incorporating the work of artists and artist researchers to imaginatively expand, decolonise, and undiscipline the methodologies of traditional scholarly research.² This shared language signifies the emergence of an ecology of concepts, a common ground interconnected through the pursuit of deeper understandings and more just ways of being in the world.

The present volume aims to contribute to fostering this common ground. It collects essays from a diversity of perspectives and practices that speak to the entanglements of art, ecology, and multispecies justice. While varied in approach, together they reveal the potential of building relations and collective futures between theory and practice, humanities and sciences, human and more-than-human agencies in the face of ecological precarity. The authors contributing to this volume encompass artist-researchers, art writers, and scholars, demonstrating the generative dialogue between these complementary, adjacent forms of inquiry.

The creative agency of non-human animals and environments and their collaborative potential within the arts in tracking and engendering systemic transformations are at the centre of the first three chapters. In “Exploring the Role of Non-Human Animals in Contemporary Art: As Objects, Matter, and Collaborators”, Davide Tolfo describes the ways in which animals contribute to and shape contemporary art. Artists approach animals as objects enabling reflection, as materials that challenge perceptions of nature, and as collaborators reshaping boundaries between creator, creation, and viewer. Tolfo highlights the evolving human-animal relationship in art, acknowledging potential overlaps between categories and inviting consideration of animal agency, welfare, and implications in art collaborations. The essay does not propose just a categorisation, but instead asks readers to consider the ever evolving web of relationships and dialogues between art, animals, and humans, inviting radical decentrings.

Concepción Cortes Zulueta presents an intimate perspective on blackbirds, interrogating non-human creative practices and their relationship with the Anthropocene epoch. The blackbirds described in “Blackbird Songs: More-than-Human Aural Histories in the Anthropocene” are not just ecological entities, but witnesses, actors, and ‘practitioners’ within anthropic landscapes. Ubiquitous across regions, these birds embody socio-political narratives with gendered appearances and behaviours, reflecting dynamics of visibility and audibility. Ironically, while their songs reverberate through environments, blackbirds often remain unheard. The COVID-19 pandemic exposed their significant presence as human noise dimmed and avian polyphonies took centre stage. The pandemic invited deeper engagement with birdsong’s aesthetic richness and eco-political implications, reflecting the evolving auditory landscape influenced by urbanisation, technology, and modernity. Blackbird calls, whether mimicking fellow birds or technosonic imprints, challenge listeners to confront nature, culture, and

1 Some of these include Aloï 2018; Escobar 2018; Haraway 2016; Kohn 2013; Latour 2017; Marder 2013; Morton 2016; Ferdinand 2019; Povinelli 2016; Stengers 2010; Tsing 2015; Yussoff 2018.

2 See for instance the work of Macarena Gomez-Barris and Elizabeth DeLoughrey, among many others (Gómez-Barris 2017; DeLoughrey 2019).

the politics shaping our world.

In his chapter, Pietro Consolandi embarks on a journey through humanity's primal drive to connect with their surrounding environment, beginning with ancient Sulawesi cave paintings. This innate link is further explored through collaborative works of multidisciplinary artists like Aki Inomata, who challenge ontological boundaries to reflect a harmonious relationship with nature. Shifting perspective, Consolandi examines representing space through cartography. Tupaia's Pacific map blends Polynesian and British conventions, demonstrating a synthesis of worldviews. The work of contemporary artists like Tita Salina and Irwan Ahmett as well as Rashad Salim is considered within this framework. Consolandi positions artists not as isolated creators, but integral components in an ecological and historical web of relations, drawing on the pluriversal perspectives of theorists like Arturo Escobar.

As industrial activity has irrevocably transformed landscapes through century-long processes of extractive violence and disruption, artists and practitioners can cultivate speculative imaginaries within these ruptured zones that gesture towards as-yet-unknown ecologies of care and renewal. Sam Risley is an artist that works with film, installations, and sculpture; in his chapter, "Enchanted Cutaway: Nurturing Imaginations through Regrowth and Remembrance in the Altered Landscape of the Weald", he shares his research into the impacts of iron extraction on the Cutaway woodland in the Weald region of England. Through monthly visits, Risley notices traces of industry and seeks to rekindle his connection to this land. Risley's practice involves attentive listening and intimate relationship building with the environment. He argues that this type of visitation may help contrast capitalist tendencies that sever human bonds with nature. His work recognises the woodland's violent history yet emphasises regrowth and remembrance, as his practice of staying with a place is a conscious, nurturing way of guarding the forest. Risley uses photo, video, and writing to uncover histories and reimagine the woodland's future, excavating layers of meaning within the landscape, and reorienting perspectives on the climate crisis.

Designer and researcher Matthew Darmour-Paul presents his own speculative design interventions into the Silicon Prairie in the American Midwest, examining the materialisation of platform capitalism in rural America. Darmour-Paul proposes *Digital Permaculture* to re-purpose extractive technologies toward an ecologically aware and regenerative internet infrastructure. His practice manifests alternative IT networks through designs like data mining facilities enabling prairie conservation, repurposed grain silos storing data, and disused irrigation equipment becoming wi-fi signal boosters. Blending architecture, research, and imaginative world-building, Darmour-Paul's work envisions a more just technological future for the American Midwest. His designs highlight linkages between land, infrastructure, and digital systems pushing back against platform capitalism's homogenising tendencies, aiming to uproot the damaging, pervasive monoculture of internet infrastructures.

Bridging the invisible worlds below the threshold of human perception, contemporary artists unravel the agency of nuclear particles, microbial symbioses, and technological networks. Their practices illuminate how human meanings emerge through complex intra-actions with vibrant matter (Barad 2007), challenging assumed boundaries between organic and inorganic, human and more-than-human. In the essay "Reintegrating Nuclear

Knowledge Through Contemporary. Art Transforming Repositories into Living Archives”, Giulia Melchionda addresses radioactive waste management, emphasising contemporary art’s role in disseminating nuclear knowledge. Centred on Italy’s waste disposal challenges and emerging artistic engagement, Melchionda presents the *Art Spaces* exhibition, providing insight into both Italy’s nuclear context and art’s relationship with nuclear heritage and public dissemination of knowledge. Interviews with artists underscore the importance of integrating art with nuclear discourse, suggesting nuclear concerns should be better conveyed within cultural discussions.

Ludovica Montecchio proposes a study of the 2022 exhibition *Metaspore* by Anicka Yi, an artist known for blending bioart and ecoart to represent bonds connecting human, microbial, and technological worlds. Yi’s works stimulate the human sensorium to manifest the forms of life co-creating ecosystems in which humans exist. Countering the implicit hierarchy of senses, she emphasises the sense of olfaction, using smell as an immediate connector to nonhuman worlds. Works like *Skype Sweater* and *Shameplex* merge the organic with the artificial, blending political critique with microscopic scales. *Quarantine Tents*, created amidst the Ebola outbreak, critiques microbial fears while commenting on gender politics. For Montecchio, through a method she defines as ‘cultural fermentation,’ Yi’s *Metaspore* invites a multisensory journey through acts of symbiosis between the biological and the technological allowing for an appreciation of the symbiotic relations constituting a holobiont assemblage.

From the enduring wounds of plantation legacies to the exclusions of urban architecture, to the necropolitical dimension of migrations and displacements, art practices expose the violent and toxic phenomena that shape human relationships with the more-than-human world. Their practices bring subjugated histories to the surface and imagine decolonial futures, exposing the persistent disparities of racial capitalism while imagining possible ecologies of care.

In her chapter, “Exploring the Plantationocene Through Works by Otobong Nkanga”, Rebecka Öhrström Kann, artist and writer, focuses on the art of influential artists Otobong Nkanga, from the perspective of the Plantationocene paradigm. Popularised by theorists Donna Haraway and Anna Tsing, this conceptualisation sheds light on the transformative epoch marked by aggressive extraction practices rooted in colonial power and relying on vulnerable racialised labour. According to Öhrström Kann, Nkanga’s oeuvre paints a vivid picture of the links among land, the body, and labour, highlighting the colonial dimension of Nigerian and Namibian mineral mining. Her work speaks to the commodification of vegetal beings and humans within racial capitalism. Kann draws upon diverse scholarly works, offering an understanding of how Nkanga’s artwork challenges Anthropocene narratives, unveiling persistent disparities and colonialism’s enduring marks on the planet.

The essay by Tommaso Gonzo and Giovanni Lorenzi, “Wasting Trajectories and Generative Ecologies: Leone Contini’s *Foreign Farmers*”, considers Leone Contini’s project, *Foreign Farmers*, which was part of Manifesta 12 in Palermo, Italy (2008). The work featured a vegetable garden, consisting of various non-native plant species, generously provided to Contini by migrant gardeners from various regions across Italy. Through the discerning frameworks of decolonial ecology and Marco Armiero’s Wasteocene paradigm, the authors interpret Contini’s installation as a prism to reflect on

emergent ecologies initiated by migratory movements, especially amid the unfolding climate crisis. By extending Christina Sharpe's metaphor of the *wake* to the contemporary context of Mediterranean migrations, the authors suggest a critical examination of how migrants endure the lingering echoes of colonial brutality.

Zoe Rogers' artistic practice involves researching New York City's privatised, inaccessible waterfront. She investigates the city's hostile architecture preventing public water access, imagining alternative outcomes through materiality, craft, and open-source research. Her practice centres autonomy, creating intimacy with materials and exposing toxicity through environmental justice. She explores the informal junctions of ecology and capitalism through methods like collage, performance, and sculpture. Rogers considers her own embeddedness in toxic systems, moving outside of human-centred ontologies, emphasising humans' mutual relationships with their surroundings.

The volume concludes with a conversation with artist duo Beate Geissler and Oliver Sann about their project *How does the World End for Others (?)*. A multidisciplinary installation structured as two timelines, it juxtaposes geo-historical events from Earth's origins to the Anthropocene epoch with excerpts from 47 works of science fiction and climate fiction. Meticulously arranged, these speculative futures adhere to a unique chronology that begins in 2022 per *Soylent Green* and ends in 2393 per Erik M. Conway and Naomi Oreskes' *The Collapse of Western Civilization*. This narrative progression cultivates an immersive sense of urgency, prompting contemplation of distant yet possibly imminent futures. In the conversation, Geissler and Sann share their ideas on how artists can contribute to current ecological debates, and on the relationship between speculative imagination and planetary realities.

The variety of approaches and subjects presented in the volume attests for a growing interest in studying ecological transformations, and the role of human and non-humans within them, through artistic research and practice. The contributions prove the possibility of seamlessly integrating ecological knowledge produced by artists through artistic methods or design theory in order to expand the field of discussion within the environmental humanities and social sciences. At the same time, orienting critical attention to the exhibition as a platform of theoretical production (see Berti 2022), as well as a testing space for hypotheses posited within scholarly research enables new venues for disseminating and diversifying ecological knowledge. The recurring engagement with paradigms like the Plantationocene and Capitalocene reveals a strive to tie racial capitalism and uneven power dynamics with ongoing planetary crisis. Meanwhile, the emphasis on exposing toxicities and reclaiming anthropogenic landscapes demonstrates broader environmental justice priorities. The collection of essays points to the centrality of site-specificity, social practice, political engagement, self-critique, auto-ethnographic inquiry, and speculative thought in contemporary art practices. This highlights desires for situated, insurgent meaning-making to challenge the ontologies and imaginaries of extractive capital and neoliberal governance.

In many ways, these priorities build on and expand the interventions of previous generations of artists grappling with ecological concerns and the degradation of the planetary environment. However, there is also a renewed questioning not just of dominant systems, but of the role of the artist itself

within networks of knowledge production and power and within the pervasive logics of the market and the industry. The volume attempts to move beyond mere celebration of artistic practices, using creative research to deconstruct the figure of the artist and probe its potentials and limitations within the common ground it now shares with humanities and social science. This self-reflexivity promises to generate important critical discourse alongside creative outputs. Ultimately, what is revealed is a field alive with interdisciplinary exchanges, unruly epistemologies, and speculative visions that collectively kindle hope for more just futures across the rifts of the present.

Bibliography

- Aloi, G. (2018). *Speculative Taxidermy: Natural History, Animal Surfaces, and Art in the Anthropocene*. New York: Columbia University Press. Critical Life Studies.
- Armiero, M. (2021). *Wasteocene: Stories from the Global Dump*. Cambridge: Cambridge University Press. Elements in Environmental Humanities.
- Baldacci, C.; Bassi, S.; De Capitani, L.; Omodeo, P.D. (eds) (2022). *Venice and the Anthropocene: An Ecocritical Guide*. Venice: Wetlands.
- Barad, K.M. (2007). *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham: Duke University Press.
- Berti, P. (2022). "Topologie dal network planetario: Note sulle 'mostre di pensiero' di Peter Weibel e Bruno Latour". *Elephant & Castle*, 28 (December), 95-102.
- Cohen, J.J.; Duckert, L. (2015). *Elemental Ecocriticism: Thinking with Earth, Air, Water, and Fire*. Minneapolis: University of Minnesota Press.
- Davies, T. (2018). "Toxic Space and Time: Slow Violence, Necropolitics, and Petrochemical Pollution". *Annals of the American Association of Geographers*, 108(6), 1537-53. <https://doi.org/10.1080/24694452.2018.1470924>.
- Davis, J.; Moulton, A.A.; Van Sant, L.; Brian Williams (2019). "Anthropocene, Capitalocene, ... Plantationocene?: A Manifesto for Ecological Justice in an Age of Global Crises". *Geography Compass*, 13(5), e12438. <https://doi.org/10.1111/gec3.12438>.
- DeLoughrey, E.M (2019). *Allegories of the Anthropocene*. Durham: Duke University Press.
- Demos, T. J (2010). "The Politics of Sustainability: Art and Ecology". *Radical Nature: Art and Architecture for a Changing Planet*. Cologne: Walther König, 17-30.
- Escobar, A. (2018). *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds*. Durham: Duke University Press. New Ecologies for the Twenty-First Century.
- Farrier, D. (2019). *Anthropocene Poetics: Deep Time, Sacrifice Zones, and Extinction*. Minneapolis: University of Minnesota Press.
- Ferdinand, M. (2019). *Une écologie décoloniale. Penser l'écologie depuis le monde caribéen*. Paris: Seuil.
- Fox, J. (1999). "Mountaintop Removal in West Virginia: An Environmental Sacrifice Zone". *Organization & Environment*, 12(2), 163-83. <https://doi.org/10.1177/1086026699122002>.
- Gómez-Barris, Macarena (2017). *The Extractive Zone: Social Ecologies and Decolonial Perspectives*. Durham: Duke University Press.
- Haraway, D. (2015). "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin". *Environmental Humanities*, 6(1), 159-65. <https://doi.org/10.1215/22011919-3615934>.
- Haraway, D. (2016). *Staying with the Trouble: Making Kin in the Chthulucene*. Durham: Duke University Press.
- Iovino, S.; Oppermann, S. (2014). *Material Ecocriticism*. Bloomington: Indiana University Press.
- James, E.; Morel, E. (eds) (2020). *Environment and Narrative: New Essays in Ecocriticism*. Columbus: The Ohio State University Press. <https://doi.org/10.26818/9780814214206>.

- Klein, N. (2015). *This Changes Everything: Capitalism vs. the Climate*. London: Penguin Books.
- Kohn, E. (2013). *How Forests Think: Toward an Anthropology Beyond the Human*. University of California Press.
- Latour, B. (2017). *Facing Gaia: Eight Lectures on the New Climatic Regime*. Oxford: Polity Press.
- López, A.; Ivakhiv, A.; Rust, S.; Tola, M; Chang, A.Y.; Chu, K. (2023). *The Routledge Handbook of Ecomedia Studies*. London: Routledge. <https://doi.org/10.4324/9781003176497>.
- Luisetti, F. (2023). *Essere pietra. Ecologia di un mondo minerale*. Venezia: Wetlands.
- Malm, A.; Hornborg, A. (2014). "The Geology of Mankind? A Critique of the Anthropocene Narrative". *The Anthropocene Review*, 1(1), 62-69. <https://doi.org/10.1177/2053019613516291>.
- Marder, M. (2013). *Plant-Thinking: A Philosophy of Vegetal Life*. New York: Columbia University Press.
- Mitman, G. (2019). *Reflections on the Plantationocene. A Conversation with Donna Haraway and Anna Tsing. Moderated by Gregg Mitman*. Madison: Edge Effects. https://edgeeffects.net/wp-content/uploads/2019/06/PlantationoceneReflections_Haraway_Tsing.pdf.
- Moore, J. W.; Altwater, E.; Crist, E. (2016). *Anthropocene or Capitalocene?*. Oakland: PM Press.
- Morton, T. (2016). *Dark Ecology: For a Logic of Future Coexistence*. New York: Columbia University Press.
- Murphy, M.W.; Schroering, C. (2020). "Refiguring the Plantationocene: Racial Capitalism, World-Systems Analysis, and Global Socioecological Transformation". *Journal of World-Systems Research*, 26(2), 400-15. <https://doi.org/10.5195/jwsr.2020.983>.
- Murphy, M. (2008). "Chemical Regimes of Living". *Environmental History*, 13 (October), 695-703.
- Povinelli, E.A. (2016). *Geontologies: A Requiem to Late Liberalism*. Durham: Duke University Press.
- Seger, M. (2022). *Toxic Matters. Narrating Italy's Dioxin*. Charlottesville: University of Virginia Press.
- Souza, M. Lopes de (2021). "'Sacrifice Zone': The Environment-Territory-Place of Disposable Lives". *Community Development Journal*, 56(2), 220-43. <https://doi.org/10.1093/cdj/bsaa042>.
- Stengers, I. (2010). *Cosmopolitics*. Minneapolis: University of Minnesota Press. Post-humanities 9-10.
- Stilt, K. (2021). "Rights of Nature, Rights of Animals". *Harvard Law Review Forum, Harvard Law Review Forum*, 134 Harv. L. Rev. F. 276. <https://doi.org/10.2139/ssrn.3746727>.
- Todd, Z. (2015). "Indigenizing the Anthropocene". Davis, H.; Turpin, E. (eds), *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies*. London: Open Humanities Press, 241-54. http://dx.doi.org/10.26530/oapen_560010.
- Tola, M. (2018). "Between Pachamama and Mother Earth: Gender, Political Ontology and the Rights of Nature in Contemporary Bolivia". *Feminist Review*, 118(1), 25-40. <https://doi.org/10.1057/s41305-018-0100-4>.
- Tsing, A. Lowenhaupt (2015). *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton; Oxford: Princeton University Press.
- Yusoff, K. (2018). *A Billion Black Anthropocenes or None*. Minneapolis: University of Minnesota Press.