INDIGENOUS PATHWAYS BEYOND THE "ANTHROPOCENE": BIOCULTURAL CLIMATE JUSTICE THROUGH DECOLONIZATION AND LAND REMATRIATION

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In this essay I argue, as I have similarly done elsewhere,[±] that confronting and overcoming the root drivers of Earth System crises, such as biodiversity loss—the sixth "mass extinction"—and climate change, indispensably requires the reconstitution of Indigenous territorialities and sacred ecologies by means of decolonization. This, in turn, necessitates the rematriation of Indigenous lands, the revitalization of Indigenous cultures, and the resurgence of Indigenous sovereignty and self-determination. As conveyed by Lenape and Shawnee scholar Steve Newcomb, rematriation entails restoring a people to their rightful place in sacred relationship with their ancestral land and Mother Earth.¹ Rematriation requires, among other

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demands, returning stolen and dispossessed lands to their original Indigenous caretakers and opening ample space outside of the ontology of states and markets for the autonomous reconstitution of Indigenous territorialities, lifeways, identities, cultures, knowledges, and practices in accordance with their own spiritualities, cosmovisions, communal authority, and norms.² Such are the bases for the resurgence of Indigenous communal land relations that can enable the defense and resurgence of regenerative biocultural placemaking which characterizes Indigenous land caretaking and governance. Rematriation also entails reconstituting place and self-

(https://www.tishmancenter.org/indigeneity). His work underlines how Indigenous resurgence, decolonization, and the revitalization of biocultural diversity, alongside social, environmental, and climate justice movements, are vital to overcome planetary crises. Building and extending beyond his doctoral work on *Indigenous Philosophy and World Politics*, his latest writings appear in the *Journal of World Systems Research*, the journal *Perspectives on Global Development and Technology*, the volume on *Social Movements and World-System Transformation*, and the volumes on *Anarchist Political Ecology* and on *Contesting Extinctions: Decolonial and Regenerative Futures*. He is currently working on a manuscript titled *Indigenous Resurgence beyond "Anthropocene" Collapse: From Planetary Crises to Decolonization*.

- [±] This article elaborates and builds substantially on a previous chapter where the author was the leading co-author, namely Leonardo E. Figueroa Helland et al., *Decolonize, ReIndigenize: Planetary Crisis, Biocultural Diversity, Indigenous Resurgence, and Land Rematriation, in* Contesting Extinctions: Decolonial AND REGENERATIVE FUTURES 23, 48 (Luis I. Prádanos et al. eds., 2021).
- ¹See Steven Newcomb, *Perspectives: Healing, Restoration, and Rematriation*, INDIGENOUS L. INST., http://ili.nativeweb.org/perspect.html (last visited Sept. 28, 2022).
- ² Indigenous knowledges include, among others, bioculturally diverse communal land-based socioecological organization systems; kincentric cosmovisions and spiritualties; calendar and spatial planning in sync with eco-social cycles; polycultural food/medicinal systems; holistic human-ecological health practices; communal and reciprocal labor regimes; gender complementarity or two-spirit/diverse-worlds identities; consensual decision-making systems; participatory intergenerational place-based education and knowledge transmission; place-based architecture and biocentric landscape design. Indigenous governance, management, and planning strive to integrate these into the design of convivial self-governing communities that nurture the regeneration of all life, in its full richness, plentiful vitality, and bountiful diversity, for indefinite generations. *See* Leonardo E. Figueroa Helland et al., *Decolonize, ReIndigenize: Planetary Crisis, Biocultural Diversity, Indigenous Resurgence, and Land Rematriation, in* CONTESTING EXTINCTIONS: DECOLONIAL AND REGENERATIVE FUTURES 23, 48 (Luis I. Prádanos et al. eds., 2021).

determination by centering the sovereignty and power, not of states or markets, but of Earth, land, and communities of life. This means that decolonial rematriation necessarily stands in opposition to, outside, and beyond the coloniality of anthropocentric, androcentric, Eurocentric, state-centric, and capitalist regimes of dominion and property which are at the root of the so-called "Anthropocene" crises. Thus, in unsettling ontologies that underpin the institutions, systems, and political economies of the modern-colonial order, rematriation is necessarily decolonizing and must be differentiated from reductionist and assimilationist forms of state-sanctioned and market-centric land titling. This is especially necessary where some increasingly prevalent and specific forms of titling are made to serve the interests of assimilating Indigenous peoples, local communities, and ecosystems into property regimes that facilitate a neoliberal green economy of markets for trading in ecosystem services (e.g., carbon, biodiversity, and forest carbon markets). This neoliberal green economy is anthropocentric colonialism thinly veiled in a supposedly environmental veneer which, far from protecting Mother Earth or Indigenous peoples, reinscribes the hegemony of the very same state-market systems and their colonial ontology of dominion that have been devasting the planet and Indigenous communities.

This essay proceeds as follows. First, I discuss the spiritual basis of sacred Indigenous relations to Land and Mother Earth. Second, I discuss Indigenous communities as keystone biocultures that have nurtured life's diversity, even in the face of continuing colonial violence. Third, I discuss climate and other Earth System crises as problems of colonialism where Indigenous peoples often stand up to defend the sacred at a high cost to themselves and their communities. Fourth, I discuss how Indigenous peoples and knowledges should not be seen as supplements to a world-system seeking to reform its devastations through shifts to a "green economy." Indigenous resistance and resurgence defends and (re)constitutes a pluriverse of worlds outside and beyond a world-system in irreversible decline. I discuss the above tensions in light of the continuing colonial traps of hegemonic, neoliberal green, global environmental politics and policy. Fifth, I discuss the treacherous labor of land reclamation within and against the dominance of the state-market-centric property regime, which today seeks to appropriate Indigenous lands and labors into a reductionist and desacralizing green economy of market mechanisms. Finally, I articulate how Indigenous decolonial

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land rematriation constitutes a horizon of resurgent Indigenous worlds of communal socioecological organization outside and beyond the modern-colonial regime of property and territory that is unwilling to address the Earth System crises of its own creation, and instead reasserts itself through state- and market-centric governance of the climate and Earth System. In sum, Indigenous peoples and knowledges are not supplements or correctives to the hegemonic world system; they constitute a pluriverse of worlds beyond it.

I. THE SPIRITUAL BASIS OF SACRED INDIGENOUS RELATIONS TO LAND AND MOTHER EARTH

Indigenous peoples are keystone biocultures whose millennial land-based lifeways and knowledges are central to the protection and regeneration of biodiversity as well as to climate resilience.³ This is especially so in the face of the "Anthropocene" crises caused by the modern, colonial, capitalist, patriarchal, and state-centric civilization. According to the *Local Biodiversity Outlooks* 2,⁵ Indigenous lands are being reduced to islands of biological and cultural diversity—biocultural diversity—increasingly enclosed and encroached upon by areas in which nature has been degraded and deteriorated, particularly at the behest of corporate, state, and

³ See id. at 24; see also Luisa Maffi & Ellen Woodley, Biocultural Diversity Conservation (2010); Enrique Salmon, Eating the Landscape: American Indian Stories of Food, Identity, and Resilience 24, 56, 74, 121 (2012); Michael C. Gavin et al., Effective Biodiversity Conservation Requires Dynamic, Pluralistic, Partnership-Based Approaches, 10 Sustainability 1846 (2018); Darrell A. Posey, Kayapó Ethnoecology and Culture 225–26 (2002).

⁴ See Christophe Bonneuil & Jean-Baptiste Fressoz, The Shock of the Anthropocene 3 (David Fernbach trans., 2016); Cheryl McEwan, Decolonizing the Anthropocene, in International Relations in the Anthropocene 77 (2021); see generally, Ian Angus, Facing the Anthropocene: Fossil Capitalism and the Crisis of the Earth System 19–20 (2016); John Bellamy Foster & Brett Clark, The Robbery of Nature: Capitalism and the Ecological Rift 101 (2020).

⁵ The *Local Biodiversity Outlooks 2* (LBO-2) foregrounds the numerous onthe-ground projects led by indigenous peoples and local communities that contribute to the implementation of global agreements like the Paris Agreement and the Convention on Biological Diversity. *See* FOREST PEOPLES PROGRAMME, LOCAL BIODIVERSITY OUTLOOKS 2 (2020).

settler extractive projects.⁶ Biocultural diversity expands the gamut of interlaced human-cultural and biotic diversities, particularly as a result of the long-term coevolution of reciprocally-adapting socioecological complexes.⁷ Biocultural diversity interweaves the full diversity of landscapes, ecosystems, habitats, animals, plants, and other organisms with the distinct human lifeways, cultures, languages, and knowledges with whom they have coevolved and shaped each other over thousands of years.⁸ Such long-term coevolution of reciprocal cultural-biotic land, sea, and waterscapes is characteristic of Indigenous territorialities which are interwoven through relational and spiritually-imbued place-making communal knowledge practices.⁹

For example, consider that the Maya have dwelled in Mesoamerica as a distinctive cultural form since time immemorial and for

⁶ See id. at 5, 9; Victor M. Toledo, ¿Por qué los pueblos indígenas son la memoria de la especie?, 107 Papeles de Relaciones Ecosociales y Cambio Global 27 (2009) (Spain); Álvaro Fernández-Llamazares et al., Scientists' Warning to Humanity on Threats to Indígenous and Local Knowledge Systems, 41 J. ETHNOBIOLOGY 144, 145, 147, 149 (2021).

⁷ See Figueroa Helland et al., supra note 2, at 29; see also Sophie Caillon et al., Moving Beyond the Human-Nature Dichotomy Through Biocultural Approaches: Including Ecological Well-Being in Resilience Indicators, Ecology & Soc'y Dec. 2017, at 2; Michael C. Gavin et al., Defining Biocultural Approaches to Conservation, 30 Trends Ecology & Evolution 140 (2015); see also Maffi & Woodley, supra note 3; Krystyna Swiderska et al., Int'l Inst. For Env't and Dev., Biocultural Heritage Territories 2 (2020); Juliana Merçon et al., From Local Landscapes to International Policy: Contributions of the Biocultural Paradigm to Global Sustainability, 2 Glob. Sustainability 1, 2–3 (2019); Sam Grey & Rauna Kuokkanen, Indigenous Governance of Cultural Heritage: Searching for Alternatives to Co-Management, 26 Int'l J. Heritage Stud. 919, 931 (2020); Natalia Aguilar Delgado, Community Protocols as Tools for Resisting Exclusion in Global Environmental Governance, 56 Revista de Administração de Empresas [Rev. Adm. Empres.] 395, 405 (2016) (Braz.); Gavin et al., supra note 3; Forest Peoples Programme, supra note 5, at 11; Toledo, supra note 6.

⁸ See MAFFI & WOODLEY, supra note 3; SWIDERSKA, supra note 7, at 2; see also Fernández-Llamazares et al., supra note 6, at 153; see generally Delgado, supra note 7, at 396; see generally Merçon, supra note 7; see generally Ricardo Rozzi, Earth Stewardship and the Biocultural Ethic: Latin American Perspectives, in 2 ECOLOGY & ETHICS 87 (Ricardo Rozzi et al. eds., 2015).

⁹ See MAFFI & WOODLEY, supra note 3; SWIDERSKA ET AL., supra note 7, at 2; see also Fernández-Llamazares et al., supra note 6, at 153; see generally Delgado, supra note 7, at 405; see generally Merçon et al., supra note 7; see generally Rozzi, supra note 8.

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at least eight thousand years. 10 The so-called Pygmies—including Baka, Aka, Twa, and Mbuti peoples—have lived in African rainforests similarly since time immemorial and for at least sixty thousand years. 11 Similarly, all Indigenous cultures emerge from long-term dwelling in deliberate co-adaptation, cocreation, and coevolution with specific places. 12 This results in spiritually rich biocultural and kincentric communalities enacted as sacred ecologies resulting from nurturing kin-type human-nonhuman relationships of reciprocal honoring, care, and mutual responsibility. 13 It is the ceremonial reenactment of reciprocal nurturance on a day-to-day basis upon which the cyclical regeneration of life as a whole is dependent, enriched, and celebrated. 14 Hence, biotic and cultural diversity are not merely analogous to each other in Indigenous paradigms, but are organically integrated and co-creative socioecological wholes. 15 Biocultural kincentric communities are the living intermeshed cumulative outcomes of relations that regenerate social-ecosystem metabolisms from dynamic co-creative mutual adaptation, reciprocal influence, and codesign. 16 Indigenous lifeways are rooted in such millennial co-creation and coevolution where human and nonhuman

¹⁰ See, e.g., Anabel Ford et al., The Maya Forest Garden: Eight Millenia of Sustainable Cultivation of Tropical Woodlands, 29 J. ETHNOBIOLOGY 213 (2009). With regard to the qualifier "at least" in "at least 8,000 years": Dating the histories of Indigenous cultures is contested because Indigenous knowledge-keepers challenge Western scholars' and scientists' claims, arguing that Indigenous peoples keep their own histories and timelines, and it is not up to Western scholars or scientists to validate or recognize them. That is why for Maya peoples, their own histories of dwelling in a certain place are told according to their own counts and timelines—hence the qualifier "at least." The final authority on how to date Indigenous peoples' history remains with Indigenous knowledge holders who may speak of being in a place since time immemorial or simply always.

¹¹ See Toledo, supra note 6.

¹² See Figueroa Helland et al., supra note 2, at 29; see also MAFFI & WOODLEY, supra note 3.

¹³ See Enrique Salmón, Kincentric Ecology: Indigenous Perceptions of the Human-Nature Relationship, 10 ECOLOGICAL APPLICATIONS 1327, 1328 (2000).

¹⁴ See Tirso Gonzales & Maria Gonzalez, From Colonial Encounter to Decolonizing Encounters. Culture and Nature Seen from the Andean Cosmovision of Ever: The Nurturance of Life as Whole, in NATURE AND CULTURE: REBUILDING LOST CONNECTIONS 88 (Sarah Pilgrim & Jules Pretty eds., 2010).

¹⁵ See MAFFI & WOODLEY, supra note 3.

¹⁶ See Figueroa Helland et al., supra note 2, at 29.

relationships are nurtured *interpersonally*, cultivating a non-generalizable intimacy—a mutual knowledge and respect among unique and specific human and non-human persons and places; this kincentric character of relations makes them non-objectifiable, non-substitutable, non-replaceable, and non-tradeable. This relational intimacy leads Indigenous people to tailor customary normative orders that prescribe modes of organization and practice geared to ensure the cyclical renewal and enrichment of those specific kincentric communities of life.¹⁷ Relational intimacy and relational knowledge

See Figueroa Helland et al., supra note 2, at 32. For materials on Indigenous peoples globally or from different parts of the world consider, among many others, the following: Traditional Ecological Knowledge: Learning from INDIGENOUS PRACTICES FOR ENVIRONMENTAL SUSTAINABILITY (Melissa K. Nelson & Daniel Shilling eds., 2018); James V. Fenelon, Indigenous Alternatives to the Global Crises of the Modern World-System, in Overcoming Global INEQUALITIES 143, 150, 162 (Immanuel Wallerstein et al. eds., 2015); Nicole Redvers et al., Indigenous Natural and First Law in Planetary Health, 11 CHALLENGES 1, 1-3 (2020); GREGORY CAJETE, NATIVE SCIENCE: NATURAL LAWS OF INTERDEPENDENCE (2000); James Fenelon & Jennifer Alford, Envisioning Indigenous Models for Social and Ecological Change in the Anthropocene, 26 J. WORLD-SYS. RSCH. 372, 376-77 (2020); Deborah McGregor et al., Indigenous Environmental Justice and Sustainability, 43 CURRENT OP. ENV'T SUSTAINABILITY 35, 35-37 (2020); Leonardo Esteban Figueroa Helland, Indigenous Philosophy and World Politics: Cosmopolitical Contributions from Across the Americas (Aug. 2012) (unpublished Ph.D. dissertation, Arizona State University) (on file with author); Gladys Tzul Tzul, Sistemas de gobierno comunal indígena: la organización de la reproducción de la vida, in Epistemologías del SUR (Maria Paula Meneses & Karina Bidaseca eds., 2018); Tirso Gonzales, Sense of Place and Indigenous People's Biodiversity Conservation in the Americas, in SEEDS OF RESISTANCE, SEEDS OF HOPE: PLACE AND AGENCY IN THE CONSERVATION OF BIODIVERSITY 85 (Virginia D. Nazarea et al. eds., 2013); Sarayaku, KAWSAK SACHA—LIVING FOREST, https://www.culturalsurvival.org/sites/default/files/ KawsakSacha-TheLivingForest.UICN .pdf (last visited Sept. 27, 2022); Mark Omorovie Ikeke, Communalistic Ethics and Natural Resource Depletion in Africa, 7 INT'L J. RSCH. ARTS & Soc. Sci. 145, 151 (2014); Lesley Le Grange, Ubuntu, Ukama, and the Healing of Nature, Self and Society, EDUC. PHIL. & THEORY, Sept. 2012, at 56, 61-63; Pastoralists Indigenous Non Gov't Orgs. F., Climate CHANGE MIGRANTS AND INDIGENOUS PEOPLES ADAPTATION STRATEGIES (2017); Deborah Rose, An Indigenous Philosophical Ecology: Situating the Human, 16 AUSTL. J. ANTHROPOLOGY 294, 300; Davianna Pomaikal McGregor et al., An Ecological Model of Native Hawaiian Well-Being, PAC. HEALTH DIALOG, Sept. 2003, at 106, 107 (N.Z.); Noelani Goodyear-Ka'ōpua, Introduction to NATION RISING: HAWAIIAN MOVEMENTS FOR LIFE, LAND, AND SOVEREIGNTY 1, 5 (Noelani Goodyear-Ka'ōpua et al. eds., 2014); GLADSON DUNGDUNG, ADIVASIS AND THEIR FOREST 14 (2019); Mohammed Latif Khan, Sacred Groves and Their Significance

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can only be cultivated from long-term, (in Indigenous cultures even thousands of years of) careful, and attentive interaction among and with specific communities of human and non-human companions. The interpersonal intimate appreciation for human and nonhuman persons makes each of them irreducible to equivalencies or entities that could be objectified into general categories. Thus, within Indigenous cosmovisions, nonhuman persons such as animals, plants, and landscapes, are each as unique as human persons and cannot be traded, substituted, universally measured, or generically mapped, let alone commodified, bought or sold. Indigenous communities relate with their non-human companions and territories as kin in ways that non-Indigenous people could only understand through their personal, unique, and non-substitutable relations to their familial kin. 20

in Conserving Biodiversity, 34 INT'L J. ECOLOGY & ENV'T SCI. 277 (2008); Laxman Joshi et al., Indigenous Systems and Ecological Knowledge Among Dayak People in Kutai Barat, East Kalimantan 17 (ICRAF Southeat Asia, Working Paper No. 2004_3); Avinoam Meir, Recognition Policy of Bedouin Villages in Israel, Marginalization and the Ethic of Bio-cultural Diversity, in Nature, Tourism and Ethnicity as Drivers of (De)Marginalization 201, 203, 207 (Stanko Pelc & Miha Koderman eds., 2017); Bernadette Montanari, The Future of Agriculture in the High Atlas Mountains of Morocco: The Need to Integrate Traditional Ecological Knowledge, in The Future of Mountain Agriculture 51, 68 (Stefan Mann ed., 2012).

- ¹⁸ See generally Figueroa Helland et al., *supra* note 2, at 28–29; and for some Indigenous examples, see, among many others, CAJETE, *supra* note 17; Salmón, *supra* note 13, at 1328; Joshi et al., *supra* note 17, at 18.
- 19 See Figueroa Helland et al., supra note 2, at 36, 40; and for some Indigenous examples, see, among many others, Sarayaku, supra note 17; LAURA ZANOTTI, RADICAL TERRITORIES IN THE BRAZILIAN AMAZON: THE KAYAPÓ'S FIGHT FOR JUST LIVELIHOODS 38, 26–27, 112–13 (2016); Leonardo E. Figueroa Helland & Pratik Raghu, Indigeneity vs. "Civilization": Indigenous Alternatives to the Planetary Ecological Rift, in Social Movements and World-System Transformation 189, 197, 205 (Jackie Smith et al. eds., 2016). For a critique of commodification characteristic pertinent to this perspective of Indigenous movements, consider Zapatista analyses like 300, Part I: A Plantation, a World, a War, Slim Chances, Enlace Zapatista (Aug. 22, 2018) [hereinafter Part I], http://enlacezapatista.ezln.org.mx/2018/08/22/300-part-i-a-plantation-a-world-a-war-slim-chances-subcomandante-insurgente-moises-supgaleano.
- ²⁰ See Figueroa Helland et al., supra note 2, at 28–29; and for some Indigenous examples, see, among many others, CAJETE, supra note 17, at 77, 94–95, 108–11, 178–88; Salmón, supra note 13, at 1328, 1331–32; Gonzales, supra note 17; Davianna Pomaikal McGregor et al., supra note 17, at 107; Noelani Goodyear-Ka'ōpua, Rebuilding the 'Auwai: Connecting Ecology, Economy and Education in Hawaiian Schools, 5 ALTERNATIVE 46 (2009); Mary Graham, Some Thoughts

Herein lies the "sacred" aspect of kincentric biocultural communities: relations among humans, rivers, mountains, animals, lands, insects, trees, and forests, refer to *nonreplaceable* personal relationships among human and nonhuman persons that share a unique spirit.²¹ This shared spirit between human and nonhuman persons ties them into emotional-material-existential codependency as part of Mother Earth's and the cosmos's cyclical and regenerative metabolism.²² Like a human person's relationship to their very unique familial kin, nonhumans are ancestors, relatives, and descendants, all of whom emerge from, return to, and ultimately are the land herself in recursive cycles of life-energy in constant transformation.²³ Customary communal norms prescribe the actions needed for the renewal of collective lifecycles, for which we are all co-creatively co-responsible.²⁴ And, of course, one exists and owes

about the Philosophical Underpinnings of Aboriginal Worldviews, 3 Worldviews: Glob. Religions, Culture, & Ecology 105, 105–18 (1999); Mark O. Ikeke, *The Ecological Crisis and the Principle of Relationality in African Philosophy*, 5 Phil. Study 179, 179–86 (2015).

²¹ See generally Figueroa Helland et al., supra note 2; and for some Indigenous examples, see, among many others, CAJETE, supra note 17; Figueroa Helland, supra note 17, at 285; INDIGENOUS TRADITIONS AND ECOLOGY: THE INTERBEING OF COSMOLOGY AND COMMUNITY (John A. Grim ed., Harvard Press 2001); Aurora Kagawa-Viviani et al., I Ke Ewe ' Taina o Ke Kupuna: Hawaiian Ancestral Crops in Perspective, 10 SUSTAINABILITY 4607 (2018); Rose, supra note 17, at 300.

²² See generally Figueroa Helland et al., *supra* note 2; and for some Indigenous examples, see, among many others, CAJETE, *supra* note 17, at 21, 40, 73, 260; Leonardo Figueroa Helland et al., *Decolonizing Food Systems: Food Sovereignty, Indigenous Revitalization, and Agroecology as Counter-Hegemonic Movements*, 17 PERSP. ON GLOB. DEV. & TECH. 173 (2018); FORD, *supra* note 10; Le Grange, *supra* note 17, at 63.

²³ See generally CAJETE, supra note 17, at 21, 25, 71, 73, 75, 108, 180; Figueroa Helland, supra note 17. For Indigenous examples across the world, see, for example, Daniel Coq-Huelva et al., Co-Evolution and Bio-Social Construction: The Kichwa Agroforestry Systems (Chakras) in the Ecuadorian Amazonia, 9 SUSTAINABILITY 1920 (2017); Philipp Altmann, Sumak Kawsay as an Element of Local Decolonization in Ecuador, 52 LATIN AM. RSCH. REV. 749, 749–59 (2017).

²⁴ See generally Cajete, supra note 17, at 14–15, 20–21, 94–95, 113; Figueroa Helland, supra note 17. For Indigenous examples across the world, see, among many others, Ikeke, supra note 17, at 145; Rachel Wolfgramm et al., Home: Resistance, Resilience, and Innovation in Māori Economies of Well-Being, in Traditional Ecological Knowledge: Learning from Indigenous Practices for Environmental Sustainability 216 (Melissa K. Nelson & Daniel Shilling eds., 2018).

life to one's kin and to the non-anthropocentric community of kin whom are honored and respected, and never seen as inferior. On the contrary, nonhumans are often seen as primordial or superior, progenitors, ancestors, and teachers who make our life possible and provide guidance (e.g., forests and water bodies precede us, make us possible, and teach us how to live).²⁵ They have the power to both make and unmake us; they are "sovereign" in relation to us. 26 To nurture and be nurtured, shape and be shaped, by nonhuman and human others over millennia of long-term dwelling is the basis of Indigenous cosmovisions. These principles undergird biocultural communal governance systems wherein the primary roles and responsibilities of humans are to honor their host biotic community by living always in ways that contribute to and celebrate the renewal of the richness, bounty, and complementary diversity of life where all is related.²⁷ These principles are embodied in many Indigenous cosmovisions, including notions like Lekil Kuxlejal/Utz'K'aslemal (Maya), Suma Qamaña (Ayamara), Suma Kawsay (Quechua), Ubuntu/Ukama (Bantu), Nande Reko (Guarani), Bimaadaziwin (Anishinaabe), among many others.²⁸ Such are diverse enactments of what Tewa Pueblo philosopher Greg Cajete calls the Indigenous paradigm: to always live collectively in ways that contribute to and nurture the continuous rebirth of the whole community of life in its fullest and most plentiful vitality and diversity.²⁹ Indigenous cultural formations are thus specifically land-sea-water-ocean-based and uniquely biocultural and diverse in that each cultural

²⁵ See, e.g., CAJETE, supra note 17; TRADITIONAL ECOLOGICAL KNOWLEDGE, supra note 17; Figueroa Helland, supra note 17, at 102–03; DAVID SUZUKI & PETER KNUDTSON, WISDOM OF THE ELDERS: NATIVE AND SCIENTIFIC WAYS OF KNOWING ABOUT NATURE, 39–40, 53–55, 89–91 (2006); Jaime Martinez Luna, Comunalidad as the Axis of Oaxacan Thought in Mexico, UPSIDE DOWN WORLD (Oct. 27, 2015), https://upsidedownworld.org/archives/mexico/comunalidad-axis-of-oaxacan-thought.

²⁶ See generally Cajete, supra note 17, at 79, 211, 240; Traditional Ecological Knowledge, supra note 17. For examples in application, see Hilary Whitehouse et al., Sea Country: Navigating Indigenous and Colonial Ontologies in Australian Environmental Education, 20 Env't. Educ. RSCH. 56 (2014).

²⁷ See, e.g., Tzul Tzul, supra note 17; Dungdung, supra note 17, at 14; Whitehouse et al., supra note 26; Fenelon & Alford, supra note 17, at 391.

²⁸ See Figueroa Helland et al., supra note 2, at 32; see also infra Part I and accompanying notes.

²⁹ See CAJETE, supra note 17.

formation—including each of their cosmovisions, knowledges, practices, rituals, ceremonies, celebrations, calendars, and modes of socioecological organization and reproduction—is the dynamic cocreative outcome of long-term reciprocal nurturing among relations that make up unique place-specific kincentric communities.³⁰ Such relational communities, and the land-rooted cyclical and regenerative cosmovisions that grow from them, are diametrically opposed to the anthropocentric and patriarchal ontologies and axiologies of Abrahamic worldviews and Eurocentric modern and colonial orders.³¹ They are also antithetical to the objectifying epistemologies of mastery as well as their reductionist linear teleologies underpinning narratives of dominion premised on (hu)man-centric exceptionalism, whether theological, logocentric-rationalistic, or evolutionary. Such teleologies include narratives of linear "progress," "modernization," "developmentalism," growth, accumulation, and the broader claims of Man's civilizational superiority and mastery over othered humans and nonhumans.³²

³⁰ See generally Figueroa Helland et al., supra note 2; and for some Indigenous examples, see Figueroa Helland et al., supra note 22, at 173–201; PASTORALISTS INDIGENOUS NON GOV'T ORGS. F., supra note 17; Anneli Ekblom et al., Conservation through Biocultural Heritage—Examples from Sub-Saharan Africa, LAND, Jan 2, 2019, at 1; Gayle Highpine, A Garden In Motion: Indigenous Amazonian Permaculture, AYAHUASCA.COM (Feb. 27, 2016), http://www.ayahuasca.com/amazon/a-garden-in-motion-indigenous-amazonian-permaculture; Meir, supra note 17, at 203; Montanari, supra note 17, at 68.

³¹ See generally Figueroa Helland et al., supra note 2; and for some Indigenous examples, see Angélica Castro Rodríguez & Neftalí Reyes Méndez, Diagnóstico: Alternativas comunitarias en defensa de los territorios en Oaxaca. Sembrando dignidad, reivindicamos lo común, EDUCA OAXACA (2019), https://www.educaoaxaca.org/wpcontent/uploads/2020/01/Final-diágnostico-alternativas.pdf; Goodyear- Ka'ōpua, supra note 17, at 3; Gladys Tzul Tzul, La forma comunal de la resistencia, 3 REVISTA DE LA UNIVERSIDAD DE MÉXICO [REV. U. MEX.] 105 (2019); Winfried K. Dallmann, Indigenous Peoples of the Russian North, NORWEGIAN POLAR INSTITUTE (Nov. 2001), https://ansipra.npolar.no/english/items/Russ_north.html; Trevelyan Wing, Climate Change, Green Development, and the Indigenous Struggle for Cultural Preservation in Arctic Norway, CLIMATE INSTITUTE (Nov. 2017), https://climate-org/climate-change-green-development-and-the-indigenous-struggle-for-cultural-preservation-in-arctic-norway.

³² See Sam Adelman, Epistemologies of Mastery, in RESEARCH HANDBOOK ON HUMAN RIGHTS AND THE ENVIRONMENT 20, 21 (Anna Grear & Louis J. Kotzé eds., 2015) [hereinafter Adelman, Epistemologies of Mastery]; Sam Adelman, Beyond Development: Toward Sustainability and Climate Justice in the Anthropocene, in THE LIMITS OF LAW AND DEVELOPMENT: NEOLIBERALISM, GOVERNANCE AND

II. TO NURTURE OR DESTROY DIVERSITY? INDIGENOUS BIOCULTURES VS. DESACRALIZING VIOLENCES

The spiritual basis of Indigenous kincentric biocultural communities and sacred ecologies is central to explaining why most of the world's remaining biodiversity resides in Indigenous territories—and why these communities and territories are subject to centuries of ongoing assault by actors and interests whose worldviews and socioeconomic systems require the objectification, desacralization, commodification, homogenization, domination, and exploitation of nonhuman persons, including land and Earth, and their reduction to universally measurable, exploitable, and tradeable units. Eighty percent of Mother Earth's fast-declining biodiversity is situated within the twenty to twenty-five percent of the planet's terrestrial surface still held and steadfastly defended by Indigenous peoples.³³ Given the ever increasing extractivist assaults of corporate and state actors bent on expanding commodity frontiers and opening new markets for continuing "growth" and accumulation, the prospects of stopping the catastrophic rate of biodiversity loss are dire unless Indigenous territories and self-determination are promptly secured and rematriated. Enter thus the biocultural axiom wherein

SOCIAL JUSTICE (Sam Adelman & Abdul Paliwala eds., 2020); TRADITIONAL ECOLOGICAL KNOWLEDGE, *supra* note 17; Carmen Gonzales, *Global Justice in the Anthropocene*, *in* Environmental Law and Governance for the Anthropocene 5, 16 (Louis Kotzé ed., 2017); Pluriverse: A Post-Development Dictionary (Ashish Kothari et al. eds., 2019); Philip McMichael, *Instituting the Development Project: Colonialism, Anticolonial Struggles and Decolonization, in* Development and Social Change: A Global Perspective (Philip McMichael & Heloise Weber eds., 6th ed. 2017).

³³ See Forest Peoples Programme and Indigenous Peoples Major Grp. For Sustainable Dev., Central Roles of Indigenous Peoples and Local Communities in Achieving Global Commitments on Biodiversity, Indigenous Peoples Major Grp. For Sustainable Dev. (2018), https://www.indigenouspeoplessdg.org/index.php/english/all-resources/ipmg-position-papers-and-publications/ipmg-submission-interventions/95-the-central-roles-of-indigenous-peoples-and-local-communities-in-achieving-global-commitments-on-biodiversity/file; Jonathan Loh & David Harmon, Biocultural Diversity: Threatened Species, Endangered Languages (2014); Ronald L. Trosper & John A. Parrotta, Introduction to Traditional Forest-Related Knowledge: Sustaining Communities, Ecosystems, and Biocultural Diversity 3 (John A. Parrotta & Ronald L. Trosper eds., 2012); Fernández-Llamazares et al., supra note 6; Victor Toledo, Indigenous Peoples and Biodiversity, in Encyclopedia of Biodiversity (Simon Levin ed. 2001).

the protection and restoration of biodiversity is one and the same with defending, returning, reconstituting, and rematriating Indigenous nations and territories.³⁴

Indigenous placemaking has long hosted most of the world's biodiversity hotspots by creatively enhancing the worlds' genetic resources.³⁵ In fact, Indigenous peoples have been deemed keystone cultures within biomes and ecosystems because they have not only sustained and protected biodiversity, but actually engendered and enhanced it alongside increasing soil fertility and carbon sequestration capacity, as well as providing the basis for communal food sovereignty and political-economic self-determination.³⁶ They do so through millennia-old customary communal socioecological management practices that foster and expand polycultures of species and enhance ecosystem heterogeneity and species complementarity, thereby building on and supporting ecosystem functions through methods that deliberately curate gardened landscapes and habitats.³⁷ Consider, for instance, the extensive and carefully curated Indigenous forest gardens, controlled fires, and agropastoralist landscapes and habitats. These are whole ecosystems of biocultural, agroecological, and medicinal diversity nurtured over millennia by Indigenous cultures such as the South Asian Indigenous peoples

³⁴ See Toledo, supra note 33.

³⁵ See Glob. Forest Coal., 1.5°C from a Community Perspective, Forest Cover (Glob. Forest Coal., Utrecht, Neth.), Dec. 3, 2018; see also CMTY. Conservation Resilience Initiative & Glob. Forest Coal., Report of the Community Conservation Resilience Initiative (Ronnie Hall ed., 2018), http://globalforestCoalition.org/ccri-global-report.

³⁶ See Figueroa Helland et al., supra note 2, at 32; D. Barton, Indigenous Agroforestry in Latin America (1994); see also Maffi & Woodley, supra note 3; Salmón, supra note 13; Posey, supra note 3, at 172–73; Matthew D. Knoblauch, The First Gardeners: Native Americans and New Jersey's Environment at First Contact, 5 NJS 146, 160–61 (2019); Frank K. Lake et al., Considering Diverse Knowledge Systems in Forest Landscape Restoration, in Forest Landscape Restoration 42 (2018); Forest Peoples Programme and Indigenous Peoples Major Grp. for Sustainable Dev., supra note 33; Cmty. Conservation Resilience Initiative, supra note 35.

³⁷ See Lake, supra note 36; BARTON, supra note 36, at 3; MAFFI & WOODLEY, supra note 3; Knoblauch, supra note 36, at 162; see generally Posey, supra note 3, at 172.

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(Adivasi),³⁸ Borneo's Dayak,³⁹ East Africa and specifically Tanzania's WaChagga⁴⁰ and Maasai,⁴¹ Turtle Island's Haudenosaunee, Lenape, Yurok and Karuk,⁴² Amazonia's Kichwa, Bora, Amuesha, Kayapo, and Ka'apor cultures,⁴³ Andean Quechua-Aymara cultures,⁴⁴ Mesoamerica's Maya and Huastec cultures,⁴⁵ Australia's Aboriginal cultures,⁴⁶ Hawaii's Native (Kanaka Maoli) peoples,⁴⁷ North Africa's Imazighen/Amazigh (inappropriately called

³⁸ See Khan, supra note 17, at 277, 280–81.

³⁹ See Joshi et al., supra note 17, at 17.

⁴⁰ See Sunay Sabbath, Adaptation, Resilience, and Transformability: Historical Ecology of Traditional Furrow Irrigation System on Slopes of Mount Kilimanjaro (2015) (unpublished M.A. thesis, Uppsala University) (on file with author); Andreas Hemp, *The Banana Forests of Kilimanjaro: Biodiversity and Conservation of the Chagga Homegardens, in* FOREST DIVERSITY AND MANAGEMENT (David L. Hawksworth & Alan T. Bull eds., 2006).

⁴¹ See Pastoralists Indigenous Non Gov't Orgs. F., supra note 17.

⁴² See Knoblauch, supra note 36, at 148, 181, 183–84.

⁴³ See Barton, supra note 36, at 5, 10–13; Posey, supra note 3, at 4, 6, 10.

⁴⁴ See Figueroa Helland et al., supra note 22, at 173–201; see generally Gonzales & Gonzalez, supra note 14; Tirso Gonzales et al., Latin American Andean Indigenous Agriculturalists Challenge Current Transnational System of Science, Knowledge and Technology for Agriculture: From Exclusion to Inclusion, in Towards an Alternative Development Paradigm: Indigenous People's Self-Determined Development 163, 165–87 (Victoria Tauli-Corpuz et al. eds., 2010).

⁴⁵ See Victor M. Toledo, *The Multiple Use of Tropical Forests by Indigenous Peoples in Mexico: A Case of Adaptive Management*, 7 CONSERVATION ECOLOGY 1 (2003).

⁴⁶ See Rose, supra note 17, at 300.

⁴⁷ See Kawgawa-Vivani et al., supra note 21.

"Berbers"), ⁴⁸ Southwest Asia and North Africa's Bedouin, ⁴⁹ and Abya Yala's southern cone Mapuche, ⁵⁰ among many others. Unsurprisingly then, the world's high biodiversity wilderness areas and hotspots non-coincidentally overlap with seventy percent of language diversity, mostly Indigenous languages containing thousands of years of cosmovisions, practices, and knowledges rooted in the land. ⁵¹

Many areas rich in biodiversity that others have wrongly assumed—often from Eurocentric eyes—to be wild, empty, virgin, pristine, untouched, unproductive, undeveloped, or unprotected are actually the outcome of thousands of years of once thriving or still continuing, deliberate Indigenous co-design with the community of life. The past and ongoing removal of Indigenous dwellers is linked

See Didier Genin & Romain Simenel, Engogenous Berber Forest Management and the Functional Shaping of Rural Forests in Southern Morocco: Implications for Shared Forest Management Options, 39 Hum. Ecology 257 (2011); Didier Genin et al., Another Vision of Sound Tree and Forest Management: Insights from Traditional Ash Shaping in the Moroccan Berber Mountains, 429 FOREST ECOLOGY & MGMT. 180 (2018): Montanari, supra note 17, at 52. The Berber people are the same as the Imazighen/Amazigh people. The term "Berber," however, is a discriminatory term used by outsiders to refer to Imazighen/Amazigh. "Berber" is discriminatory since it represents their language as "unintelligible" (to the dominant ethnolinguistic cultures over time) and thus "barbarian." Amazigh people prefer to self-identify as Imazighen. For more on this topic, see, for example, Bruce Maddy-Weitzman, A Turning Point? The Arab Spring and the Amazigh Movement, 38 ETHNIC & RACIAL STUD. 2499 (2015); Abdelkader Cheref, Don't Call Us Berber, We Are Amazigh, NAT'L NEWS, https://www.thenationalnews.com/opinion/comment/don-t-call-us-berber-weare-amazigh-1.965334 (last visited Sept. 30, 2022); Blanca Madani, Arabization of the Amazigh Lands, 6 Int'l J. Francophone Stud. 211 (2003).

⁴⁹ See Alice Gray, Of Permaculture & Pastoralism: Heroes & Villains?, PERMACULTURE RSCH. INST. (May 24, 2013), https://www.permaculturenews.org/2013/05/24/of-permaculture-and-pastoralism-heroes-and-villains; Meir, supra note 17, at 207; J. Grainger, 'People Are Living in the Park'. Linking Biodiversity Conservation to Community Development in the Middle East Region: A Case Study from the Saint Katherine Protectorate, Southern Sinai, 54 J. ARID ENV'TS 29 (2003).

⁵⁰ See Leslie Ray, Language of the Land: The Mapuche in Argentina and Chile 106 (2007); Thora Martina Herrmann, *Indigenous Knowledge and Management of Araucaria Araucana Forest in the Chilean Andes: Implications for Native Forest Conservation*, 15 Biodiversity & Conservation 647 (2006).

⁵¹ See L.J. Gorenflo et al., Co-occurrence of Linguistic and Biological Diversity in Biodiversity Hotspots and High Biodiversity Wilderness Areas, 109 PNAS 8032 (2012).

to a decline in biodiversity.⁵² This decline has occurred in settler colonial occupied states, despite the creation of so-called national parks and protected areas (many created by dispossessing and removing Indigenous peoples and imposing a fortress conservation model that excludes historically-rooted cultures), or as the result of other land, water, ocean, and green grabs.⁵³ Indigenous lands have faced ecocide, epistemicide, and erasure under colonial, settler colonial, and neocolonial pressures.⁵⁴ The systematic misrepresentation of Indigenous populations as deficient land managers, nonmanagers, or even destructive slash-and-burners or rapacious hunters, and of their curated places as deficient or empty landscapes available for appropriation and in need of colonial, capitalist, state, scientific, or technological "expert" intervention and administration underpins racist, discursive, and patriarchal normative justifications for past and present dispossessions.⁵⁵ This includes the theft of lands, the basis of empires, and the system of states, especially those stolen lands that constitute the material land base of contemporary settler states as well as those lands taken in old and new cycles of accumulation by dispossession, all the way up to contemporary land grabs.56

⁵² See Fernández-Llamazares et al., supra note 6, at 146; see also Toledo, supra note 6.

⁵³ See Lara Domínguez & Colin Luoma, Decolonising Conservation Policy: How Colonial Land and Conservation Ideologies Persist and Perpetuate Indigenous Injustices at the Expense of the Environment, Land, Feb. 2020, at 1–15; see also Maffi & Woodley, supra note 3; Michel P. Pimbert, Constructing Knowledge for Food Sovereignty, Agroecology, and Biocultural Diversity, in Food Sovereignty, Agroecology and Biocultural Diversity: Constructing and Contesting Knowledge 18, 25 (Michel P. Pimbert ed., 2018); Priscilla Settee, Indigenous Food Sovereignty in Canada, in Traditional Ecological Knowledge 175, 181–85 (Melissa K. Nelson & Daniel Shilling eds., 2018); Lake, supra note 36.

⁵⁴ See Gorenflo et al., supra note 51, at 8032.

⁵⁵ See, e.g., Posey, supra note 3, at 10; Knoblauch, supra note 36, at 148; Laura Pulido, Racism and the Anthropocene, in Future Remains 116, 126 (Gregg Mitman et al. eds., 2018); Sara Vigil, Green Grabbing-Induced Displacement, Istituto Per Gli Studi Di Politica Internazionale (Mar. 23, 2018), https://www.ispionline.it/it/pubblicazione/green-grabbing-induced-displacement-19959.

⁵⁶ See Pulido, supra note 55, at 126–27, see, e.g., Vigil, supra note 55, at 1–2; Posey, supra note 3, 223–33.

This interlocking assault on Indigenous peoples and kinship communities (embedded in Indigenous territories) has been centuries in the making and one and the same with the assault on Mother Earth.⁵⁷ Today, this modern, colonial, capitalist, patriarchal, and state-centric civilization continues chugging along notwithstanding COVID-19, imminent climate catastrophe, and manifold converging cyclical crises. This "modern" civilization is well on its path to drive us all past the geologically-irreversible precipice of Hothouse Earth as it crosses epochal boundaries, social limits, and environmental thresholds, including so-called planetary boundaries, triggering tipping points whose complex nonlinear dynamics are well beyond its capacity to fully understand, let alone hubristically 'manage' or control; yet neither geoengineering, nor eco-modernization or Earth System Governance will suffice. 58 For as Indigenous and Black knowledge keepers and scholars surmise, this Earth System crisis is the predictable outcome of centuries of the deliberate imperial, colonial, white supremacist, Eurocentric, capitalist, state developmentalist, and extractivist uprooting of human and nonhuman persons from their lands, rupturing their kinship relations, and transforming both human and nonhuman bodies and lands into desacralized productive resources: homogenized, tradeable, consumable,

⁵⁷ See generally Heather Davis & Zoe Todd, On the Importance of a Date, or Decolonizing the Anthropocene, 16 ACME 761 (2017); Adelman, Epistemologies of Mastery, supra note 32, at 16, 18.

⁵⁸ For a description of Hothouse Earth, planetary boundaries and tipping points, see Carl Folke et al., Our Future in the Anthropocene Biosphere, 50 AMBIO 834, 841 (2021). For a description of planetary boundaries, specifically, see The Nine Planetary Boundaries, STOCKHOLM RESILIENCE CENTRE, https://www.stockholmresilience.org/research/planetary-boundaries/the-nine-planetary-boundaries.html (last visited Sept. 10, 2022). For critical discussions of geoengineering, eco-modernization, and Earth System Governance, see, for example, Patrick Bond, As Climate Crisis Worsens, the Case for Eco-socialism Strengthens, CADTM (Nov. 3, 2021), https://www.cadtm.org/As-Climate-Crisis-Worsens-the-Case-for-Eco-socialism-Strengthens; Ariel Salleh, Neoliberalism, Scientism and Earth System Governance, in The International Handbook of Political ECOLOGY 432 (Raymond L. Bryant ed., 2015); The Big Bad Fix: The Case Against Climate Geoengineering, ETC GRP. (Feb. 2018), https://etcgroup.org/sites/ www.etcgroup.org/files/files/etc bbf mar2018 us v1 web.pdf; Patrick Bond & Rahul Basu, 'Unequal Ecological Exchange' Worsens Across Time and Space, Creating Growing Northern Environmental Liabilities, CADTM (May 19, 2021), https://www.cadtm.org/Unequal-ecological-exchange-worsens-across-time-andspace-creating-growing.

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and ultimately disposable.⁵⁹ As Kyle Whyte underlines, while many are now concerned with crossing ecological tipping points, the relational tipping points were crossed long ago by colonialism, capitalism, and industrialization; it is too late for the dominant civilization and its state-market-technoscientific apparatus to repair its environmental damages or social harms.⁶⁰ Only by renouncing its power, relinquishing control, and opening space for the resurgence of other subjugated worlds can we hope for a congenial geological and social future.

Indigenous peoples understand that it is the colonial continuum that desacralizes and objectifies life which gives way time and again to increasing homogenization, domination, and commodification. The "Anthropocene" or rather Eurocene, Androcene, Plantationocene, Homogecene and Capitalocene, is the inevitable upshot of a violent process of centuries of continuing dispossession, ecocide, ethnocide, genocide, epistemicide, and destruction of Indigenous peoples' kincentric biocultural communities. For over five centuries, up to five thousand of the approximately twelve thousand ethnolinguistic cultures once extant before modern colonialism have been sacrificed at the altar of development, modernization, resource

See Davis & Todd, supra note 57, at 763; Pulido, supra note 55, at 126–27; Carmen G. Gonzalez, The Sacrifice Zones of Carbon Capitalism: Race, Expendability and Loss and Damages, in RESEARCH HANDBOOK ON CLIMATE CHANGE LAW AND LOSS & DAMAGE 44–48 (Meinhard Doelle & Sara L. Seck eds., 2021); KATHRYN YUSOFF, A BILLION BLACK ANTHROPOCENES OR NONE 6–7 (2018); Kyle Whyte, Too Late for Indigenous Climate Justice: Ecological and Relational Tipping Points, WIRES CLIMATE CHANGE, Nov. 2019, at 7 [hereinafter Whyte, Too Late for Indigenous Climate Justice]; Kyle Whyte, Indigenous Science (Fiction) For The Anthropocene: Ancestral Dystopias and Fantasies of Climate Change Crises, 1 ENV'T & PLAN. E: NATURE & SPACE 224, 227 (2018) [hereinafter Whyte, Indigenous Science (Fiction) for the Anthropocene]; see generally, Fenelon, supra note 17; Fenelon & Alford, supra note 17, at 372–79; Janae Davis et al., Anthropocene, Capitalocene, . . . Plantationocene?: A Manifesto for Ecological Justice in an Age of Global Crises, 13 GEOGRAPHY COMPASS 3 (2019); Jude L. Fernando, The Virocene Epoch, 27 J. Pol. Ecology 635 (2020); Michael W. Murphy & Caitlin Schroering, Refiguring the Plantationocene: Racial Capitalism, World-Systems Analysis, and Global Socioecological Transformation, 26 J. WORLD-SYS. RSCH. 401 (2020).

⁶⁰ See Whyte, Too Late for Indigenous Climate Justice, supra note 59, at 1.

⁶¹ See Fenelon, supra note 17; see also MAFFI & WOODLEY, supra note 3; see also McEwan, supra note 4, at 77–78; see also Fernando, supra note 59, at 640.

extraction, and Eurocentric civilization. 62 The vast majority of the cultures destroyed by modern colonialism are non-Western and Indigenous, and with them have gone millennia of regenerative landbased practices and knowledges. 63 The dominant civilization justifies its violent reorganization of the world-system upon patriarchal, racist, and anthropocentric doctrines and epistemologies of mastery that claim that whole worlds of biocultural meaning and relational knowledge have been empty, wild, undeveloped, or un-conserved, and that non-human communities and persons, just like Indigenous people, are savage, unpredictable, and must be made legible, dominated, tamed, domesticated, decoded, and managed. 64 Lest one think that such colonial perspectives are a thing of the past, to this day the grabbing of Indigenous lands is still justified upon the premise that external "experts," power brokers, investors, and state agents know better than Indigenous peoples how to care for lands, whether for the purposes of resource extraction, production, profit, settlementurbanization, conservation, or other purposes. 65 And lest one thinks

⁶² See Toledo, supra note 6.

⁶³ See id; see also Fernández-Llamazares et al., supra note 6, at 147; see also MAFFI & WOODLEY, supra note 3.

⁶⁴ See Carmen Gonzales, Racial Capitalism and the Anthropocene, THE CAMBRIDGE HANDBOOK OF ENVIRONMENTAL JUSTICE AND SUSTAINABLE DEVELOPMENT 73-74 (2021); Knoblauch, supra note 36, at 174; Fenelon, supra note 17, at 154–55, 158; Adelman, Epistemologies of Mastery, supra note 32, at 13; Ivan R. Scales, Tropical Forests, Politics, and Power: From Colonial Concessions to Carbon Credits, 23 Brown J. World Affs. 191, 194–95 (2017); Erika Cudworth & Stephen Hobden, Civilisation and the Domination of the Animal, 42 MILLENNIUM 746, 752–65 (2014); Gene Ray, Resisting Extinction: Standing Rock, Eco-Genocide, and Survival, S. As STATE MIND, Fall/Winter 2017, at 141; Jason W. Moore, The Capitalocene, Part I: On the Nature and Origins of our Ecological Crisis, 44 J. PEASANT STUD. 594, 596-97, 601, 605 (2017); James W. Moore, The Capitalocene Part II: Accumulation by Appropriation and the Centrality of Unpaid Work/Energy, 45 J. PEASANT STUD. 237 (2018); Brett Bowden, The Thin Ice of Civilization, 36 ALTERNATIVES 118 (2011); see generally Judith Verweijen & Alexander Dunlap, The Evolving Techniques of the Social Engineering of Extraction, Pol. Geography, Jan. 2021, at e3-e4.

⁶⁵ See, e.g., Last Line of Defence, GLOB. WITNESS (Sept. 13, 2021) https://www.globalwitness.org/en/campaigns/environmental-activists/last-line-defence; INDIGENOUS ENV'T NETWORK & OIL CHANGE INT'L, INDIGENOUS RESISTANCE AGAINST CARBON (2021); Gonzales, supra note 64, at 79–80; Nathalie Butt et al., The Supply Chain of Violence, 2 NATURE SUSTAINABILITY 742, 742 (2019); Scales, supra note 64, at 198–99; see also Fernández-Llamazares et al., supra note 6; Glob. Just. Ecology Project, A Darker Shade of Green: REDD

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"nature" is no longer othered as wild, hegemonic discourses increasingly portray humans as threatened by an unstable Earth System and humanity as at war against a coming anarchy of climate chaos that must be technoscientifically controlled, geoengineered, securitized, and even militarized. Yet the main problem is not Earth's

YouTube 20, Alert and the *Future* of Forests, (Jan. 2012), https://www.youtube.com/watch?v=FPFPUhsWMaQ; Martin Crook et al., Ecocide, Genocide, Capitalism and Colonialism: Consequences for Indigenous Peoples and Glocal Ecosystems Environments, 22 THEORETICAL CRIMINOLOGY 298, 298–99 (2018); TRANSNAT'L INST., THE GLOBAL LAND GRAB: A PRIMER (2012); CMTY. CONSERVATION RESILIENCE INITIATIVE, supra note 35; Dianne E. Rocheleau, Networked, Rooted and Territorial: Green Grabbing and Resistance in Chiapas, 42 J. Peasant Stud., 695, 695-723 (2015); Verweijen & Dunlap, supra note 64; Alexander Dunlap, The Politics of Ecocide, Genocide and Megaprojects: Interrogating Natural Resource Extraction, Identity and the Normalization of Erasure, 23 J. GENOCIDE RSCH. 212 (2021) [hereinafter Dunlap, Ecocide]; Alexander Dunlap, Wind, Coal, and Copper: The Politics of Land Grabbing, Counterinsurgency, and the Social Engineering of Extraction, 17 GLOBALIZATIONS 661, 674 (2020) [hereinafter Dunlap, Wind]; Seneca Media & Commc'ns Ctr., Protecting Our Ancestors: Saving Native Burial Grounds, YouTube (Nov. 2, 2020), https://www.youtube.com/watch?v=eqmZmEzQZRY; Simone Athayde, Introduction: Indigenous Peoples, Dams and Resistance, 12 TIPITÍ 80 (2014); Bárbara Jerez et al., Lithium Extractivism and Water Injustices in the Salar de Atacama, Chile: The Colonial Shadow of Green Electromobility, 87 Pol. Geography 2 (2021); PASTORALISTS INDIGENOUS NON GOV'T ORGS. F. ET AL., CLIMATE CHANGE MITIGATION STRATEGIES AND EVICTION OF INDIGENOUS PEOPLES FROM THEIR ANCESTRAL LANDS: THE CASE OF TANZANIA (2015); Wing, supra note 31; Rebecca Lawrence, Internal Colonisation and Indigenous Resource Sovereignty: Wind Power Developments on Traditional Saami Lands, 32 ENV'T & PLAN. D 1036 (2014).

66 See Climate False Sols., Hoodwinked in the Hothouse: Resist False SOLUTIONS TO CLIMATE CHANGE 1-3 (2021); Jesse Bragg et al., The Big Con: How Big Polluters Are Advancing a "Net Zero" Climate Agenda to Delay, Deceive and Deny, CORP. ACCOUNTABILITY (Jun. 2021), https://www.corporateaccountability.org/wp-content/uploads/2021/06/The-Big-Con EN.pdf; ETC GRP., supra note 58, at 4–10; Nafeez Ahmed, War, Empire and Racism in the Anthropocene: The Biophysical-Economics and Military-Logics of Industrial Hyperreality, MEDIUM (June 27, 2019), https://medium.com/insurge-intelligence/war-empire-and-racism-in-the-anthropocene-133f13c3fb1; Climate Chaos (Part II)—The Militarization of Liberals' Climate Change Response, CITATIONS NEEDED (Oct. 28, 2020), https://citationsneeded.medium.com/episode-122-climate-chaos-part-ii-the-militarization-of-liberals-climate-change-response-7c5e3c7a1d8d. For additional readings on the link between climate change and militarization, see generally LORAH STEICHEN & LINDSAY KOSHGARIAN, INST. FOR POL'Y STUD., NO WARMING, NO WAR: HOW MILITARISM FUELS THE CLIMATE CRISIS (2020); SANJAY CHATURVEDI & TIMOTHY DOYLE, CLIMATE TERROR: A CRITICAL

immunological response to the domineering violence of the colonial-capitalist-state apparatus, but the savagery of a civilization whose power depends on that violence and the apparatuses producing it.

Notwithstanding continuing marginalization and ecocidal, genocidal, and ethnocidal violence, there remain upwards of four hundred million self-identified Indigenous peoples globally.⁶⁷ These peoples make up more than five thousand nations and between five and ten percent of Earth's human population; of the seven thousand languages left, four thousand are Indigenous who altogether make up the largest linguistic, cultural, and ethnic diversity in the world.⁶⁸ By enacting modes of socioecological organization whose design is subservient to the regeneration and enhancement of landscape biodiversity and heterogeneity, Indigenous cultures have multiplied into a rich panoply of biocultural and ethnolinguistic diversity, each co-evolving in intimate relation with their unique places and landscapes. The greatest ethnolinguistic and cultural diversity is always found in the places of the highest biodiversity, such as New Guinea, which on its own has eight hundred languages, and Oaxaca, Mexico with 150 languages in a relatively small area of less than one hundred thousand square kilometers. Further, each of these languages has multiple variants (e.g., Zoque) which themselves can be seen as distinct languages.⁶⁹ And yet, there is massive statistical erasure in at least two forms. First, the numbers obscure the fact that colonialism is a process that constantly enacts de-Indigenization—that is,

GEOPOLITICS OF CLIMATE CHANGE (2015); THE SECURE AND THE DISPOSSESSED: HOW THE MILITARY AND THE CORPORATIONS ARE SHAPING A CLIMATE-CHANGED WORLD (Nick Buxton & Ben Hayes eds., 2015); TODD MILLER ET AL., TRANSNAT'L INST., GLOBAL CLIMATE WALL: HOW THE WORLD'S WEALTHIEST NATIONS PRIORITIZE BORDERS OVER CLIMATE ACTION (2021).

⁶⁷ See Forest Peoples Programme and Indigenous Peoples Major Grp. For Sustainable Dev., *supra* note 33, at 6; U.N. Dep't of Econ. & Soc. Affs., State of the World's Indigenous Peoples at 1, U.N. Doc. ST/ESA/328, U.N. Sales No. 09.VI.13 (2009); *Who Are Indigenous Peoples,* First Peoples Worldwide, http://www.firstpeoples.org/who-are-indigenous-peoples.htm (last visited Sept. 27, 2022).

⁶⁸ See Forest Peoples Programme and Indigenous Peoples Major Grp. For Sustainable Dev., *supra* note 33, at 8; U.N. Dep't of Econ. & Soc. Affs., *supra* note 67.

⁶⁹ See Toledo, supra note 6; see also J.T. Faarlund & Yásnaya Elena Aguilar Gil, La Lengua Zoque (2017).

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the systematic erasure of Indigeneity (e.g., through assimilation or "acculturation" coupled with extermination) via forced dismantling and destruction of Indigenous identities and sociopolitical entities and forced dispossession of biocultural kincentric communities and assimilation into modern orders. 70 Second, there is an internalized colonial violence that compels otherwise self-identified Indigenous peoples and groups who still inherit Indigenous cultures, lifeways, or lands to feel compelled to abandon them in order to not face harm, discrimination, precarity, or premature death at the hands of the dominant "modern" societies.⁷¹ Both forms of active erasure are driven by the visible and structural violence of empires, states, capitalism, and "the market" of modernization, industrialism, developmentalism, globalization, extractivism, and "green" colonialism such as fortress conservation and green grabbing. 72 They can be enacted through manifestly coercive force, such as forced relocations, or through the instruments of Eurocentric or state-centric religion, law, education, culture, and the media.⁷³

See, e.g., Guillermo Bonfil Batalla, México Profundo: Reclaiming A CIVILIZATION 46 (Philip A. Dennis trans., Univ. of Tex. Press 1996) (1987); INDIGENOUS DATA SOVEREIGNTY AND POLICY 82, 99, 229, 233 (Maggie Walter et al. eds., 2021); see also Fenelon, supra note 17, at 154, 161; James V. Fenelon & Thomas D. Hall, Revitalization and Indigenous Resistance to Globalization and Neoliberalism, 51 AM. BEHAV. SCIENTIST 1867, 1872-76 (2008); Fernández-Llamazares et al., supra note 6; Makere Stewart-Harawira, Re-Singing the World: Indigenous Pedagogies and Global Crisis During Conflicted Times, in GLOBALIZATION AND "MINORITY" CULTURES: THE ROLE OF 'MINOR' CULTURAL GROUPS IN SHAPING OUR GLOBAL FUTURE 160 (Sophie Croisy ed., 2015); 8 STUDIES IN INTERNATIONAL MINORITY AND GROUP RIGHTS 160-84 (Gudmundur Alfredsson & Kristen Henrad eds., 2021); DESI RODRIGUEZ-LONEBEAR, Building a Data Revolution in Indian Country, in Indigenous Data Sovereignty: TOWARD AN AGENDA 253-72 (Tahu Kukutai & John Taylor eds., 2016); The Indigenous World 2021: Indigenous Data Sovereignty, INT'L WORK GRP. FOR INDIGENOUS AFFS. (Mar. 18, 2021), https://www.iwgia.org/en/ip-i-iw/4268-iw-2021-indigenous-data-sovereignty.html.

⁷¹ *See* Bonfil Batalla, *supra* note 70, at 119; Rodriguez-Lonebear, *supra* note 70.

⁷² See CMTY. CONSERVATION RESILIENCE INITIATIVE, supra note 35; see also Policy Recommendations for the Convention on Biological Diversity Conference of the Parties 14, GLOB. FOREST COAL. (2018), https://globalforestcoalition.org/cbd-cop14-policy-recommendations.

⁷³ See, e.g., Crook et al., supra note 65, at 299; Angelique Townsend Eagle-Woman, The Ongoing Traumatic Experience of Genocide for American Indians and Alaska Natives in the United States, 3 Am. INDIAN L.J. 424, 437, 442–43, 448

For example, the decline in language diversity is a frighteningly accurate marker of the loss of Indigenous cultures and biodiversity. Homogenizing institutions have been propelling linguistic imperialism and linguicide to such extents that by the end of this century fifty percent to ninety percent of all remaining languages could vanish. 74 The destruction of Indigenous diversities is one and the same with the destruction of biodiversity and agrobiodiversity. The extent and speed of biodiversity loss in the last few centuries is compromising ecosystem functions, 75 and since the onset of neoliberal capitalist globalization, the trend in the loss of both biodiversity and cultural diversity has accelerated with the Index of Linguistic Diversity and the Living Planet Index (LPI) of species populations showing highly correlated declines of at least thirty percent since the 1970s. 76 As for food diversity and resiliency, across the world it has so far been documented that Indigenous knowledges have creatively enhanced agrobiodiversity as the key contributors to the estimated 1,200 to 1,400 new species nurtured since the Neolithic

(2015); Fenelon & Hall, supra note 70, at 1876–77; Stewart-Harawira, supra note 70; Racism: A History (BBC television broadcast 2007); BONFIL BATALLA, supra note 70, at 75, 105; Whyte, Indigenous Science (Fiction) for the Anthropocene, supra note 59, at 226–28; Karina L. Walters et al., Dis-placement and Dis-ease: Land, Place, and Health Among American Indians and Alaska Natives, in COMMUNITIES, NEIGHBORHOODS, AND HEALTH (Linda M. Burton et al. eds. 2010); see generally Eve Tuck & K. Wayne Yang, Decolonization is Not a Metaphor, 1 DECOLONIZATION 1, 1–40 (2012); Gladys Tzul Tzul, Rebuilding Communal Life: Ixil Women and the Desire for Life in Guatemala, 50 NACLA REP. ON AMS. 404, 404 (2018); Walter Delrio et al., Discussing Indigenous Genocide in Argentina: Past, Present, and Consequences of Argentinean State Policies toward Native Peoples, 5 GENOCIDE STUD. & PREVENTION 138 (2010); Crescencio Bastida Muñoz, Five Hundred Years of Resistance: Self-Determination and Political Strategies for Rejuvenation Among Indigenous Peoples in Mexico (1997) (M.A. thesis, Carleton University) (Carleton University Research Virtual Environment).

⁷⁴ See Peter K. Austin & Julia Sallabank, *Introduction* to CAMBRIDGE HANDBOOK OF ENDANGERED LANGUAGES 2–5 (Peter K. Austin & Julia Sallabank eds., 2011); Robert Phillipson & Tove Skutnabb-Kangas, *Linguistic Imperialism and Endangered Languages*, in HANDBOOK OF BILINGUALISM AND MULTILINGUALISM (Tej K. Bhatia & William C. Ritchie eds., 2012).

⁷⁵ See Alice B. M. Vadrot, Endangered Species, Biodiversity, and the Politics of Conservation, in GLOBAL ENVIRONMENTAL POLITICS: CONCEPTS, THEORIES AND CASE STUDIES (Gabriela Kütting & Kyle Herman eds., 2018).

⁷⁶ See Loh & Harmon, supra note 33; Gorenflo et al., supra note 51, at 8032–37; see also Maffi & Woodley, supra note 3; see generally Fernández-Llamazares et al., supra note 6.

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period and countless varieties since.⁷⁷ Of course, actual figures are likely much higher than documented estimates suggest since Indigenous peoples are known to deliberately nurture ecosystem heterogeneity, much of which is not visible to those outside of Indigenous cosmovisions and practices, and much of which is lost through genocidal, ecocidal, and ethnocidal erasure.⁷⁸ In contrast, the modern global food system has been relentlessly reducing global agrobiodiversity to the handful of marketable crops it can produce in high yields, some now bioengineered.⁷⁹ Increasingly, these crops are just "flex crops," amenable for financialized speculation, as they can be marketed as food, fiber, feed, or industrial inputs and now even as fast-growing trees designed to suck the excess carbon out of the atmosphere.⁸⁰

⁷⁷ See Toledo, supra note 6; see also Toledo, supra note 33.

See, e.g., Fernández-Llamazares et al., supra note 6, at 156-57; Agroecología y desarrollo endógeno sustentable para vivir bien: 25 años de la experiencia de AGRUCO, AGRUCO (2011), http://biblioteca.clacso.edu.ar/ Bolivia/agruco/20170928052016/pdf_223.pdf; Miguel A. Altieri, Foreword to GARY PAUL NABHAN, ENDURING SEEDS: NATIVE AMERICAN AGRICULTURE AND WILD PLANT CONSERVATION (1989); Miguel A. Altieri & Clara I. Nicholls, Agroecology Scaling Up for Food Sovereignty, in Sustainable Agriculture Reviews 1–6 (Eric Lichtfouse, ed., 2012); FREDDY B. DELGADO & MAYRA Á. DELGADO, EL VIVIR Y COMER BIEN EN LOS ANDES BOLIVIANOS: APORTES DE LOS SISTEMAS AGROALIMENTARIOS Y LAS ESTRATEGIAS DE VIDA DE LAS NACIONES INDÍGENA ORIGINARIO CAMPESINAS A LAS POLÍTICAS DE SEGURIDAD Y SOBERANÍA ALIMENTARIA (2014); Ford et al., supra note 10; Gonzales et al., supra note 44, at 179, 187; Carmen G. Gonzalez, Climate Change, Food Security, and Agrobiodiversity: Toward a Just, Resilient, and Sustainable Food System, 22 FORDHAM ENV'T L. REV. 493, 495–500, 502-04 (1999), Crianza Andina de la Agrobiodiversidad: Conservación in situ de plantas nativas cultivadas en el Perú v sus parientes silvestres, PRATEC (1999), http://www.pratec.org/wpress/pdfs-pratec/crianza-andina-agrobio.pdf; see generally Toledo, supra note 33; Kyle Whyte, Indigenous Food Sovereignty, Renewal and U.S. Settler Colonialism, in The Routledge Handbook of Food Ethics (Mary C. Rawlinson & Caleb Ward eds., 2016); Pimbert, supra note 53.

⁷⁹ See, e.g., Altieri & Nicholls, supra note 78; Int'l Panel of Experts on Sustainable Food Sys., A Long Food Movement: Transforming Food Systems by 2045 5–6, 88–89 (2021); Gonzalez, supra note 78; ETC Grp., Who Will Feed Us? The Industrial Food Chain vs. The Peasant Food Web 28 (2017); Heinrich Böll Found. Et al., Agrifood Atlas: Facts and Figures about the Corporations that Control What We Eat (2017); ETC Grp., Plate Techtonics: Mapping Corporate Power in Big Food 2–23 (2019).

⁸⁰ See, e.g., Saturnino M. Borras Jr. & Jennifer C. Franco, Agrarian Climate Justice: Imperative and Opportunity 6–9 (Transnat'l Inst., Working Paper No. 13, 2018); TRANSNAT'L INST., supra note 65; Winfridus Overbeek, What Could Be

On the one hand, without the keystone role of Indigenous peoples as cultures that nurture and defend biotic communities as sacred, there is a chance that little to no biodiversity would endure, particularly as we confront continuing developmentalism, extractivism, and accumulation driven by states and capitalists.⁸¹ On the other hand, the project of Eurocentric colonial modernity has been to render every community legible to its calculations by making life and peoples as homogenous as possible. It has done so by uprooting them from any intimate or particular ties with specific biocultural communities so as to transform human and nonhuman bodies into generic objects of dominion, commodification, and trade, and subjects of the state-market property regime where all becomes a productive or consumable resource in a depersonalized "market" which claims to embody the supposedly universal logic codified as law.⁸² If ever humans have conducted an immeasurably risky experiment, it is the experiment in forced homogenization of human and nonhuman communities, such as in food systems, 83 carried through the wholesale reduction of the world's diversity through the Eurocentric, colonial, racist, patriarchal, capitalist, and anthropocentric teleologies of civilization, modernity (including eco-modernism), and

Wrong About Planting Trees? The New Push for More Industrial Tree Plantations in the Global South, World Rainforest Movement (Feb. 2020), https://www.wrm.org.uy/publications/what-could-be-wrong-about-planting-trees-the-new-push-for-more-industrial-tree-plantations-in-the-global-south; Anne Petermann & Orin Langelle, Trees to Solve the World's Problems? From Genetically Engineered Trees for Forests for the Bioeconomy—to the Trillion Tree Proposal and Business for Nature, GLOB. JUST. ECOLOGY PROJECT (2019), https://globaljusticeecology.org/new-gjep-report-addresses-proposals-to-prolong-capitalism-using-trees-green-profit-schemes.

- ⁸¹ See Maffi & Woodley, supra note 3; Forest Peoples Programme and Indigenous Peoples Major Grp. for Sustainable Dev., supra note 33; Forest Peoples Programme, supra note 5.
- ⁸² See, e.g., Crook et al., supra note 65, at 309; EagleWoman, supra note 73, at 437, 442–43; Fenelon & Hall, supra note 70, at 1876; Stewart-Harawira, supra note 70; Racism: A History, supra note 73; Bonfil Batalla, supra note 70, at 160; Whyte, Indigenous Science (Fiction) For The Anthropocene, supra note 59, at 232; Walters et al., supra note 73; see generally Tuck & Yang, supra note 73; Tzul Tzul, supra note 73, at 406; Delrio et al., supra note 73; Bastida Munoz, supra note 73.
- ⁸³ See Pimbert, supra note 53, at 34–35; see also Figueroa Helland et al., supra note 22.

developmentalism.⁸⁴ The path that has taken us to Hothouse Earth and the sixth mass extinction is the path of violent and forcible biospheric and cultural simplification and reduction of both human and nonhuman diversity and of the recursive foundational violence of colonialism where the Eurocene enacts the Capitalocene which in turn enacts the Homogecene, meaning that all societies and peoples must replicate and become one with the universalizing and globalizing path of Eurocentric modernization or face extinction.⁸⁵ In this path to Hothouse Earth there is only one hegemonic way of organizing society that is deemed viable—the state-market logic of dominion, property, and growth—even while this globalized society is, by its day-to-day operations, irreversibly destroying the geological, environmental, and climatic conditions for its own viability.⁸⁶ Just as diversity breeds resiliency, homogeneity spells extinction.

III. A CLIMATE CRISIS OR A PROBLEM OF COLONIALISM? DEFENDING MOTHER EARTH AT A HIGH COST

Biocultural diversity, Indigenous resurgence, and land rematriation are also intimately tied to climate resilience.⁸⁷ Indigenous

⁸⁴ See Leonardo E. Figueroa Helland & Tim Lindgren, What Goes Around Comes Around: From the Coloniality of Power to the Crisis of Civilization, 22 J. WORLD-SYS. RSCH. 430, 445–46 (2016); see also Fernández-Llamazares et al., supra note 6, at 146.

⁸⁵ See generally Davis & Todd, supra 57; see McEwan, supra note 4.

⁸⁶ See Figueroa Helland and Lindgren, supra note 84; John Bellamy Foster & Brett Clark, The Planetary Emergency, Monthly Rev. (Dec. 1, 2012), https://monthlyreview.org/2012/12/01/the-planetary-emergency/; John B. Foster et al., The Ecological Rift: Capitalism's War on the Earth 19 (2010); Adelman, Epistemologies of Mastery, supra note 32, at 13; Nafeez Mosaddeq Ahmed, A User's Guide to the Crisis of Civilization and How to Save It 1 (2010); Alexander Dunlap & Jostein Jakobsen, The Violent Technologies of Extraction: Political Ecology, Critical Agrarian Studies and the Capitalist Worldeater (2020).

⁸⁷ See Kate Dooley et al., Climate Land Ambition & Rts. All., Missing Pathways to 1.5°C: The Role of the Land Sector in Ambitious Climate Action 1–3 (2018); Forest Peoples Programme, Closing the Gap: Rights-Based Solutions for Tackling Deforestation 43 (2018); Javier Baltodano, Community Forest Management: An Opportunity to Preserve and Restore Vital Resources for the Good Living of Human Societies, Friends of the Earth Int'l (2018), https://www.foei.org/wp-content/uploads/2018/04/Community-forest-management_an-Opportunity_EN.pdf.

peoples dwell within or next to an estimated eighty-five percent of the world's protected areas, and Indigenous-tended forests have slower or no deforestation or degradation.⁸⁸ Research has shown that over millennia, Indigenous peoples have actively contributed to increasing the expansion, density, and diversity of forest ecosystems and carbon stocks through means including Indigenous forest gardening and customary community forest governance.⁸⁹ Even in contrast with government-protected areas, Indigenous customary tenure has showcased superior protection and even enhancement of biodiversity, functional ecosystem resilience, and climate change adaptation and mitigation potential, with Indigenous community forest management resulting in increased forest carbon stocks. 90 Close to thirty-eight billion tons of carbon are hosted within communitymanaged forests, which represent approximately twenty-eight percent of countries' forests, mostly in regions with large Indigenous and forest-dwelling populations who rely on collective customary governance that sustains livelihoods by nurturing agroecologically diverse biomass. 91 Historically and to this day, Indigenous peoples' reliance on customary community forest management employs long-term forest gardening knowledges and practices that ensure the densification of carbon sinks and the stable management of carbon cycles while sustaining and enhancing biodiversity. 92 All this has been achieved without market mechanisms, exclusionary conservation enclosures such as fortress conservation or carbon offsetting

⁸⁸ See Monica Gabay & Mahbubal Alam, Community Forestry and Its Mitigation Potential in the Anthropocene: The Importance of Land Tenure Governance and the Threat of Privatization, 79 FOREST POL'Y & ECON. 26, 26–35 (2017).

⁸⁹ See Forest Peoples Programme and Indigenous Peoples Major Grp. For Sustainable Dev., *supra* note 33, at 3; Dooley et al., *supra* note 87, at 6–7, 14–20; Diego Cardona-Calle, Friends of the Earth Int'l, Community Forest Management and Agroecology 3 (2017); Gabay & Alam, *supra* note 88, at 27–29.

⁹⁰ See Gabay & Alam, supra note 88, at 29; CARDONA-CALLE, supra note 89, at 15, 21; see generally DOOLEY ET AL., supra note 87, at 8.

⁹¹ See Gabay & Alam, supra note 88, at 26, 29.

⁹² See Figueroa Helland et al., supra note 2; Cardona-Calle, supra note 89, at 23; see also Forest Peoples Programme and Indigenous Peoples Major Grp. for Sustainable Dev., supra note 33, at 3; Dooley et al., supra note 87, at 8, 15; Maffi & Woodley, supra note 3; Salmon, supra note 3; Knoblauch, supra note 36, at 162.

enclosures, or risky technofixes.⁹³ Hence, overcoming "Anthropocene" crises and regenerating ecosystems requires the restoration of the biocultural lifeways of Indigenous communities and management practices, which in turn requires the rematriation of Indigenous lands, cultures, and sovereignty.⁹⁴ Moreover, ensuring Indigenous communal tenure and sovereign customary governance, and restoring it where it has been eroded or destroyed, results in decreased deforestation and soil degradation, and likely also enhanced biodiversity and climate resiliency, since Indigenous practices not just maintain but can also restore and amplify previously damaged habitats.⁹⁵

A quarter of the world's forest carbon stored in tropical and subtropical forests is in areas managed collectively by local and Indigenous peoples, even when one-third lack legally sanctioned tenure rights. Given this limited tenure recognition, the areas under customary Indigenous governance are systematically underestimated and subject to encroachments and land grabbing. In considering varying data, it is first important to premise that due to the invisibilization of Indigenous customary governance under statecentric and intergovernmental law, statistics on Indigenous land tenure versus Indigenous land claims can result in different estimates, and with rising movements and work towards Indigenous data sovereignty, data based on Indigenous methodologies and assessments

⁹³ See Adelman, Epistemologies of Mastery, supra note 32, at 23–25; see also Kathleen McAfee, Green Economy and Carbon Markets for Conservation and Development: A Critical View, 16 INT'L ENV'T AGREEMENTS 333, 335 (2016); Sam Adelman, Tropical Forests and Climate Change: A Critique of Green Governmentality, 11 INT'L J.L. CONTEXT 195 (2015).

⁹⁴ See Gabay & Alam, supra note 88, at 27; Baltodano, supra note 87, at 4.

⁹⁵ See Figueroa Helland et al., supra note 2; see also Forest Peoples Programme and Indigenous Peoples Major Grp. for Sustainable Dev., supra note 33, at 3; Dooley et al. supra note 87, at 3, 5–6; Cardona-Calle, supra note 89, at 16, 24; Gabay & Alam, supra note 88; Fernández-Llamazares et al., supra note 6, at 157; Baltodano, supra note 87, at 4; Maffi & Woodley, supra note 3; Salmon, supra note 3.

⁹⁶ See Dooley et al., supra note 87, at 6; Forest Peoples Programme, supra note 5, at 20.

⁹⁷ *See* Forest Peoples Programme, *supra* note 5; Vigil, *supra* note 55, at 2; Dooley et al., *supra* note 87, at 5.

could lead in different directions. 98 Some estimate that Indigenous Peoples manage or have tenure over less than a third of the world's land surface, 99 while others estimate Indigenous and local customary claims at over 50 percent of Earth's land (about 6 billion hectares) even though they have 'legal,' i.e. state-sanctioned, title to only 10 percent and formal usufruct or management rights to another 8.100 The dearth of recognition of Indigenous land tenure and Indigenous land claims allows states, corporations and settlers to label communities 'illegal' in their own territories, thereby facilitating recurring waves of land, water, ocean, and green grabbing. 101 For example, the vast majority of the world's remaining forests, up to 80 percent in some estimates, are defended by 370 million Indigenous people whose sovereign territories are assaulted by extractivist operations, including mining, agribusiness, industrial operations, plantations, and these industries' government allies. 102 The displacement of Indigenous peoples leads to the erosion of their intimate knowledges and the degradation of whole biocultural and agrobiodiverse land, water, and seascapes. 103

Over history and presently, Indigenous peoples continue to confront the ecologically induced genocide resulting from the

⁹⁸ See Stephen T. Garnett et al., A Spatial Overview of the Global Importance of Indigenous Lands for Conservation, 1 Nature Sustainability 369, 370 (2018); The Red Deal: Indigenous Action to Save Our Earth Part Three: Heal Our Planet, The Red Nation (2020), http://therednation.org/wp-content/up-loads/2020/04/Red-Deal_Part-III_Heal-Our-Planet.pdf; Dooley et al., supra note 87; Forest Peoples Programme and Indigenous Peoples Major Grp. For Sustainable Dev., supra note 33; Fernández-Llamazares et al., supra note 6. Part of the reason why these data may vary is also likely due to who collects them and the erasure of Indigenous data sovereignty; for that see also Rodriguez-Lonebear, supra note 70; Int'l Work Grp. For Indigenous Affs., supra note

⁹⁹ See Stephen T. Garnett et al., supra note 98, at 370.

¹⁰⁰ See Dooley et al., supra note 87, at 5, 7; Forest Peoples Programme and Indigenous Peoples Major Grp. for Sustainable Dev., supra note 33; Glob. Forest Coal., supra note 35.

¹⁰¹ See Vigil, supra note 55, at 2.

¹⁰² See Glob. Witness, Enemies of the State? How Governments and Business Silence Land and Environmental Defenders 18–25 (2019); see also Int'l Panel of Experts on Sustainable Food Sys., supra note 79, at 27.

¹⁰³ See Int'l Panel of Experts on Sustainable Food Sys., *supra* note 79, at 27–28.

death-dealing logics of imposition, domination and exploitation that lubricate the global political economy of colonialism and capitalism. ¹⁰⁴ This has led to a vast array of negative consequences, including the loss of land, identity, and knowledges, loss of food sovereignty, physical and mental health deterioration, forced migration, and systemic racism and discrimination. 105 Corporate and state actors, often supported by intergovernmental organizations and even big green NGOs, continue to be complicit in the social engineering of compulsory compliance with continued extractivism. ¹⁰⁶ Further, Indigenous resistance to continued entrenchments, enclosures, encroachments, and exclusions is often confronted with violent and even lethal terror and repression.¹⁰⁷ Of the over 3,000 ecological distribution conflicts reported in the Environmental Justice (EJ) Atlas, roughly 40 percent involve Indigenous peoples affected by corporate, state, intergovernmental extractive and industrial projects (e.g., mining, energy including fossil fuels, nuclear, hydropower, industrial agriculture, urban development and tourism, and water management); this also includes those facing dispossession onsite or complete eviction to give way to so-called green energy projects, such as agrofuels and bioenergy tree plantations, or for green enclosures created for fortress conservation, eco-tourism, or carbon

¹⁰⁴ See Crook et al., supra note 65, at 298, 299; Davis et al., supra note 59; Butt et al., supra note 65, at 744.

¹⁰⁵ See EagleWoman, supra note 73, at 430–39, 442–43; see, e.g., Crook et al., supra note 65, at 303; Michael Gracey & Malcolm King, Indigenous Health Part 2: The Underlying Causes of the Health Gap, 374 LANCET 76 (2009); Kalinda Griffiths et al., How Colonization Determines Social Justice and Indigenous Health—A Review of the Literature, 33 J. POPULATION RSCH. 9 (2016); Walters et al., supra note 73; Fernández-Llamazares et al., supra note 6, at 149; see generally, Michael Gracey & Malcolm King, Indigenous Health Part 1: Determinants and Disease Patterns, 374 LANCET 65 (2009).

¹⁰⁶ See Verweijen & Dunlap, supra note 64, at 1; Dunlap, Ecocide, supra note 65, at 228; Dunlap, Wind, supra note 65, at 661, 668; Jutta Kill, Regulated Destruction: How Biodiversity Offsetting Enables Environmental Destruction, FRIENDS OF THE EARTH INT'L (2018), https://www.foei.org/wp-content/uploads/2019/11/foe-FoN2-regulated-destruction-EN-WEB.pdf.

¹⁰⁷ See Verweijen & Dunlap, supra note 64, at 3; Dunlap, Ecocide, supra note 65, at 222; Dunlap, Wind, supra note 65, at 671–72; Benjamin A. Sovacool, Who Are the Victims of Low-Carbon Transitions? A Political Ecology of Climate Change Mitigation, 73 ENERGY RSCH. & Soc. Sci. 73 (2021); Rocheleau, supra note 65.

capture and biodiversity offsetting. ¹⁰⁸ These neoliberal 'green economy' ¹⁰⁹ projects are deployed to keep the capitalist economy of endless growth going even if only by fueling it through slightly green means or by offsetting its damages to other, usually Southern or Indigenous places. Even though Indigenous peoples make up 5 to 10 percent of the global population and their lands only 20 to 25 percent of the global land surface, they are involved in 40 percent of ecological distribution conflicts. ¹¹⁰ Also, every year about 40 percent of all land and environmental defenders killed are Indigenous

¹⁰⁸ See Environmental Justice Atlas, EJAtlas.org (last visited Mar. 31, 2022); Joan Martinez-Alier, Is There a Global Environmental Justice Movement?, 43 J. Peasant Stud. 731, 734 (2016); Arnim Scheidel et al., Environmental Conflicts and Defenders: A Global Overview, 63 Glob. Env't Change (2020); Catherine Corson & Kenneth Iain MacDonald, Enclosing the Global Commons: The Convention on Biological Diversity and Green Grabbing, 39 J. Peasant Stud. 263, 273 (2012); see also Carol Richards & Kristen Lyons, The New Corporate Enclosures: Plantation Forestry, Carbon Markets and the Limits of Financialised Solutions to the Climate Crisis, 56 Land Use Pol'y 209 (2016); Arnim Scheidel & Courtney Work, Forest Plantations and Climate Change Discourses: New Powers of 'Green' Grabbing in Cambodia, 79 Land Use Pol'y 9, 9–18 (2018); Overbeek, supra note 80.

¹⁰⁹ See James Fairhead et al., Green Grabbing: A New Appropriation of Nature? 39 J. Peasant Stud. 237, 240 (2012); McAfee supra note 93, at 333.

¹¹⁰ Calculations based on information from the ENVIRONMENTAL JUSTICE ATLAS, supra note 108. See also Scheidel et al., supra note 108. Concerning calculations based on the Environmental Justice (EJ) Atlas: These are the author's own calculations based on data published in the EJ Atlas. Specifically, the EJ Atlas disaggregates ecological distribution conflicts in terms of the actors involved, and usefully allows one to isolate and number the specific conflicts where Indigenous peoples are involved out of the total number of ecological distribution conflicts. I used the number of conflicts documented to include Indigenous peoples in relation to the total overall number of such conflicts to arrive at the 40%. As of 5/22/2022, the EJ Atlas registers 3669 total cases reported of ecological distribution conflicts across the world. This does not include a likely significant number of unreported cases, many of which would also involve Indigenous and traditional communities. Of those 3669 total cases reported, 1468 involve the category of Indigenous or traditional groups as mobilizing groups, which, if calculated as percentage, is about 40.01% of all cases. Methodologically, once again, cases involving such groups may be among the most underreported and invisibilized as would be expected from a continuing history of oppression, erasure, media marginalization or other forms of silencing, including censure by others or self-censure at times related to threats of violence and repression or actual violence and repression.

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(almost 200 deaths per year), in addition to being victims of multiple other human rights violations and assaults.¹¹¹

Indigenous women, who make up the key intergenerational knowledge and wisdom keepers, the bearers of Indigenous futurity, as well as some of the most prominent land defenders who lead struggles based on Indigenous woman-centric or gender complementary (non-androcentric) cosmovisions, are distinctively impacted. 112 Consider, for instance, the gendered and sexual violence of extractivist man camps in variegated industrial sites, coupled with deliberate targeting, stigmatization, criminalization, and assault. 113 This violence is driven in part by the profit motive of capitalist extraction, but the identities and lands of those harmed can only be accounted for by the colonial racism and patriarchal genderization which deems Indigenous biocultural kincentric communities, their sacred territorialities, and their social reproduction potential living obstacles to the modern-colonial project of totalitarian mastery of nature and total extractivism, advanced in the globalization of universalist teleologies of 'development'. 114 The recursive

¹¹¹ See Butt et al., supra note 65, at 743.

Justice Perspective of Indigenous Women 19, 56–57 (2019); Melissa K. Nelson, Wrestling with Fire: Indigenous Women's Resistance and Resurgence, 43 Am. Indian Culture & Rsch. J. 69, 75, 81 (2019); Patricia E. Perkins, Climate Justice, Gender, and Intersectionality, in Routledge Handbook of Climate Justice (Tahseen Jafry et al. eds., 2018); Sylvia Marcos, Subversive Spirituality, in Dynamics of Religion 109 (Christoph Bochinger & Jörg Rüpke eds., 2016); Sovereign Bodies Inst. & Brave Heart Soc'y, Zuya Wicayuonihan: Honoring Warrior Women (2019); Tzul Tzul, supra note 73, at 404; Maria Alejandra Rodriguez Acha, We Have to Wake Up, Humankind! Women's Struggles for Survival and Climate and Environmental Justice, 60 Dev. 32, 33–34 (2017); Miriam Garcia-Torres et al., Collective Critical Views of the Territory from Feminism, (Re)patriarcalización de los territorios, Ecologia Politica (Jan. 10, 2018), https://www.ecologiapolitica.info/?p=10169.

¹¹³ See, e.g., FORO INTERNACIONAL DE MUJERES INDIGENAS, supra note 112, at 43, 52–53; SOVEREIGN BODIES INST. & BRAVE HEART SOC'Y, supra note 112, at 13, 16, 20; Tzul Tzul, supra note 73; Rodriguez Acha, supra note 112, at 35; Miriam Garcia-Torres et al., supra note 112.

¹¹⁴ See Adelman, Epistemologies of Mastery, supra note 32, at 20; Rodriguez Acha, supra note 112, at 33; Pulido, supra note 55, at 127; Abigail Perez Aguilera, Mining and Indigenous Cosmopolitics: The Wirikuta Case, in Ecological Crisis and Cultural Representation in Latin America 179, 181, 182, 189 (Mark Anderson & Zelia Bora eds., 2016).

waves of colonization and recolonization act as a "genocide machine" that perpetuates environmentally destructive extraction through the constant uprooting of Indigenous land relations.¹¹⁵

Across industrial sectors, corporate actors heavily implicated in land dispossession and harms against Indigenous leaders and local communities include agribusiness, mining, fossil fuel extraction, hydropower and dams, nuclear energy and waste, industrial fishing, and industrial logging. ¹¹⁶ For decades now, we have also seen the dramatic increase in renewable energy industry-related violence impacting Indigenous and local communities, including small-scale peasants, fisherfolk and forest dwellers. ¹¹⁷ Consider the following,

Here, I am elaborating on and adding to the concept of "genocide machine" as used by Robert Davis and Mark Zannis, and further explored in the work of Alexander Dunlap. Specifically, I add that the genocide machine works on the recursive reenactment of cycles and processes of colonization and recolonization. See ROBERT DAVIS & MARK ZANNIS, THE GENOCIDE MACHINE IN CANADA: THE PACIFICATION OF THE NORTH (1973); see also Dunlap, Ecocide, supra note 65, at 215.

¹¹⁶ See, e.g., Last Line of Defence, supra note 65; INDIGENOUS ENV'T NETWORK & OIL CHANGE INT'L, supra note 65; Gonzales, supra note 64, 79–80; Butt et al., supra note 65, at 742.

¹¹⁷ See, e.g., Sovacool, supra note 107; Teresa Kramarz et al., Governing the Dark Side of Renewable Energy: A Typology of Global Displacements, 74 ENERGY RSCH. & SOC. SCI. 1, 5–6 (2021); TRANSNAT'L INST., supra note 65; CMTY. CONSERVATION RESILIENCE INITIATIVE & GLOB. FOREST COAL., supra note 35; Alberto Alonso-Fradejas, 'Leaving No One Unscathed' in Sustainability Transitions: The Life Purging Agro-Extractivism of Corporate Renewables, 81 J. RURAL STUD. 127 (2021); Rocheleau, supra note 65; Vigil, supra note 55, at 2; Dunlap, Wind, supra note 65, at 663; Seneca Media & Commc'ns Ctr., supra note 65; Glob. Just. Ecology Project, supra note 65; Alexander Dunlap, The 'Solution' is now the 'Problem': Wind Energy, Colonisation and the 'Genocide-Ecocide *Nexus'* in the Isthmus of Tehuantepec, Oaxaca, 22 INT'L J. HUM. RTS. 550 (2017); Athayde, supra note 65; Anthony Oliver-Smith, Framing Social-Environmental Justice by Amazonian Indigenous Peoples: The Kayapo Case, 12 TIPITI 118 (2014); Marlene Brito-Millan et al., No Comemos Baterías: Solidarity Science Against False Climate Change Solutions, 22 Sci. for People 33 (2019); Jerez et al., supra note 65, at 9; ILSE RENKENS, INT'L WORK GRP. FOR INDIGENOUS AFFS., IWGIA REPORT 28: THE IMPACT OF RENEWABLE ENERGY PROJECTS ON Indigenous Communities in Kenya (2019); Pastoralists Indigenous Non GOV'T ORGS. F. ET AL., supra note 65; Shikha Lakhanpal, Contesting Renewable Energy in the Global South: A Case-Study of Local Opposition to a Wind Power Project in the Western Ghats of India, 30 ENV'T DEV. 51 (2019); Wing, supra note 31, at 6; Lawrence, supra note 65; Sarah Ryser, The Anti-Politics Machine of

which are just a few examples of the multiple impacts of expansive renewable industry on Indigenous peoples: hydropower (e.g., impacting Sami, Adivasis, Lenca, Cree, Inuit), agro biofuels and bioenergy (e.g., impacting the Maya, Guarani, Dayak, Mapuche), industrial wind power (e.g., impacting the Huave, Sami, Adivasi, pastoralists in Kenya), solar farms (e.g., impacting the Amazigh, Seneca), lithium (e.g., impacting the Lickanantay and Atacameños), 118 rare earth and technology minerals (e.g., impacting the Congo River basin peoples), geothermal (e.g., Maasai), and hydrogen (impacting, e.g., Southwest Turtle Island nations like Pueblo and Diné/Navajo peoples, and North African Indigenous peoples, potentially again impacting the Amazigh and Saharawis). 119 These impacts are not only produced at the industry's operating location, but across the renewable energy product's lifecycle, from the extraction of raw materials to processing, infrastructure, and disposal of phased-out infrastructure. 120 Recent research 121 documents and examines the increasing harms of industrial scale green energy transitions as well as reductionist climate change mitigation policies and projects on ecosystems and social groups, including Indigenous,

Green Energy Development: The Moroccan Solar Project in Ouarzazate and Its Impact on Gendered Local Communities, LAND, June 20, 2019, at 1.

¹¹⁸ See Brito-Millan et al., supra note 117; see also Ryser, supra note 117 (on the impacts of industrial scale solar on the Amazigh/Imazighen).

¹¹⁹ As noted above, the publications on this issue are proliferating, and the following are only some examples. See, e.g., TRANSNAT'L INST., supra note 65; CMTY. CONSERVATION RESILIENCE INITIATIVE & GLOB. FOREST COAL., supra note 35; Alonso-Fradejas, supra note 117; Rocheleau, supra note 65; Vigil, supra note 55, at 2; Seneca Media & Commc'ns Ctr., supra note 65; Glob. Just. Ecology Project, supra note 65; Dunlap, supra note 117; Athayde, supra note 65; Oliver-Smith, supra note 117; Brito-Millan et al., supra note 117; Jerez et al., supra note 65; Renkens, supra note 117; Pastoralists Indigenous Non Gov't Orgs. F. et Al., supra note 65; Lakhanpal, supra note 117; Wing, supra note 31; Lawrence, supra note 65; Christos Zografos & Paul Robbins, Green Sacrifice Zones, or Why a Green New Deal Cannot Ignore the Cost Shifts of Just Transitions, 3 One Earth 543 (2020); New Mexico Groups Sound Alarm On Governor's Hydrogen Proposal, WILDEARTH GUARDIANS (Dec. 10, 2021), https://wildearthguardians.org/press-releases/new-mexico-groups-sound-alarm-on-governors-hydrogen-proposal/.

¹²⁰ See Sovacool, supra note 107; Kramarz et al., supra note 117, at 2.

See, e.g., Sovacool, supra note 107; Kramarz et al., supra note 117, at 2.

local, and other communities. 122 Here as well, Indigenous lands and waters are threatened by new 'green' enclosures through the expansion of the neoliberal capitalist 'green economy, 123 which in addition to green energy transitions, seeks to hegemonically incorporate Indigenous lands into payments for ecosystem services trading schemes that financialize nature in the form of carbon and biodiversity pricing, markets, and offsets. 124 Many such schemes allow

See Kramarz et al., supra note 117, at 2; note that as industrial renewable energy projects increase in number and scale, they have been associated with different forms of displacement, which upon an extensive review of research and cases, they typologize in different and overlapping categories of displacements frequently entailing (1) physical, socioeconomic, or spiritual dispossession of communities, (2) degradation or destruction of environments and human health, and (3) the creation of economic dependency relations characterized by social exclusions, underdevelopment, or maldevelopment. See also Sovacool, supra note 107, for an extensive review of 20 years of literature on the energy (in)justice implications of climate change mitigation-intended low carbon transitions, in which Sovacool examined 332 case studies from across the world involving all technical configurations (wind, solar, hydro, bioenergy & waste-to-energy, nuclear, biofuels/agrofuels, land use change (e.g., climate smart agriculture, BECCS), hydrogen, geothermal, clean coal, among others. Sovacool finds that every such form of climate mitigation through green energy transition is linked—often repeatedly and persistently—to (1) territorial enclosures (49.5% of cases, (2) social exclusions (71.5% of cases), (3) encroachments (60.1% of cases), and (4) the entrenchment of inequalities and dependencies (76.8% of cases). 28% of cases (almost a third) are linked to all four processes. Moreover, sixty-two of the cases have resulted in violence, severe violence, murder and torture, and many resulted in irreversible species loss, destruction of cultural icons and communities, and permanent alteration of nonhuman and human communities and landscapes. Sovacool notes how a large percentage of this literature shows that such harms particularly impact nonhuman species (77.3% of articles), local communities (76% of articles), farmers, agriculturalists or pastoralists (37.4% of articles), rural poor (36.9% of articles), Indigenous peoples and ethnically marginalized groups (35.9% of articles), fishing and water depending communities (25% of articles), and women (13.6% of articles), among others.

¹²³ See Richards & Lyons, supra note 108, at 211; Fairhead et al., supra note 109; McAfee, supra note 93, at 333.

¹²⁴ See Corson & MacDonald, supra note 108, at 265; McAfee, supra note 93, at 333; Alexander Dunlap & Sian Sullivan, A Faultline in Neoliberal Environmental Governance Scholarship? Or, Why Accumulation-by-Alienation Matters, 3 Env't & Plan. E 552, 552–79 (2020); Kill, supra note 106, at 5; Ronnie Hall & Nele Marien, Friends of the Earth Int'l, Nature for Sale: How Corporations Benefit from the Financialization of Nature (2020), https://www.foei.org/wp-content/uploads/2020/02/Friends-of-the-Earth_Nature-for-Sale-report EN.pdf.

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polluters to continue their activities while displacing the burden of sequestration and biodiversity protection onto the communities least responsible for climate disruption and biodiversity destruction.

And yet, in the face of this disproportionate, often lethal violence, Indigenous peoples are still at the forefront of resistance, leading and often succeeding in struggles to defend land, waters, oceans and the atmosphere against environmentally and socially destructive projects, as well as often successfully defending themselves and communities from evictions and enclosures. For example, Indigenous resistance against fossil fuel projects in Turtle Island (North America) has stopped or delayed greenhouse gas pollution equivalent to at least one-quarter of annual U.S. and Canadian emissions. 125 And globally, according to the EJ Atlas, grassroots mobilization against destructive projects and in the defense of environmental livelihoods, wherein Indigenous organizations, communities, and leaders feature prominently, has contributed to halt at least 11 percent of such projects and to reach less harmful negotiated outcomes in an additional 10 percent of cases. 126 The same research shows that the rate of success in environmental justice conflicts increases as movements and communities combine preventive mobilization, diversification of protest tactics, and litigation. 127 What's more, while the involvement of Indigenous and local actors attracts more acute violence than other environmental justice mobilizations, Indigenous involvement in such struggles nonetheless significantly increases their rate of success and of other positive outcomes for environmental resistance. 128

IV. THE COLONIAL TRAPS OF GLOBAL ENVIRONMENTAL POLICY

At this point, it is important to note a key doctrinal difference. On the one hand, we are seeing the increasingly visible linkage in science and policy spheres¹²⁹ of Indigenous peoples and knowledges (IPs and IKs) with biocultural diversity and carbon sinks. This

¹²⁵ See Indigenous Env't Network & Oil Change Int'l, supra note 65.

See Scheidel et al., supra note 108.

¹²⁷ See id.

¹²⁸ See id.

¹²⁹ See, e.g., Merçon et al, supra note 7; Peter Bridgewater & Ian D. Rotherham, A Critical Perspective on the Concept of Biocultural Diversity and its Emerging Role in Nature and Heritage Conservation, 1 PEOPLE & NATURE 291 (2019).

linking often treats IPs and IKs as supplements to the dominant systems of states, markets, science, and technology, incorporating them as "stakeholders" and "local knowledge holders" within and under hegemonic onto-epistemological, governance, and political economic frameworks. 130 We can refer to this as inclusion without decolonization since it subsumes Indigeneity into the system without dismantling the apparatuses of power and frameworks of knowledge that colonize peoples and the planet. On the other hand is what I would call a politically critical and decolonial biocultural axiom wherein the protection and restoration of biodiversity and climate stability is indispensably conditional on the defense, rematriation, and resurgence of Indigenous peoples, territories, and sovereign self-determination in accordance with their own cosmovisions and modes of socioecological governance and communal organization (i.e., rematriation as decolonization). Furthermore, a politically critical decolonial biocultural axiom demands dismantling the statemarket-technoscientific apparatuses that perpetuate the coloniality of people and nature.

The biological-cultural link involving Indigenous peoples and knowledges has been visible in policy and science starting since the 1988 First International Congress of Ethnobiology. 131 Over the years it became internationally prominent, eventually centered by Indigenous peoples themselves via, for instance, the UN Permanent Forum on Indigenous Issues, and has been enshrined in the UN Declaration on the Rights of Indigenous Peoples. 132 However, in spaces of environmental governance not primarily focused on Indigenous rights, the bioculture-climate-IPs and IKs nexus is often "included"

¹³⁰ See, e.g., Kyle Whyte, What Do Indigenous Knowledges Do for Indigenous Peoples?, in Traditional Ecological Knowledge 65–66 (Melissa K. Nelson & Daniel Shilling eds., 2018); see also Nicole Latulippe & Nicole Klenk, Making Room and Moving Over: Knowledge Co-Production, Indigenous Knowledge Sovereignty and the Politics of Global Environmental Change Decision-Making, 42 Current Op. Env't Sustainability 7 (2019). For an example, consider global food systems governance in Kirtana Chandrasekaran et al., Exposing Corporate Capture of the UNFSS Through Multistakeholderism, FOOD Sys. 4 PEOPLE (Sept. 23, 2021), https://www.foodsystems4people.org/wp-content/uploads/2021/11/UNFSSreport2021-pdf.pdf.

¹³¹ See Maffi & Woodley, supra note 3; Ethnobiology: Implications and Applications, 1988 Proc. First Int'l Cong. Ethnobiology.

¹³² See G.A. Res. 61/295, annex, United Nations Declaration on the Rights of Indigenous Peoples (Sept. 13, 2007).

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as a supplement, part of a laundry list of science-policy instruments necessary to address Earth System crises that often includes market mechanisms. For example, the centrality of Indigenous peoples in protecting nature has had its profile raised in the UN Environment Programme (UNEP) and UN Framework Convention on Climate Change (UNFCCC) processes, including their Conferences of the Parties; in Intergovernmental Panel on Climate Change (IPCC) reports; ¹³³ in the Convention of Biological Diversity (CBD), including its Conferences of the Parties and Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) reports; ¹³⁴ in the UN 2030 Agenda for Sustainable Development and its Sustainable Development Goals; in the World Bank's (WB) Environmental and Social Framework; and even in the notably procapitalist World Economic Forum (WEF), with attempts at a problematic "multistakeholder" inclusion within a stakeholder capitalist approach. 135

While the acknowledgement of IPs and IKs is commendable, their inclusion alongside—or rather under—hegemonic state, market, and technoscientific structures and paradigms is highly problematic. As mentioned above, the dominant environmental governance approach is the neoliberal "green economy" that reinscribes

 $^{^{133}}$ See, e.g., Intergovernmental Panel on Climate Change, Climate Change and Land (2020); Intergovernmental Panel on Climate Change, Global Warming of 1.5°C (2019).

¹³⁴ See, e.g., Intergovernmental Sci.-Pol'y Platform on Biodiversity & Ecosystem Servs., Global assessment report on biodiversity and ecosystem services (2019); Intergovernmental Sci.-Pol'y Platform on Biodiversity and Ecosystem Servs., Report on Land Degradation and Restoration (2018).

¹³⁵ See Indigenous Peoples Hold Key to Protecting Nature, WORLD ECON. F. (July 22, 2021), https://www.weforum.org/videos/19440-indigenous-people-hold-the-key-to-protecting-nature; Tariq Al-Olaimy, Why Nature Is the Most Important Stakeholder of the Coming Decade, WORLD ECON. F. (Jan. 7, 2020), https://www.weforum.org/agenda/2020/01/why-nature-will-be-the-most-important-stakeholder-in-the-coming-decade/; MARY ANN MANAHAN & MADHURESH KUMAR, PEOPLE'S WORKING GRP. ON MULTISTAKEHOLDERISM, THE GREAT TAKEOVER: MAPPING OF MULTISTAKEHOLDERISM IN GLOBAL GOVERNANCE 19, 25–26, 92–93, 98 (Brid Brennan et al. eds., 2021); see also Philip McMichael, Shock and Awe in the UNFSS, 64 Dev. 162 (2021).

See Fairhead et al., supra note 109, at 240; McAfee, supra note 93, at 333; Ariel Salleh, A Materialist Ecofeminist Reading of the Green Economy, in

the power of market-based, state-centric, and technoscientific actors, institutions, and paradigms to solve the crises that they themselves created by extending the modern, colonial, and capitalist commodification and management rationality into ecosystem and Earth System Governance. This has facilitated corporate capture of already deadlocked intergovernmental state-centric institutions as is reflected in global environmental policy and governance process concerning climate, biodiversity, forests, food, and water (among other spheres), which seek to solve the planetary crisis of "civilization" through the same capitalist and state-centric rationalistic forms of knowledge and power that created the problem. ¹³⁷ In such spaces, there is a purportedly "multistakeholder" governance approach that in fact facilitates unequal power relations, leading to the takeover of environmental governance processes by powerful states, corporate private actors and their networks, and "big green," mostly northerndominated, NGOs. 138 These actors shape policy spaces increasingly towards highly problematic "solutions" to environmental problems like the instrumentalized reduction and compartmentalization of living complex life-webs into economistic "ecosystem services" to be accounted, priced, traded, and paid for through Payments for

ROUTLEDGE HANDBOOK OF TRANSFORMATIVE GLOBAL STUDIES (S.A Hamed Hosseini et al. eds., 2020).

See Lili Fuhr et al., 5 Years Later—Happy Birthday, Paris Agreement?, HEINRICH BÖLL STIFTUNG (Dec. 10, 2020), https://us.boell.org/en/2020/12/11/5years-later-happy-birthday-paris-agreement; see also Henri-Count Evans & Rosemary Musvipwa, The Sustainable Development Goals, Paris Agreement and Addis Agenda: Neo-Liberalism, Unequal Development and the Rise of a New Imperialism, in Knowledge for Justice: Critical Perspectives from Southern AFRICAN-NORDIC RESEARCH PARTNERSHIPS 37 (Hilde Ibsen & Tor Halvorsen eds., 2017); see also Patrick Bond et al., Paths Beyond Paris: Movements, ACTION, SOLIDARITY TOWARDS CLIMATE JUSTICE (2015), http://www.carbontradewatch.org/downloads/publications/PathsBeyondParis-EN.pdf; Walker DePuy et al., Environmental Governance: Broadening Ontological Spaces for a More Livable World, 5 Env't & Plan, E 947 (2021); Camila Moreno et al., Carbon Metrics: Global Abstractions and Ecological Epistemicide, 42 HEINRICH BÖLL STIFTUNG ECOLOGY (2016); Time to Tackle Biodiversity Loss: Draft Post-2020 UN Framework Not Ambitious Enough, FRIENDS OF THE EARTH INT'L (Jan. 17, 2020), https://www.foei.org/time-to-tackle-biodiversity-loss-draft-post-2020-unframework-not-ambitious-enough; Adelman, Epistemologies of Mastery, supra note 32, at 20.

¹³⁸ NICK BUXTON, TRANSNAT'L INST., MULTISTAKEHOLDERISM: A CRITICAL LOOK (2019), https://www.tni.org/en/publication/multistakeholderism-a-critical-look.

Ecosystem Services (PES) such as carbon pricing, carbon trading, carbon markets, forest carbon markets, ¹³⁹ REDD+¹⁴⁰, carbon and biodiversity offsets, results-based climate finance, compensatory afforestation-ecosystem service restoration, and compensatory relocation of displaced populations. These are often coupled with reductionist technocentric schemes and technofixes such as bioenergy with carbon capture, geoengineering and bioengineering, and "climate smart agriculture."¹⁴¹

Condensing decades of key climate justice knowledge and organizing, the excellent civil society and social movement report *Hoodwinked in the Hothouse (Third Edition): Resist False Solutions to Climate Change* punctually calls out how a variety of such approaches constitute false solutions to climate change and other environmental crises. They are nonetheless increasingly supported by and embodied in global environmental governance mechanisms, such as under the Paris Agreement's Article 6, including voluntary mechanisms, Internationally Transferred Mitigation Outcomes and the sustainable development mechanism, which follows on the problematic Clean Development Mechanism of the Kyoto Protocol. Often, the above instruments, mechanisms, and projects are subsumed under discourses and framings of net zero, no net deforestation, carbon neutrality, negative emissions, and nature based solutions (NBS). As Women's Earth and Climate Action Network

See Richards & Lyons, supra note 108, at 210.

¹⁴⁰ REDD+, Reducing Emissions from Deforestation and Forest Degradation, is a "mechanism that enables carbon dioxide emitters in high-income nations to pay low-income nations with tropical forests to preserve their forests and thus not release carbon dioxide." *See* Scales, *supra* note 64, at 200; *see also* McAfee, *supra* note 93, at 333; Vigil, *supra* note 55, at 2; Fairhead et al., *supra* note 109, at 244.

¹⁴¹ See Bond, supra note 58, at 3; CLIMATE JUST. ALL. & INDIGENOUS ENV'T NETWORK, CARBON PRICING: A CRITICAL PERSPECTIVE FOR COMMUNITY RESISTANCE 14 (2017); FRIENDS OF THE EARTH INT'L, A LEAP IN THE DANK: THE DANGERS OF BIOENERGY WITH CARBON CAPTURE AND STORAGE (2021).

See CLIMATE FALSE SOLS., supra note 66.

¹⁴³ See Fuhr et al. supra note 137; Vigil, supra note 55, at 2; see also Harriet Bulkeley & Peter Newell, Governing Climate Change: A Brief History (2015); see also Heinrich Böll Found., Radical Realism for Climate Justice: A Civil Society Response to the Challenge of Limiting Global Warming to 1.5°C, (2018).

¹⁴⁴ See Nick Buxton, Transnat'l Inst., A Primer on Climate Security: The Dangers of Militarizing the Climate Crisis (2021); Friends of the

International (WECAN) communicates in relation to the UNFCCC Conference of Parties 26 (COP26):

Throughout...COP26, we saw countries and businesses compose commitments within net-zero frameworks and approaches. Netzero commitments seek to balance current emissions with emissions removals, to balance out the global carbon budget....[N]etzero has been used to further perpetuate false solutions, while countries continue to pollute and expand fossil fuel infrastructure. Within the net-zero framework, governments are planning to advance 'nature-based' solutions, which focus on land-based offset schemes, and seek to put a price on nature. 'Nature-based' solutions are a part of the wider market-based mechanisms that include carbon pricing, nuclear power plants, mega-dams, geoengineering, bioenergy, forest offsets, carbon trading schemes, and carbon capture and storage. Market-based mechanisms are a false solution to curb catastrophic climate change and deforestation. As an example, these mechanisms allow big polluters to continue to poison communities at sites of extraction and at points of distribution and processing by buying up pollution permits from forests around the world and simultaneously continuing dirty pollution practices in a different country. Simultaneously, pollution permits or offsets in forest areas can lead to land theft and dispossession from Indigenous and local communities. These 'solutions' enable polluters to keep polluting, while Indigenous and frontline communities suffer the consequences. At COP26, Indigenous peoples, frontline communities, feminists, and many others from civil society persisted in advocating against false solutions and the net-zero paradigm. 145

EARTH INT'L, CHASING CARBON UNICORNS: THE DECEPTION OF CARBON MARKETS AND "NET ZERO" 12 (Feb. 2021); see generally ACTION AID ET AL., NOT ZERO: How 'NET ZERO' TARGETS DISGUISE CLIMATE INACTION (Oct. 2020), https://whatnext.org/research_pubs/not-zero-how-net-zero-targets-disguise-climate-inaction; 'Nature-based Solutions': Concealing a Massive Land Robbery, WRM BULLETIN (World Rainforest Movement, Montevideo, Uru.), March/April 2021, at 2; Bragg et al., supra note 66; CLIMATE FALSE SOLS., supra note 66, at 11.

145 Despite Government Failures at COP26, Peoples' Movements Continue Rising to Transform Our World, WECAN (Nov. 21, 2021), https://www.wecaninternational.org/post/despite-government-failures-at-cop26-peoples-movements-continue-rising-to-transform-our-world; see also Real Solutions, Not 'Net Zero': A Global Call for Climate Action, REAL SOLS., NOT 'NET ZERO' (2021), https://www.realsolutions-not-netzero.org (the important statement by over 700 Civil Society Groups at the UNFCCC COP26); see also Erika Lennon et al., False Solutions Prevail over Real Ambition at COP26, HEINRICH BÖLL STIFTUNG (Dec.

Net-zero and nature-based solutions provide cover for the enclosure of commons¹⁴⁶ and the expansion of technofixes such as bioenergy, carbon capture, and geoengineering, without mitigation at the source or the halting of activities of environmental offenders. 147 They merely facilitate the environmental load displacement through offsetting of environmental harms to other locations—a spatial fix 148—or into the future—a temporal fix—while continuing present and projected environmental and climate damages of corporations, states, investors, and privileged consumers. This enables the latter to claim net environmental harm reductions or even "negative" emissions in their "environmental" and "natural capital accounting"—all while continuing to overshoot climate thresholds, drive biodiversity into extinction, and cross planetary boundaries. ¹⁴⁹ All of the above imply one or another form of the neoliberal green rationale, which amounts to climate colonialism and ecological neoimperialism wherein a damage done by one—usually powerful or privileged—actor in one location can be offset or compensated by "sustainability," "conservation," or green technofix initiatives or projects elsewhere, without the damaging actions or the offending actors having to be immediately stopped or reduced at the source. These green enclosures are visible not only in climate governance, but also in other fields, such as biodiversity governance under the UN CBD framework, such that Corson and MacDonald characterized international environmental institutions and organizations' sites that create the legitimating conditions for green grabbing to be veiled as solutions to environmental problems. 150 Such false

 $^{16,\ 2021),\} https://www.boell.de/en/2021/12/16/false-solutions-prevail-over-real-ambition-cop 26.$

See generally Corson & MacDonald, supra note 108.

¹⁴⁷ See Action Aid et al., supra note 144; 'Nature-based Solutions': Concealing a Massive Land Robbery, supra note 144, at 26.

¹⁴⁸ See Corson & MacDonald, supra note 108, at 269, 273.

¹⁴⁹ See Friends of the Earth Int'l, supra note 144, at 4; Action Aid et al., supra note 144; 'Nature-based Solutions': Concealing a Massive Land Robbery, supra note 144, at 16; CLIMATE FALSE SOLS., supra note 66, at 10–12; ETC GRP., supra note 58.

¹⁵⁰ See Corson & MacDonald, supra note 108, at 273–75; see also Scheidel & Work, supra note 108; Frederic Hache, Friends of the Earth Int'l & Green Fin. Observatory, Can Market Based Approaches Tackle Critical Loss of Biodiversity? 1 (2019); Friends of the Earth Int'l, supra note 137;

solutions harm frontline, local, and Indigenous communities and territories, and embody state and corporate interests antagonistic to Indigenous struggles.¹⁵¹

In this context of emergent false solutions, Indigenous communities and their biocultural ecosystems—which were long marginalized from and invisibilized in powerful policy, corporate, and big environmental NGO spheres—are now conveniently made hypervisible and central as keys to the global neoliberal green economy since Indigenous community landscapes become perfect offsetting sites for continuing environmental harm elsewhere. 152 Though they are the least responsible for, and are disproportionately harmed by, Anthropocene crises and the actors driving them, ¹⁵³ they are now called upon to solve, or at least attenuate, the problem by allowing their lands to be used as carbon sponges by those who drive environmental destruction. But "inclusion" of IPs and IKs that occurs alongside or as part of this host of false solutions does little to stop the harm to Indigenous peoples and territories worldwide or to Mother Earth, and may instead hegemonically incorporate them into managerial governance mechanisms that perpetuate the drivers of Anthropocene crises. For example, the Nature Based Solutions (NBS) discourse is of particular and increasing relevance to Indigenous lands. Here Indigenous lands, forests, waters, and seascapes are cast as nature-based solutions that can be used to offset or compensate for environmental harm done elsewhere. 154 For example,

Peoples' Response to the High Level Summit on Biodiversity, CBD ALL. (Sept. 30, 2020), http://www.cbd-alliance.org/en/cbd/2020/peoples-response-high-level-summit-biodiversity; Robert Fletcher et al., Natural Capital Must Be Defended: Green Growth As Neoliberal Biopolitics, 46 J. PEASANT STUD. 1068, 1069 (2019).

¹⁵¹ See CLIMATE FALSE SOLS., supra note 66, at 1, 5, 12; Minga Indígena, Climate Chart, 350 (2019), https://350.org/wp-content/uploads/2019/12/CARTACLIMATICA-en.pdf; CLIMATE JUST. ALL. & INDIGENOUS ENV'T NETWORK, supra note 141, at 4; TRACEY OSBORNE ET AL., INDIGENOUS PEOPLES' BIOCULTURAL CLIMATE CHANGE ASSESSMENT INITIATIVE, INDIGENOUS PEOPLES AND REDD+: A CRITICAL PERSPECTIVE (2014); PLURIVERSE: A POST-DEVELOPMENT DICTIONARY, supra note 32; see generally Vigil, supra note 55.

See Fairhead et al., supra note 109, at 251.

¹⁵³ See Gonzalez, supra note 59, at 44, 49; Gonzales, supra note 32, at 2; Pulido, supra note 55, at 119.

¹⁵⁴ See CLIMATE FALSE SOLS., supra note 66, at 13–17; 'Nature-based Solutions': Concealing a Massive Land Robbery, supra note 144, at 3; Scales, supra note 64, at 192; Vigil, supra note 55, at 2.

concerning climate change, within NBS there is an effort to hegemonically incorporate Indigenous lands (and sometimes communities) as carbon sinks in the global capitalist green economy equation of net zero. 155 REDD+, for example, has been discussed by critical scholars and movements as disciplinary inclusion, adverse incorporation, appropriation, green grabbing, "CO2lonialism" (carbon colonialism), or as a false solution, and is here interpreted as a modality of hegemonic incorporation into the "green economy," but certainly not the only one. 156 Indigenous lands become carbon sponges for continuing emissions elsewhere. Indigenous lands can also be coded as biodiversity conservation respites, which can be instrumentalized to balance out or offset continuing extractivist destruction of ecosystems elsewhere. 157 In forest policy, Indigenous lands can also be internalized into the green neoliberal economy through compensatory forest conservation, reforestation or afforestation, where deforestation in one location is allowed to continue if it helps fund forest conservation, reforestation, or afforestation elsewhere or in the future. 158 "Carbon farming" and climate smart agriculture is also being brought into this neoliberal green economy, where farming practices that absorb carbon, including some organic, agroecological, or Indigenous polyculture techniques, could be selectively plugged into corporate agribusiness or brought into accounting schemes to offset continuing damages elsewhere. 159 While Indigenous cultures

¹⁵⁵ See CLIMATE FALSE SOLS., supra note 66, at 16; ACTION AID ET AL., supra note 144; 'Nature-based Solutions': Concealing a Massive Land Robbery, supra note 144, at 2.

¹⁵⁶ See Vigil, supra note 55, at 2; McAfee, supra note 93, at 333.

¹⁵⁷ See Corson & MacDonald, supra note 108, at 273.

¹⁵⁸ See, e.g., Scales, supra note 64, at 201; see also Kill, supra note 106, at 8; World Rainforest Movement, Offsets in the Forests: A Logic That Violates Indigenous and Traditional Peoples' Rights While Facilitating Further Deforestation (2019).

¹⁵⁹ See Alberto Alonso-Fradejas et al., Friends of the Earth Int'l et al., 'Junk Agroecology': The Corporate Capture of Agroceology for a Partial Ecological Transition Without Social Justice, (2020), https://www.tni.org/files/publication-downloads/38_foei_junk_agroecology_full_report_eng_lr_0.pdf; see also Corporate Greenwashing: "Net Zero" and "Nature-Based Solutions" are a Deadly Fraud, GRAIN (Mar. 17, 2021), https://grain.org/en/article/6634-corporate-greenwashing-net-zero-and-nature-based-solutions-are-a-deadly-fraud; see also From Land Grab to Soil Grab—the

nurture biodiverse, agrobiodiverse, forest, and carbon rich places, neither such places nor their Indigenous caretakers should be used, instrumentalized, incorporated, traded, or colonially assimilated into a global neoliberal green accounting mechanism which allows continuing destruction anywhere else. Neither should Indigenous lands be used as a cushion or sponge for the continuity of the colonial state-capitalist destruction of the planet.

Green economy schemes have the perverse effect of working as potential cooptation mechanisms into the reproduction of damaging activities. By seeking to incorporate Indigenous and other actors into an economy which profits from the purchase and sale of different types of environmental credits such as carbon credits, 160 biodiversity and wildlife credits and derivatives, 161 and forest-related compensations, environmental offenders can continue the harmful activities as long as they can cover the costs of offsetting and compensation in green economy markets. Persuading Indigenous communities to sell such credits from their own sustainable activities in ecosystem service markets can make them complicit in the sacrifice of other environmental justice and Indigenous communities, and of planetary sustainability as a whole, since the activities of environmental offenders in other locations are permitted to continue upon the purchase of such credits. 162 Credit purchasers pay for such offsets using the very same profits they obtain through extractivist, GHG-emitting, consumerist, wasteful, socially dislocating, and environmentally destructive operations. Accepting payments in ecosystem trading schemes can thus mean complicity in the continuing destruction of communities and landscapes elsewhere, and of the persistent destabilization of Mother Earth. Incorporating Indigenous communities into these circuits of capital can thus be critically examined as a colonial assimilation and cooptation strategy, a payoff to neutralize Indigenous resistance, and an incorporation of Indigenous ecologies into the commodifying market order that seeks to incentivize Indigenous compliance with the reproduction of the very

New Business of Carbon Farming, GRAIN (Feb. 24, 2022), https://grain.org/en/article/6804-from-land-grab-to-soil-grab-the-new-business-of-carbon-farming.

¹⁶⁰ See McAfee, supra note 93, at 334; Scales, supra note 64, at 201–02.

¹⁶¹ See Corson & MacDonald, supra note 108, at 268.

See McAfee, supra note 93, at 333.

same state-sanctioned capitalist system that has been destroying Indigenous communities, spiritualities, and Mother Earth.

Moreover, this trap often presents itself to Indigenous communities in the form of burdensome and community-divisive contracts and reductionist accounting procedures carried out through the alienating legal and conceptual language, patriarchal economistic logic, and state-sanctioned Eurocentric law that fragments and further desacralizes the community of life, thereby further dishonoring Indigenous spiritualities, cosmovisions, and communal organization. Critiques of carbon offsetting, including but not limited to REDD, have offered pertinent insights.¹⁶³ Also, when Indigenous peoples are absorbed into such ecosystem service trading schemes, like REDD+,164 they often have to relinquish some or all of their sovereignty and self-determination rights to traditional land uses, and may even effectively lose their right to occupy their lands so that their ecosystems can be used—if not wholly enclosed—to issue ecosystem service credits which environmental offenders can use as pollution permits to be accounted in their questionable net zero claims (e.g., net zero emissions, net zero deforestation, etc.). 165 Ecosystem service trading contracts often involve enforcement mechanisms which can result in the restriction of traditional Indigenous land uses and even land access, sometimes leading to green grabbing induced in situ displacement—being allowed to stay on site but losing decision-making power over land use—or displacement off site, whether planned relocation or eviction. REDD+ forest carbon projects, for instance, have been characterized as either creating in some cases exclusion, eviction, or in others enforcing adverse incorporation or disciplinary inclusion, and have been critiqued as neocolonial or neoliberal green capitalist appropriation or green grabbing. 166 Communities may be allowed to stay in their lands if they curtail their land uses to only what is acceptable under the terms of

¹⁶³ See, e.g., WORLD RAINFOREST MOVEMENT, supra note 158; Glob. Just. Ecology Project, supra note 65.

¹⁶⁴ See McAfee, supra note 93, at 333; see also Vigil, supra note 55, at 2.

ACTION AID ET AL., *supra* note 144; *'Nature-based Solutions': Concealing a Massive Land Robbery, supra* note 144, at 16; WORLD RAINFOREST MOVEMENT, *supra* note 158, at 5; *see* CLIMATE FALSE SOLS., *supra* note 66, at 8, 9.

¹⁶⁶ See Vigil, supra note 55, at 2; see also Fairhead et al., supra note 109; McAfee, supra note 93, at 333.

a given offsetting or compensatory contract. 167 This effectively erodes self-determination by transferring control over land use to the contract brokers or to the buyers of carbon or other such credits, and thereby amounts to a new colonial type of "green" land, water, or ocean grab against Indigenous, local, peasant, fisherfolk, and forest-dwelling communities, or a new cycle of primitive accumulation by green dispossession. 168 Even if "results-based payments" for ecosystem services in such trading schemes trickle down to communities (which have been slow to materialize), ¹⁶⁹ they may do so only in part as a swarm of brokers and traders, environmental accountants, economists, government agents, corporate executives, NGO representatives, and lawyers who, as part of these transactions, end up capturing much of the funds. 170 Many Indigenous communities, organizations, and allies have therefore grown justifiably skeptical and critical of any such attempts at hegemonic incorporation into green economy schemes.¹⁷¹

Thus, inclusionary attempts that seek to incorporate Indigenous peoples, lands, and knowledges in the neoliberal green economy do not unsettle coloniality. Instead, they reify the technoscientific and economic managerial frameworks that embody the hegemony of Eurocentric epistemologies, patriarchal and state-centric intergovernmental governance, and capitalist market mechanisms that have ravaged the planet, the climate, biodiversity, and Indigenous

¹⁶⁷ See Scheidel & Work, supra note 108; Fairhead et al., supra note 109, at 249–52; McAfee, supra note 93, at 338; see also WORLD RAINFOREST MOVEMENT, supra note 158, at 36, 45; Corson & MacDonald, supra note 108, at 270; Richards & Lyons, supra note 108, at 213–14.

¹⁶⁸ See Fairhead et al., supra note 109, 247–52; Richards & Lyons, supra note 108, at 209; Scheidel & Work, supra note 108; Scales, supra note 64, at 201–02; see generally Corson & MacDonald, supra note 108; Vigil, supra note 55.

¹⁶⁹ See Vigil, supra note 55, at 2–3.

¹⁷⁰ See McAfee, supra note 93, at 337–38; Vigil, supra note 55, at 2–3; Corson & MacDonald, supra note 108, at 264; Fairhead et al., supra note 109; Scheidel & Work, supra note 108; Scales, supra note 64, at 200–02; see generally WORLD RAINFOREST MOVEMENT, supra note 158; Richards & Lyons, supra note 108, at 213–14.

¹⁷¹ See generally World Rainforest Movement, supra note 158; Minga Indígena, supra note 151; Climate Just. All. & Indigenous Env't Network, supra note 141; Tracey Osborne et al., supra note 151; Climate False Sols., supra note 66, at 52–62.

peoples and territories. ¹⁷² Indigenous lands, peoples, forests, waters, oceanscapes, and biocultural communities should not be hegemonically incorporated as the compensatory poles of the green economy. They should be recognized, valued, and rematriated in their own terms to restore their self-determination and the sovereignty of land and Mother Earth according to Indigenous spirituality and socioecological organization. This is especially true since Indigenous communities and practices can thrive only if root crisis drivers, like capitalism, colonialism, industrial and consumer civilization, patriarchy, and extractivism, are mitigated or rather dismantled at their source. 173 What is needed is decolonization, not inclusion. This requires hegemonic institutions, actors, and frameworks to move over and make room for Indigenous peoples and allow territories to resurge and thrive on their own terms and in accordance with their own relational kincentric cosmovisions and communal lifeways, which are neither state-centric nor market-capitalist, and are not based on reductionist technoscience. Moreover, Indigenous knowledges and practices are not to be used as supplements in the reproduction of the state-capitalist world system, but as means to the liberation of land, Mother Earth, and communities from it. 174

V. THE TREACHEROUS LABOR OF LAND RECLAMATION IN A STATE-MARKET CENTRIC PROPERTY REGIME

In addition to the colonial traps of environmental policy discussed above, many Indigenous leaders and organizations are also increasingly cautious of the different and contesting pathways for

¹⁷² See CLIMATE FALSE SOLS., supra note 66, at 5; Patrick Bond, Social Movements for Climate Justice During the Decline of Global Governance, in RETHINKING ENVIRONMENTALISM: LINKING JUSTICE, SUSTAINABILITY, AND DIVERSITY 153 (Sharachchandra Lele et al. eds., 2018); see generally George Martine & José Eustáquio Diniz Alves, Disarray in Global Governance and Climate Change Chaos, 36 Braz. J. Population Stud. 1 (2019).

¹⁷³ See Rethinking the Apocalypse: An Indigenous Anti-Futurist Manifesto, INDIGENOUS ACTION (Mar. 19, 2020), https://www.indigenousaction.org/rethinking-the-apocalypse-an-indigenous-anti-futurist-manifesto; CLIMATE FALSE SOLS., *supra* note 66, at 1, 2, 58; THE RED NATION, *supra* note 98.

¹⁷⁴ See Tuck & Yang, supra note 73; Whyte, supra note 130, at 8; Giovanna Di Chiro, Care Not Growth: Imagining a Subsistence Economy for All, 21 Brit. J. Pol. & Int'l Rels. 303, 307–08 (2019); Latulippe & Klenk, supra note 130; Grey & Kuokkanen, supra note 7.

land reclamation, land titling, and land demarcation, some of which are problematically being appropriated and incorporated into this hegemonic neoliberal "green economy." For example, the Indigenous Environmental Network (IEN) aptly warns of how land titling is incorporated into NBS:

The World Business Council for Sustainable Development claims that NBS could reduce emissions almost 40%. And the World Bank assures us that NBS is the cheapest fix for global warming.

Big environmental and conservation NGOs such as Environmental Defense Fund and The Nature Conservancy support NBS.

Using NBS for emissions trading and offsets is the biggest scam of all time, resulting in human rights violations and global land grabs. Polluters want half the world's land for NBS [in their attempts to claim "net zero emissions," "carbon neutrality" or compensatory offsetting by using others' lands to absorb their continuing emissions or to compensate for their destruction of biodiversity].

Indigenous Peoples and local communities—2.5 billion people—customarily manage over 50% of the global land mass. This is what is at stake: Half the world's land.

'Nature Based Solutions' (NBS)-like projects have already resulted in Indigenous Peoples being violently evicted from their land, human rights abuses and threats to cultural survival. Mining monster Rio Tinto funded research to show that the cheapest way to pretend to supposedly reduce pollution is to fund the titling of Indigenous Peoples land on the condition that they use their land for carbon offsets so polluters can pollute more and make billions of dollars privatizing Nature. Now this scheme is being scaled up globally [emphasis added].

In addition, polluters and the UN are stealing Indigenous Peoples' narratives, saying that NBS will "reconnect people and Nature;" "bring nature back at the center stage of human societies;" and promote "harmony between people and nature, as well as ecological development and represent a holistic, people-centered response to climate change. NBS presents itself as recognizing Indigenous traditional knowledge... ¹⁷⁵

This attempted neocolonial incorporation of Indigenous land titling into the hegemonic green economy is reaching the heights of

¹⁷⁵ Indigenous Env't Network, "Nature-Based Solutions" Greenwash Pollution (Sky Protector, Briefing Paper 13, 2018), http://skyprotector.org/2018/07/19/sky-protector-briefing-paper-11-2.

global governance, ¹⁷⁶ involving, for example, the likes of the World Bank Group, whose deeply problematic track record includes being the single institution historically most responsible for fossil fuel financing and the largest financier of fossil fuels in 2016, alongside the European Investment Bank (EIB), and the Asian Development Bank (ADB).¹⁷⁷ The WB is now using its powerful influence to accelerate this green colonialist assimilation scheme through discourses of so-called social inclusion in climate finance, as in its program, EnABLE—Enhancing Access to Benefits while Lowering Emissions of the Forest Carbon Partnership. 178 In its recent 2021 major Synthesis Report on the Opportunity Assessment to Strengthen Collective Land Tenure Rights in Forest Carbon Partnership Facility (FCPF) Countries, the WB displays an urgency for governments to formalize the land and territorial claims of Indigenous Peoples and local communities in the context of REDD+ and the FCPF's Carbon Fund claiming that enabling communities to leverage tenure rights can concomitantly advance their prosperity while also advancing emissions reductions efforts through, for example, the WB's results-based climate finance. 179 Under the guise of supporting and enhancing "the inclusion of marginalized groups," the WB has "established. . . a multi-donor trust fund, Enhancing Access to Benefits while Lowering Emissions (EnABLE), that aims to ensure that marginalized communities are included in the World Bank's results-based climate finance." This is because tenure rights for Indigenous Peoples and local communities are now seen as "critical for the success of emission reduction program (ERP) implementation." Within this program, for instance, Emission Reduction Payment Agreements (ERPAs) are established. An

¹⁷⁶ See Fairhead et al., supra note 109.

¹⁷⁷ See Bond, supra note 58, at 14; see also Peter Newell & Mohamed Adow, Cutting the Supply of Climate Injustice, IDS BULL., 2021 at 1.

¹⁷⁸ See World Bank Grp. [WBG], Opportunity Assessment to Strengthen Collective Land Tenure Rights in FCPF Countries at 6 (2021); see also World Bank, New Trust Fund Strengthens Social Inclusion in Results-Based Climate Finance, Forest Carbon Partnership (2022), https://www.forestcarbonpartnership.org/new-trust-fund-strengthens-social-inclusion-results-based-climate-finance.

See WORLD BANK GRP., supra note 178, at 5.

¹⁸⁰ *Id.* at 1.

¹⁸¹ *Id.* at 5.

ERPA is a "legally binding contract that allows one party to deliver verified carbon credits to another... [T]his contract generally involves a government or business in a developing country selling carbon credits to the World Bank's trust funds." Instrumentalizing Indigenous and local community land titling into these schemes means that formalizing tenure happens specifically so that such lands may be "targeted" for result-based climate finance centrally involving ERPs and offsetting schemes under the compensatory green capitalist economy of so-called nature-based solutions. 183 As the WB communicates, "[g]overnments, development institutions, and the private sector are increasingly turning to nature-based solutions to address the world's climate and biodiversity crisis. Countries, corporations, and investors are increasingly looking to forestand land-based emission reduction programs (ERPs)" as "strategies and solutions to cut their greenhouse gas emissions" via programs like REDD+, ¹⁸⁴ but also to other formal governmentally and intergrovernmentally managed and voluntary private, non-governmental PES markets, including carbon and biodiversity markets. 185 As the WB acknowledges, "it is estimated that some 1.6 billion people live in and depend on the land and forest areas, and many of them are now being targeted for ERPs and offset schemes" and yet "governments formally recognize less than half of communities' claims to

What You Need to Know About Emission Reductions Payment Agreements (ERPAs), WORLD BANK (May 19, 2021), https://www.worldbank.org/en/news/feature/2021/05/19/what-you-need-to-know-about-emission-reductions-payment-agreements.

¹⁸³ See WORLD BANK GRP., supra note 178, at 10, 186.

¹⁸⁴ Id. at 10

¹⁸⁵ See Friends of the Earth Int'l, supra note 144, at 4; Action Aid et al., supra note 144; see also Friends of the Earth Brazil, Brazil: Sena Madureira Declaration, June 17, 2018, in Offsets in the Forests: A Logic That Violates Indigenous and Traditional Peoples' Rights While Facilitating Further Deforestation, supra note 158, at 45; 'Nature-based Solutions': Concealing a Massive Land Robbery, supra note 144, at 5; Climate False Sols., supra note 66, at 7, 11; Corson & MacDonald, supra note 108, at 274; see also Fairhead et al., supra note 109, at 238; Scheidel & Work, supra note 108; see also Hache, supra note 150; see also Kill, supra note 106, at 15; Friends of the Earth Int'l, supra note 137; CBD All., supra note 150; Thomas Fatheuer, Disputed Nature: Biodiversity and Its Convention 29 (2016); Adrian Martin et al., Global Environmental Justice and Biodiversity Conservation, 179 Geographical J. 122 (2013); Fletcher et al., supra note 150, at 1069.

land and territory." ¹⁸⁶ In this context, for the WB "[securing] Indigenous and community tenure rights" becomes "essential" to "sustainable management, conservation and restoration,"187 but primarily as part of a global neoliberal green economy. The Minga Indigena, a platform of Indigenous peoples in international climate and biodiversity policy spheres, has recommended that we should "[r]eject the mercantilization of nature since lands and territories are priceless," and has characterized "Nature Based Solutions (NBS), Reducing Emissions from Deforestation and Forest Degradation (REDD+) and other compensation programs" as "not real solutions to climate crises," but rather "neocolonialist solutions that bring conflicts within our peoples." 188 Certainly, as the Minga Indígena has demanded at different UNFCCC Conferences of the Parties, there must be a recognition of and respect for the right to territory, autonomy, and self-determination of Indigenous peoples but on their own terms and according to their cosmovisions and ways and not part of ecosystem trading schemes that allow environmental offenders to continue to destroy lands and peoples and disrupt Mother Earth:

"today the governments center in negotiating around the carbon footprint [including carbon trading]. There is no recognition of the cultures, no recognition of the rights of the cultures, of free, prior and informed consent, and there is no recognition of indigenous territories, which was the minimum base we expected from these Glasgow negotiations...the solution is not the negotiation and valuation of biodiverse spaces or of carbon; the solution is climate justice, which is also social and racial [justice]...we are not alone...with us come all our ancestors, all the spirits of the animals and of nature, of the forest, water and sea,...and all the species are here with us..."

Id. at 19:28–23:55 (my translation directly from the Spanish language delivery by Calfin Lafkenche (Mapuche)).

WORLD BANK GRP., supra note 178, at 10.

Minga Indígena, supra note 151 (climate chart sent by the Indigenous Peoples of the Minga to national, international, and government representatives at the UN Conference of the Parties—COP25, in Madrid, Spain). It is important to note that at COP26, the Minga Indigena reiterated their critique of commercializationcentric solutions and of the centrality of the recognition of Indigenous territories according to Indigenous cosmovisions and terms. See also COP26, Minga Indigena Declaration Letter for COP26 Leaders, YouTube (Nov. 12, 2021), https://www.youtube.com/watch?v=y4nt7MUahOc. The Minga Indigena COP26 declaration, on behalf of over 140 Indigenous representatives from across the Americas (North to South), also calls out the same issues, arguing that

The patriarchal, capitalist and colonialist system has brought us into this climate crisis. We see many representatives of states considering only mercantile and financial profit, without taking into account the importance of life. . . . Full and effective participation for free, prior and informed consent [FPIC] should not be understood only as an obligation of States, but as a right to be implemented by the indigenous peoples and nations themselves, according to their customs and traditions, respecting their political, social and territorial organization. ¹⁸⁹

It must be acknowledged that Indigenous peoples, communities, organizations, and leaders are actively engaged in key and urgent projects to reclaim, demarcate, and title lands and to operationalize FPIC under state law and through international legal recognition. These are indispensable survivance strategies that, under current conditions, must be unequivocally advanced and tactically pursued. And yet Indigenous engagement is highly complex and sophisticated, being rooted in a deep anti-colonial historical caution that combines a strategic mode of survivance within the hegemonic order side with an emancipatory horizon of resurgence beyond it. There is a strategic necessity to both advance and formalize land claims and concomitantly resist the re-inscription of the hegemonic coloniality of Eurocentric, state-centric, and capital-centric worldviews, property regimes, and their legal and market apparatuses which are profoundly problematic to Indigenous cosmovisions and modes of ecological, political, social, and territorial organization. 190 Problematic forms of titling and demarcation can

¹⁸⁹ See Minga Indígena, supra note 151; see also COP26 supra note 188.

Peoples Cosmovision, Conflicts of Conquest and Need for Humanity to Come Back To Mother Earth, in Rights of Nature & Mother Earth: Rights-based Law For Systemic Change 15 (Shannon Biggs et al. eds., 2017), https://www.ienearth.org/wp-content/uploads/2017/11/RONME-RightsBasedLaw-final-1.pdf; Redvers et al., supra note 17, at 4, 10; Rebecca Tsosie, Climate Change and Indigenous Peoples: Comparative Models of Sovereignty, 26 Tul. Env't L.J. 239 (2013); Erich W. Steinman, Decolonization, Not Inclusion: Indigenous Resistance to American Settler Colonialism, 2 Socio. Race & Ethnicity 219, 225–26, 228–29 (2016); The Red Nation, supra note 98; Tzul Tzul, supra note 17; Harald Bauder & Rebecca Mueller, Westphalian Vs. Indigenous Sovereignty: Challenging Colonial Territorial Governance, Geopolitics, 2021, at 1–3; Julian Brave NoiseCat, The Western Idea of Private Property is Flawed. Indigenous Peoples Have It Right, Guardian, (Mar. 27, 2017), https://www.theguardian.com/commentisfree/2017/mar/27/western-idea-private-property-flawed-indigenous-

also reinscribe Indigenous dependence on state authority, validation, and recognition—which states have in the past and could in the future withdraw, breach, or sacrifice in the name of other priorities—and on capital accumulation which, in principle, Indigenous sovereignty has no ontological, epistemological, or axiological need for or legitimacy in. Land rematriation entails decolonization, which requires the wholesale dismantling of colonial authority over Indigenous peoples. Paths to full rematriation can be treacherous if stepping into state-imparted and state-sanctioned property regimes (e.g., for titling and demarcation) and may also require Indigenous peoples to validate state power to give or deny legal existence to Indigenous territorialities. Rematriation must keep its eye on the goals of, first, fully dismantling the colonial apparatuses' role in the governance of Indigenous peoples, their rights, authority, and self-determination, and second, the full restoration of Indigenous lands and sovereignty outside and beyond reliance on state-sanctioned titling, recognition, or validation. Indigenous territorialities are legitimate on their own terms, within their own norms, and according to their own cosmovision, spiritual-epistemic grounding, territorial-ontological spatiotemporality, and customary authority.

And yet, in the colonial, state-centric, and heavily Eurocentric field of power within which Indigenous peoples are compelled to exist, there emerges the practical, strategic compulsion to defend and reclaim lands through the means of state-sanctioned recognition, titling, and demarcation. Indigenous peoples, organizations, and movements are deeply aware that this is a historically specific compulsion forced upon communities through the hegemonic coloniality of the state apparatus and the Eurocentric legal order. ¹⁹¹ Entering into such processes can be treacherous since on the one hand, Indigenous land titling and demarcation can often embody undeniable achievements and bring significant short to middle-term rights and protections, especially in the face of immediate threats, but they

peoples-have-it-right; Stewart-Harawira, *supra* note 70; *see generally* Maano Ramutsindela, *Property Rights, Land Tenure and the Racial Discourses*, 77 GEOJOURNAL 753 (2012).

¹⁹¹ See Tuck & Yang, supra note 73; THE RED NATION, supra note 98; Stewart-Harawira, supra note 70, at 200–02; Noisecat, supra note 190; Bauder & Mueller, supra note 190, at 7–10; Samantha Hepburn, Feudal Tenure and Native Title: Revising an Enduring Fiction, 27 Sydney L. Rev. 49, 81–85 (2005); see generally, Figueroa Helland, supra note 17, at 164, 284.

can also make Indigenous sovereignty dependent on state authority and recognition. 192

These contradictions become highly visible, once again, in the context of the increasingly hegemonic green economy. 193 Here, the power of state, intergovernmental, market, and science-policy actors to "recognize" and "validate" Indigenous biocultures, for example, as biodiversity hotspots and carbon sinks, can become a thinly veiled form of cooptation and hegemonic incorporation.¹⁹⁴ Here, powerful actors are no longer interested in a crude dispossession for the purposes of resource extraction, but instead seek to extract from Indigenous peoples a contribution that will help compensate for or offset the damages that these very same powerful actors create. 195 It is a "green" extraction that dispossesses Indigenous peoples of their power to maintain worlds outside of the universe of the state-capital-colonial order. In this order, powerful actors are motivated to "formalize" Indigenous land tenure with the underlying purpose of civilizational incorporation into green capitalism. This is the wrong kind of visibility for Indigenous peoples, more akin to colonial appropriation, as powerful actors now find value in recognizing and institutionalizing Indigenous land tenure, including through titling, specifically because that is how Indigenous peoples can be brought into the contractual mechanisms of a global accounting and trading system of ecosystem services. This results in the reduction of sacred territorialities to measurable, tradeable, replaceable, commodified units: "a ton of carbon here is equivalent to a ton of carbon anywhere," as with forests and biodiversity. Land titling, surveying, demarcating, and the like—all of these can now be seen

¹⁹² See, e.g., Domínguez & Luoma., supra note 53, at 1–3; Rashwet Shrinkhal, "Indigenous Sovereignty" and Right to Self-Determination in International Law: A Critical Appraisal, 17 ALTERNATIVE 71, 73–74 (2021); Grey & Kuokkanen, supra note 7.

¹⁹³ See Corson & MacDonald, supra note 108, at 265; Scheidel & Work, supra note 108; CLIMATE FALSE SOLS., supra note 66 at 2; ACTION AID ET AL., supra note 144; 'Nature-based Solutions': Concealing a Massive Land Robbery, supra note 144, at 9; WORLD RAINFOREST MOVEMENT, supra note 158, at 56; CLIMATE JUST. ALL. & INDIGENOUS ENV'T NETWORK, supra note 141, at 56; see generally Vigil, supra note 55; Richards & Lyons, supra note 108; Fairhead et al., supra note 109; Indigenous Env't Network, supra note 175.

See CLIMATE FALSE SOLS., supra note 66, at 16; Corson & MacDonald, supra note 108, at 265; Fairhead et al., supra note 109, at 251.

¹⁹⁵ See Fairhead et al., supra note 109, at 251.

through the green eye of power and the project of total Earth System Governance and management within global anthropocentric accounting of ecosystem services. The PES and carbon reductionism of biocultural lifeways and communities of life can then become measurable metrics and units, priceable and tradeable, which can be monetized as Indigenous "contributions" to a global ecosystem accounting. This reductionism and objectification is desacralization at its highest.

At a more general level, there is further and deeper skepticism among Indigenous communities and allied critics about the ways in which state and market sanctioned property regimes seek to enclose Indigenous land relations within Eurocentric ontologies of power and socio-environmental ordering. 196 Incorporation of Indigenous lands into state and capital-centric property regimes of titling, demarcation, and formalization mechanisms can open the door for a deeper and more pervasive form of ontological legal, political, and economic erosion of communal land-based forms of Indigenous biocultural organization. The latter must be rooted in non-Western cosmovisions and axiologies, non-anthropocentric ontologies, and cyclical-regenerative sacred ecologies. Indigenous peoples and organizations are thus increasingly alert to the ways in which state and market-centric formalization of tenure can become hegemonic incorporation without decolonization. 197 Ultimately, land rematriation as decolonization is guided by a spirit of struggle that stands opposed to the colonial state-market apparatus, and seeks to reconstitute a pluriverse of resurgent worlds beyond the hegemonic geopolitical and geo-economic orders that are at the root of the destruction of Mother Earth and the erosion of Indigeneity. While state-

¹⁹⁶ See WORLD RAINFOREST MOVEMENT, supra note 158, at 10; CLIMATE JUST. ALL. & INDIGENOUS ENV'T NETWORK, supra note 141; Indigenous Env't Network, supra note 175; Shrinkhal, supra note 192, at 73–74; Grey & Kuokkanen, supra note 7; see generally CLIMATE FALSE SOLS., supra note 66.

¹⁹⁷ See McAfee, supra note 93, at 335; Corson & MacDonald, supra note 108, at 263, 264; Richards & Lyons, supra note 108; Scheidel & Work, supra note 108; Scales, supra note 64, at 203–04; CLIMATE FALSE SOLS., supra note 66, at 2; ACTION AID ET AL., supra note 144; WORLD RAINFOREST MOVEMENT, supra note 158, at 3; CLIMATE JUST. ALL. & INDIGENOUS ENV'T NETWORK, supra note 141, at 29; see generally 'Nature-based Solutions': Concealing a Massive Land Robbery, supra note 144.

sanctioned title can be a tactical step, it needs to be taken cautiously and alertly.

And here, in particular, is where it becomes key to distinguish decolonial land rematriation from other forms of formalization of land tenure involving Indigenous peoples. Decolonial land rematriation inscribes Indigenous sovereignty and the full autonomous reconstitution of self-governing Indigenous biocultural communities, in accordance with their own cosmovision, axiology, and communal political economy and ecology, to the greatest extent possible—with due consideration of the limits of operating within a field of power still saturated by the hegemonic colonial order. 198 Decolonial land rematriation, moreover, is ultimately guided by an unrelenting critique of the state and market order and its public and private property regimes. 199 It recognizes the state and market order as structures of anthropocentric, colonial, capitalist, and patriarchal dominion, as ontologically in contradiction with Mother Earth's cyclical and regenerative metabolism, and as central drivers of general planetary social and environmental harm and catastrophe. ²⁰⁰ Decolonial land rematriation understands its geospatial and temporal ordering of worlds and territories not as parcels contained within the geographies and histories of Eurocentric modernity, the patriarchal state, and the capitalist market, but as resurgent modes of relationally

¹⁹⁸ For relevant discussions, see, among several others, Whyte, *supra* note 130; Newcomb, *supra* note 1; Tuck & Yang, *supra* note 73; Latulippe & Klenk, *supra* note 130; Grey & Kuokkanen, *supra* note 7; Fenelon, *supra* note 17, at 151, 164–65; Redvers et al., *supra* note 17, at 1; Figueroa Helland & Raghu, *supra* note 19, at 190; Tom Goldtooth, *Indigenous Knowledges against the Colonization and Destruction of Mother Earth, in* PATHS BEYOND PARIS: MOVEMENTS, ACTION, AND SOLIDARITY TOWARDS CLIMATE JUSTICE 8 (Joanna Cabello & Tamra Gilbertson eds., 2015), www.carbontradewatch.org/publications/paths-beyond-paris.html; Goldtooth, *supra* note 190.

¹⁹⁹ See Di Chiro, supra note 174; Latulippe & Klenk, supra note 130; Altmann, supra note 23, at 753–57; Figueroa Helland et al., supra note 22; Tuck & Yang, supra note 73; Fenelon, supra note 17; Part I, supra note 19; Figueroa Helland & Raghu, supra note 19, at 190; Redvers et al., supra note 17, at 1; Deborah McGregor et al., supra note 17, at 35–37; see also Goldtooth, supra note 198.

²⁰⁰ See Figueroa Helland, supra note 17, at 426; See Di Chiro, supra note 174; Latulippe & Klenk, supra note 130; Altmann, supra note 23; Figueroa Helland et al., supra note 22; Fenelon, supra note 17; Part I, supra note 19; Figueroa Helland & Raghu, supra note 19, at 190; Redvers et al., supra note 17, at 1; Deborah McGregor et al., supra note 17, at 35–37; see also Goldtooth, supra note 198; Whyte supra note 130.

regenerative human and nonhuman communities of life in accordance with their own sacred ecologies, calendars, and territorialities. Indigenous peoples are not seeking simply to carve out "their own" piece of land to be enclosed within and recognized under the overarching hegemonic perpetuity of states, markets, or international governance mechanisms. Land cannot be owned; we belong to the land. Mother Earth is not a system to be managed, but a life force that makes us possible.

Thus, Indigenous resurgence calls upon us to dismantle the systems that destroy Mother Earth and erode Indigenous lifeways. Indigenous peoples know well that carving one's own piece of land within an ontological order of states and private property based on the principle of dominion will not stop these industrialized and militarized states or the globalized capitalist economy from destroying the biosphere or the climate while erecting a global order of climate apartheid to securitize and further militarize their imperial mode of living. 202 While it is most certainly the case that Indigenous lands and sovereignty must be recognized, restored, and respected, rematriation requires the complementary project of decolonization. Otherwise, state- and market-centric land titling on its own cannot stop states and corporations from destroying the planet, even when they set aside some land for Indigenous peoples and local communities. Indigenous peoples know that the fragmentary protection of delimited areas for biodiversity conservation and carbon sinks is moot when the whole of Mother Earth faces a drastic system-wide metabolic disruption with the prospects of Hothouse Earth, runaway climate change, mass extinctions, extreme climate events, ruptured biogeochemical flows, ecosystem diebacks, spreading wildfires and

²⁰¹ See Whyte, supra note 130; Figueroa Helland, supra note 17, at 318; see also Di Chiro, supra note 174; Latulippe & Klenk, supra note 130; Altmann, supra note 23; Figueroa Helland et al., supra note 22; Tuck & Yang, supra note 73; Figueroa Helland & Raghu, supra note 19, at 190; Redvers et al., supra note 17, at 1; Deborah McGregor et al., supra note 17, at 35–37; see also Goldtooth, supra note 198.

²⁰² See Jennifer L. Rice et al., Against Climate Apartheid: Confronting the Persistent Legacies of Expendability for Climate Justice, 5 Env't & Plan. E 1, 14 (2021); Buxton, supra note 144; Carmen Gonzalez, Climate Change, Race, and Migration, 1 J.L. & Pol. Econ. 123 (2020); Nafeez Mosaddeq Ahmed, The International Relations of Crisis and the Crisis of International Relations: From the Securitisation of Scarcity to the Militarisation of Society, 23 Glob. Change, Peace & Sec. 335, 349–51 (2011).

melting ice caps turning GHG sinks into GHG bombs (e.g., burning forests, melting ice caps releasing permafrost), and the irreversible cascade of numerous catastrophic tipping points. ²⁰³ The whole Earth System is being swallowed up by destructions that will likely not spare any ecosystems or communities, whether titled or otherwise. ²⁰⁴ State-sanctioned and capital-serving titling, without dismantling state dominion, capital accumulation, and their underpinning Eurocentric colonial property regime, will not defend Mother Earth. Rematriation as decolonization goes beyond state validation or market inclusion. ²⁰⁵

VI. INDIGENOUS PEOPLES AND KNOWLEDGES ARE NOT SUPPLEMENTS TO THE SYSTEM, THEY ARE WORLDS BEYOND IT: TOWARDS INDIGENOUS DECOLONIAL LAND REMATRIATION

Indigenous decolonial rematriation and resurgence inevitably calls us to look beyond the Eurocentric order and property regime, including both state and capital systems, and towards resurgence and decolonization that center and revitalize Indigenous cosmovisions and modes of ecological, political, social, and territorial organization. This means creatively reconfiguring thousands of years of sustainable communal relations with land through coalitions that connect Indigenous people with other transformative subaltern movements, such as abolitionist liberation ecologies and postpatriarchal futures. Indigenous decolonial resurgence contributes

²⁰³ See, e.g., Whyte, Too Late for Indigenous Climate Justice, supra note 59, at 2; see also Folke et al., supra note 58, at 840–41; WORLD METEOROLOGICAL ORG., STATE OF THE GLOBAL CLIMATE 2021 (2021); FOSTER ET AL., supra note 86, at 14.

²⁰⁴ See generally Whyte, Too Late for Indigenous Climate Justice, supra note

See generally Whyte, Too Late for Indigenous Climate Justice, supra note 59.

See THE RED NATION, supra note 98.

²⁰⁶ See Tuck & Yang, supra note 73; THE RED NATION, supra note 98; Part Four: Memory of What Is to Come, ENLACE ZAPATISTA (Oct. 23 2020), http://enlacezapatista.ezln.org.mx/2020/10/23/part-four-memory-of-what-is-to-come; Jaskiran Dhillon, Introduction: Indigenous, Resurgence, Decolonization and Movements for Environmental Justice, 9 ENV'T & SOC'Y 1, 3 (2018).

²⁰⁷ See Deborah McGregor et al., supra note 17, at 35–37; UNITED FRONTLINE TABLE, A PEOPLE'S ORIENTATION TO A REGENERATIVE ECONOMY—PROTECT, REPAIR, INVEST AND TRANSFORM 3 (2020); Feminist Agenda for a Green New Deal: Principles and Values, FEMINIST GREEN NEW DEAL (2019), https://feministgreennewdeal.com/principles; CBD ALL., supra note 150; BRIOHNY WALKER,

to a post-hegemonic system change by autonomously reconstituting and creatively refiguring Indigenous orderings of the world, as shown in the following examples:

- The Andean system of land and food sovereign ayllus, markas, and suyus based on interzonal symbiosis, as exhibited by the work of National Council of Ayllus and Markas of Qullasuyu in Bolivia and the Andean Project of Peasant Technologies with its Nuclei of Andean Cultural Affirmation (PRATEC-NACAS, Peru);²⁰⁸
- The Mesoamerican autonomous and self-governing systems of communal governance, including among multiple other practices, communal assembly decision-making and accountability, reciprocal and communal labor, cyclical obligation by rotation in labor and service to the community, agroecological and polycultural milpas and extensive forest gardening and reciprocal labor practices, as seen in the work of the Rebel Zapatista Autonomous Municipalities, Maya and other Mesoamerican communities, and the autonomous municipalities of Oaxaca based on Indigenous comunalidad;²⁰⁹
- The northeastern Turtle Island matrifocal orders of the longhouse with their pyrogenic forest gardens, polycultural landscapes, and other projects of Indigenous resurgence in the region. In the northeast, notable contemporary projects include The Haudenosaunee-co-led Northeast Farmers of

PRECARIOUS TIME: QUEER ANTHROPOCENE FUTURES 137 (2019); Bhumika Muchhala, Towards a Decolonial and Feminist Global Green New Deal, ROSA LUXEMBURG STIFTUNG (2020), https://www.rosalux.de/en/news/id/43146/to-wards-a-decolonial-and-feminist-global-green-new-deal; Jamie Tyberg, Unlearning: From Degrowth to Decolonization, ROSA LUXEMBURG STIFTUNG (2020), https://rosalux.nyc/degrowth-to-decolonization; THE RED NATION, supra note 98; Ashih Kothari et al., Crisis as Opportunity: Finding Pluriversal Paths, in POSTDEVELOPMENT IN PRACTICE: ALTERNATIVES, ECONOMIES, ONTOLOGIES 100—16 (Elise Klein & Carlos Eduardo Morreo eds., 2019); Di Chiro, supra note 174, at 309.

 $^{^{208}}$ See Gonzales & Gonzalez, supra note 14, at 18; Gonzales, supra note 17; Figueroa Helland et al., supra note 22.

See Tzul Tzul, supra note 17, at 385–86, 388–90, 392–93; Tzul Tzul, supra note 31; Luna, supra note 25; Part I, supra note 19; Figueroa Helland et al., supra note 22; Figueroa Helland, supra note 17; Figueroa Helland & Raghu, supra note 19, at 196, 204; Ford et al., supra note 10; Rodríguez & Méndez, supra note 31.

- Color Land Trust (NEFOC-LT), The Ganienkeh Council Fire, and Kanatsiohareke Mohawk Community;²¹⁰
- The Lakota System of Social-Ecological Organization, based on respect to all our relations (o-midakuye oyasin) including Mother Earth (ina maka);²¹¹
- The Kanaka Maoli-Native Hawaiian mokupuni, kalana, and ahupua integrated socioecological systems based on cosmovisions centering 'Aina and 'Ohana or land and kin relations, such as in the 'Auwai irrigation systems;²¹²
- The full reconstitution of Amazonia as a self-governed Indigenous forest garden in motion, ²¹³ as exemplified by the Kichwa communal Kawsak Sacha (Living Forest); ²¹⁴
- The Aboriginal Australian care of country through firestick farming;²¹⁵
- The revitalization of autonomous Sea Country geographies by South Pacific Islander cultures;²¹⁶
- The reconstitution of Maori worlds and territorialities through the cosmovision and practices of tikanga;²¹⁷
- The reconstitution of agropastoralist geographies in East Africa, as among the Barabaig and Maasai, outside and beyond state demarcations and control;²¹⁸
- The reconstitution of self-governing Indigenous "sacred areas" across sub-Saharan Africa, based, for example, on Ukama and Ubuntu communal cosmovisions:²¹⁹

Other noteworthy projects include the Three Sisters Sovereignty Project, the Queer OnKwehowe Land Project led by Dioganhdih (Kanien'kehà:ka/Mohawk), the Cayuga Share Farm (Gayogohó:nọ'), Nibezun (Wabanaki), Schaghticoke First Nations Land Reclamation Project, and the Haudenosaunee Environmental Task Force.

²¹¹ See Fenelon & Alford, supra note 17, at 382, 390–91, 394.

²¹² See Davianna Pomaikal McGregor et al., supra note 17, at 107; Goodyear-Ka'öpua, supra note 17; Kagawa-Viviani et al., supra note 21.

²¹³ See Posey, supra note 3, at xv; Highpine, supra note 30; Zanotti, supra note 19, at 5.

²¹⁴ See Sarayaku, supra note 17; Coq-Huelva et al., supra note 23; Altmann, supra note 23.

See Graham, supra note 20; Rose, supra note 17, at 299–300.

²¹⁶ See Whitehouse et al., supra note 26.

See Wolfgramm et al., supra note 24, at 224–25.

²¹⁸ See Pastoralists Indigenous Non Gov't Orgs. F., supra note 17.

²¹⁹ See generally Ekblom, supra note 30, at 6; Le Grange, supra note 17, at 61; Ikkeke, supra note 17, at 151.

- The reemergence of a self-governing panoply of Adivasi sacred groves and forests;²²⁰
- The resurgence of Sapmi as an independent sovereign Indigenous geography;²²¹
- The restoring of decentralized horizontal free Amazigh communes, like in Barbacha;²²²
- The materialization of Bedouin sumud in defending lands and staying in place, autonomously in opposition and beyond settler colonialism.²²³

Indigenous movements are implementing decolonial resurgence as part of intersectional collaborations with diverse counterhegemonic coalitions. Examples include the work of the Zapatistas in Mesoamerica (Chiapas, Mexico, ²²⁴ that of the Association of Indigenous and Afrodescendant Fishermen and Peasants for the Community Development of the Bajo Sinú (ASPROCIG) in Colombia, ²²⁵ and that of the Northeast Farmers of Color Land Trust (NEFOC-LT)²²⁶ in the Northeast of Turtle Island. Inter-American—Abya Yala and Turtle Island—movements include the Minga Indigena, ²²⁷ among others.

²²⁰ See DUNGDUNG, supra note 17; see generally, Khan, supra note 17.

See Wing, supra note 31.

²²² See Michael Desnivic & Habiba Dhirem-Kasper, Other Rojavas: Echoes of the Free Commune of Barbacha Chronicling an Autonomous Uprising in North Africa, CRIMETHINC (Nov. 2, 2017), https://crimethinc.com/2017/11/02/other-rojavas-echoes-of-the-free-commune-of-barbacha-an-autonomous-uprising-in-north-africa-2012-2014.

²²³ See Ahmed Amara et al., Indigenous (In)Justice: Human Rights Law and Bedouin Arabs in the Naqab/Negev 1 (2012); Marion Lecoquierre, Emplaced Resistance in Palestine and Israel: The Cases of Hebron, Silwan and Al-Araqib (2021).

²²⁴ For the Zapatista movement (EZLN), please consult their webpage, https://enlacezapatista.ezln.org.mx. A large amount of their communication is translated there into multiple languages, including English.

²²⁵ See Alejandro Camargo, Global Climate Change in Rural Colombia is About More Than Just the Climate, NACLA (July 23, 2014), https://nacla.org/news/2014/7/23/global-climate-change-rural-colombia-about-more-just-climate.

²²⁶ See Northeast Farmers of Color Land Trust (2022), https://nefo-clandtrust.org.

²²⁷ See Minga Indígena, supra note 151 (emphasis added); see also COP26, supra note 188.

Decolonial land rematriation demands amplifying and defending Indigenous sovereignty and collective rights of self-determination. ²²⁸ It also calls for Indigenous peoples worldwide to reclaim and revitalize Indigenous cosmovisions, languages, knowledges, and relational modes of conviviality for their own self-determination and, emphatically, resisting their appropriation by hegemonic actors.²²⁹ Importantly, the reclamation of Indigenous knowledges and practices should be for the use and purposes of Indigenous peoples and not for their incorporation into hegemonic state and market systems.²³⁰ Only through ensuring and enhancing Indigenous sovereignty, revitalizing Indigenous cosmovisions, knowledges, languages, and modes of communal conviviality globally can we reconstitute biocultural territories of life which are the basis of a pluriverse of real alternatives and solutions to the devastating environmental and social crises caused by the continuing expansion of colonial, extractivist, patriarchal, and capitalist systems.

In closing words, we stand today before two opposing paths as we confront the intersecting "Anthropocene" crises of Mother Earth. One is the hegemonic market-driven, state-centric, and intergovernmentally supported track based on false solutions and dangerous technofixes to the converging social and environmental crises.²³¹ These approaches re-entrench the anthropocentric, colonial,

²²⁸ See, e.g., Figueroa Helland et al., supra note 2; Newcomb, supra note 1; Tuck & Yang, supra note 73; Latulippe & Klenk, supra note 130; Grey & Kuokkanen, supra note 7; Redvers et al., supra note 17, at 11; Figueroa Helland et al., supra note 22; Figueroa Helland, supra note 17; Altmann, supra note 23; Deborah McGregor et al., supra note 17, at 35–37; see generally Goldtooth, supra note 198; Whyte, supra note 130.

²²⁹ See Figueroa Helland, supra note 17; Latulippe & Klenk, supra note 130; Part I, supra note 19; Figueroa Helland & Raghu, supra note 19, at 190; Rodríguez & Méndez, supra note 31; Tzul Tzul, supra note 31; Tzul Tzul, supra note 27; Deborah McGregor et al., supra note 17, at 35–37, Redvers et al., supra note 17, at 11; see generally Goldtooth, supra note 198; Whyte, supra note 130.

²³⁰ See Figueroa Helland, supra note 17; Latulippe & Klenk, supra note 130; Rodríguez & Méndez, supra note 31; Figueroa Helland & Raghu, supra note 19, at 190; see also Fenelon & Alford, supra note 17; Deborah McGregor et al., supra note 17, at 35–37; Redvers et al., supra note 17, at 11; see generally Goldtooth, supra note 198; Whyte, supra note 130.

²³¹ See Verweijen & Dunlap, supra note 64, at 5; Dunlap, Ecocide, supra note 65, at 230; Sovacool, supra note 107; Jerez et al., supra note 65, at 3, 6, 9; Borras & Franco, supra note 80, at 1–12; FRIENDS OF THE EARTH INT'L, supra note 144, at 4, 8; FRIENDS OF THE EARTH INT'L, supra note 141; Fernando, supra note 59, at

patriarchal, capitalist, neoliberal, and militarizing frameworks at the root of our epochal crises. This track is being reinforced through governance, notably but not exclusively at the global level. Consider, for example, in the UNFCCC Conference of Parties, including the latest COP26. As Tom Goldtooth of the Indigenous Environmental Network states,

The outcome of COP26 locks us into another decade of false solutions, colonialism and unbridled violence upon Mother Earth. The expansion of carbon markets, technofixes and finance programs allowing historical polluters to ramp up global fossil fuel production will only intensify the climate emergency. The consequences of COP26 are dire and will impact the survival of Indigenous Peoples and local communities across the planet, while doing little to reduce global greenhouse gas emissions at source. Many communities around the world do not have time. ²³²

The other track, the track of systemic change through intersectional liberation and decolonization, is based on the straightforward recognition that what creates crisis cannot solve it. And so dismantling colonialism, capitalism, patriarchy, and the state-centric system that produces the crisis is fundamental if human and nonhuman relations are to flourish once again. This requires the decolonial rematriation of the lands, sovereignty, cosmovisions, and lifeways of Indigenous peoples. What we need is to look well beyond the hubris of a civilization bent on mastering Mother Earth—including human and non-human 'others'—to center Indigenous, decolonial, Afro-Indigenous, Black abolitionist, peasant, Global South, feminist, and QTBIPOC, 34 subaltern, frontline and grassroots visions. Together, these movements shift us towards restoring and nurturing regenerative, complementary, intersectional, reciprocal, and diverse

^{654–55;} *see generally* Dunlap, *Wind*, *supra* note 65; Kramarz et al., *supra* note 117; CLIMATE FALSE SOLS., *supra* note 66.

²³² UNFCCC COP26 Negotiations End with False Solutions Insufficient to Mitigate Warming to 1.4C, INDIGENOUS ENV'T NETWORK (Nov. 13, 2021), https://www.ienearth.org/unfccc-cop26-negotiations-end-with-false-solutions-insufficient-to-mitigate-warming-to-1-4c/.

THE RED NATION, *supra* note 98.

²³⁴ OTBIPOC: Queer, Transgender, Black, Indigenous, and/or People of Color.

²³⁵ See Deborah McGregor et al., supra note 17, at 35–37; Fenelon & Alford, supra note 17; United Frontline Table, supra note 207; Feminist Green New Deal, supra note 207; CBD All., supra note 150; Walker, supra note 207; Muchhala, supra note 207; Tyberg, supra note 207; Di Chiro, supra note 174.

territories of life based on care for land, human, and other-than-human communities, and towards honoring Mother Earth.