



# Introduction

## Toxic Embodiment and Feminist Environmental Humanities

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This special section on toxic embodiment examines variously situated bodies, land- and waterscapes and their naturalcultural interactions with toxicity.<sup>1</sup> The ideas of toxic embodiment play out in the social imaginaries of science and popular culture. Toxins have become a widespread and well-known threat to life on the planet, accompanied by iconic photographs of dead killer whales washed ashore. Infertile orcas with extreme levels of PCB (polychlorinated biphenyl) in their system bring to the environmental social imaginary the toxic kinship of predators and other species, including humans, threatened by extinction. The cumulative exposure to endocrine disruptors, neurotoxins, asthmagens, carcinogens, and mutagens comes with everyday life today, making us all toxic bodies. In our present situation, the theme of toxic embodiment embraces extensive existential concerns around health and environment as we all interact with climate change, antibiotics, and untested chemical cocktails through the food we eat, the makeup we wear, the new sofas we sit on, or the environments in which we dwell. Without doubt, we also become more acutely aware today of how we are in nature, and nature, polluted as it may be, is in us. Terms like bio-burden or bioaccumulation circulate widely in the environmental social imaginary, injected by imagery and terminology from the natural sciences and popular culture. Bioaccumulation describes for instance the processes by which toxic substances, industrial waste or human-made chemical compounds, gradually accumulate in living tissue. The highest concentrations of toxic pollutants find their way into organisms at the higher trophic levels of the

1. The concept of natureculture originates in Donna Haraway's *The Companion Species Manifesto: Dogs, People, and Significant Otherness*.

ecological chain of being in a process known as biomagnification, but human-altered chemistries spread across vast regions of the planet, even in the deepest depths of the sea.

The ubiquity of toxins in our bodies is certainly an alarming environmental concern: industries leak waste into rivers and oceans, meteorological conditions transport contaminants to the breast milk of humans and other mammals in polar zones, plastics seep endocrine disruptors into a myriad of sea and land living organisms.<sup>2</sup> To deploy feminist environmental humanities scholar Stacy Alaimo's influential notions of exposure and trans-corporeality,<sup>3</sup> the trans-corporeal transits of toxicity seem to spare no place and no body. Environmental justice scholar Giovanna Di Chiro underlines in the trailblazing volume *Queer Ecologies* that there is good reason for public alarm concerning the continued use, circulation, and accumulation of (sometimes long since forbidden) toxic chemicals as they are wreaking havoc on the health and reproductive possibilities of the living world.<sup>4</sup> However, Di Chiro along with transfeminist scholars Eva Hayward and Malin Ah-King,<sup>5</sup> criticize the often sensationalist focus on "gender-bending" effects of endocrine-disrupting chemicals as rooted in anti-queer normativity. Their focus traces the gendered, racialized, ableist, and heteronormative patterns of mainstream environmentalism, exposing the ways in which the perceived feminization of nature, with castrating chemicals, low sperm counts, and reproductive and genital neoformations, is presented as the ultimate risk scenario of much antitoxic discourses. Such antitoxic discourse gets infused with a "polluted politics"<sup>6</sup> and "toxic sexism" where feminized monstrous, queer, or crip bodies again get cast as deviant, impure, or contaminated. In the process, titillating as it may be in word choices or imagery of popular environmentalism, a range of other threats of mortality and morbidity, cancerous ecologies and extirpated habitats gets glossed over. From the pioneering work of Rachel Carson to Vanessa Agard-Jones's pathbreaking research on toxic burdens, feminist and queer environmental perspectives intersect with decolonial, antiracist, and indigenous ones, to pave the way for understanding how the toxicity of our environments is intertwined with power relations understood as toxic: racism, settler-colonial violence, corporate greed, militarism, and toxic masculinities. The important question is who gets to live, play, thrive, and survive, and who gets to suffer and die from the "slow violence"<sup>7</sup> of toxic compounds and socioeconomic vulnerability.

With toxic pollutants as a rising threat, important questions about environmental justice, gender, and the sexual politics of environmental movements issue an urgent

2. Neimanis, Åsberg, and Hedrén, "Four Problems, Four Directions for Environmental Humanities."

3. For exposure, see Alaimo, *Exposed*; for trans-corporeality, see Alaimo, *Bodily Natures*.

4. Di Chiro, "Polluted Politics?"

5. Ah-King and Hayward, "Toxic Sexes."

6. Di Chiro, "Polluted Politics?"

7. Nixon, *Slow Violence and the Environmentalism of the Poor*.

challenge to intersectional gender and science studies; to anticolonial, queer, and trans theory; as well as to environmental and human-animal studies at large. Taking up this challenge, this special section aims at attending to the ways toxic embodiment disturbs or aligns with multiple boundaries of sexes, generations, races, geographies, nation-states, and species and how toxicity has re-dynamized corporeality and the biochemical materiality of bodies.<sup>8</sup> And for sure, our call for papers evoked a range of critical and creative responses to how existential concerns around health in the Anthropocene put bodies and toxicity firmly at the center of the environmental humanities.

The range and richness of the submissions we received testify to the vitality of the concern for environmental health among feminist, queer, creative, and environmental scholars. The original research papers and essays we selected represent a number of environmental humanities subfields, and they demonstrate a variety of theoretical approaches to the topic of toxic embodiment. Together, they trace a trajectory from an initial understanding of the oppressiveness of toxic politics and environmental injustice to a subsequent recuperation of their potential as sites of shared vulnerability and activism. Any exertion to think in new ways about toxic embodiment requires renewed attention to cultural interpellation and lively social processes as well as to biological embodiment, illness, and social practices of dying. Accordingly, this section begins with an article by Nina Lykke, a queer feminist pioneer of environmental, multispecies, and medical humanities in the Scandinavian context, who advocates a renewed attention to Anthropocene “necropolitics”<sup>9</sup> amidst global cancer epidemics. In her piece “Making Live and Letting Die: Cancerous Bodies between Anthropocene Necropolitics and Chthulucene Kinship,” Lykke seeks to reorient the environmental humanities analytics from a merely critical approach of individuals fighting the war on cancer to a critical-affirmative approach of a “we,” a planetary kinship of vulnerable bodies inhabiting “the Chthulucene”<sup>10</sup> through an ethics of affirmative difference.

Hugo Reinert, in his article “The Midwife and the Poet: Bioaccumulation and Retroactive Shock,” follows in this northern suite with a triangulation of ethnographic stories from a mining site in northern Norway. In his essay, Reinert attempts to make tangible a particular Anthropocene affect, a shared and embodied feeling of retroactive shock from experiences of differently distributed risks and harms of chemical exposure, colonial racism, ethnic erasure, and environmental destruction.

In Sasha Litvintseva’s contribution to this collection, the media and cultural scholar and filmmaker follows toxic afterlives of asbestos in a Canadian town whose history and even its name are inseparable from the history of asbestos production. For

8. For ways toxic embodiment disturbs or aligns with multiple boundaries of sexes, generations, races, geographies, nation-states, and species, see Agard-Jones, *Body Burdens*; Gaard, *Critical Ecofeminisms*; Nun, “Toxic Encounters”; Murphy, “Alterlife and Decolonial Chemical Relations”; Roberts, *Messengers of Sex*; Roberts et al., “Toxic Bodies/Toxic Environments”; and Simmons, “Settler Atmospheric.”

9. Mbembe, “Necropolitics.”

10. Haraway, “Anthropocene, Capitalocene, Plantationocene, Chthulucene.”

Litvintseva, asbestos is a fibrous mineral that operates outside in and inside out, attesting to envired embodiment and embodied environments in the conceptual registers of trans-corporeality and viscous porosity.<sup>11</sup> Asbestos exhibits a weird and multi-sited cultural history of its own, but more importantly, she asserts, it translates into an understanding that there is no spatial or temporal “outside” in which to deposit toxic materials. Following on this, Litvintseva argues that being an envired body also means there is no “outside” to either vulnerability or responsibility.

The theme of “Outside Inside” continues in Adam Dickinson’s poetic intervention with this particular title. Dickinson’s creative focus is on the proliferation of plastics and petrochemicals, and on how they also constitute forms of socio-material and biological writing capable of altering human metabolisms. Starting from the measured levels of phthalates in his own urine, the poem considers “metabolic poetics” of endocrine-disrupting chemicals and links the personal to the global in environmental ethics.

The old feminist adage, the personal is political, gets another twist in Michael Marder’s essay “Being Dumped.” In a fervor of field philosophical conceptions, plant philosopher Marder digs where he stands in his post-phenomenological exposé on the “ontological toxicity” of the dump of ideas, bodies, dreams, memes, and waste materials that make the present place the age of the global dump.

Miriam Tola, a cultural media and gender scholar with a track record in cinema journalism and documentary making, explores toxic embodiment and what might emerge from the toxic ruins of modernity. She takes us to a former chemical-textile plant in the Prenestino neighborhood of Rome, Italy, a postindustrial ruin and site of labor exploitation, toxicity, and environmental struggle since the 1920s, in her article “The Archive and the Lake. Labor, Toxicity, and the Making of Cosmopolitical Commons in Rome, Italy.” Drawing on archives from the area, she examines toxic memories and environmental destruction and finds historical workers’ resistance seeding into contemporary underground activism for the human and nonhuman commons of this “rebel lake” area and into antiproprietary cosmopolitics.

This special section on toxic embodiment aims to pick up recent injunctions to explore differing forms of multispecies exposure, as originating in the various tap-ins to environmental humanities.<sup>12</sup> Feminist scholar and trans cinema activist Wibke Straube traces ticks, trans bodies, and others of the kind Deborah Bird Rose and Thom van Dooren call “unloved others”<sup>13</sup> through close readings of video art, blog posts, and movies on the livability of trans embodiment. Cultural approaches to the transgender body as human Other and the tick body as an animal Other, come together here to explore toxicity as a “feminist figuration”<sup>14</sup> for unexpected alliances and an ethical engagement

11. For trans-corporeality, see Alaimo, *Bodily Natures*; for viscous porosity, see Tuana, “Viscous Porosity.”

12. Alaimo, *Exposed*; Chen, *Animacies*; DeSilvey, *Curated Decay*; Oppermann, “Toxic Bodies and Alien Agencies”; van Dooren, *Flight Ways*.

13. Rose and van Dooren, “Unloved Others.”

14. Haraway, “Manifesto for Cyborgs”; Haraway, “Introduction.”

with the world that exceeds common practices of pathologization. The very idea of toxicity, and that it must be purged from our lives (detoxed) in order to return to some imagined pristine or pure state of being, points to a whole underbelly of a question: How are we all complicit in who and what gets to count as toxic and in toxic existence at large, with our consumerist lifestyles and dependency on intoxications of all kinds? This is where Michael Marder's essay crosses over with Wibke Straube's transfeminist exposé. As Mel Y. Chen phrased it, how might the intimacies of toxicity also summon "queer loves?"<sup>15</sup> Indeed, experimenting with the triangulation between our selfhood's toxic embodiment, between word and world, is itself a form of exposure, demanding new conceptualizations, ways of writing, and lines of flight. This work, rather than calling for detoxification and purity, is a work of attending to the wounds of the world,<sup>16</sup> and calling for collective and individual forms of healing and caring for human and more-than-human communities.

We discovered as editors that exploring the theme of toxic embodiment entails some difficult interdisciplinary or even postdisciplinary conversations, engaging environmental historians, queer feminist philosophers, transgender studies scholars, scientists, eco-cultural studies and science studies people, literary and eco-poetic researchers, and academic politics of location.<sup>17</sup> As the editors of this special section, we are so grateful to have made the acquaintance with what seems like a surge in research interest in diversifying environmental humanities, already a pluripotent field of many upstream sources in environmental justice, queer and trans theory, multispecies humanities, science, and popular imagination.

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15. Chen, *Animacies*, 207–11.

16. Sandilands, "Melancholy Natures, Queer Ecologies."

17. Rich, "Notes towards a Politics of Location."

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### References

- Agard-Jones, Vanessa. *Body Burdens: Toxic Endurance and Decolonial Desire in the French Atlantic*. (Forthcoming).
- Ah-King, Malin, and Eva Hayward. "Toxic Sexes—Perverting Pollution and Queering Hormone Disruption." *O-zone: A Journal of Object-Oriented Studies* 1 (2014): 1–12.
- Alaimo, Stacy. *Bodily Natures: Science, Environment, and the Material Self*. Bloomington: Indiana University Press, 2010.
- Alaimo, Stacy. *Exposed: Environmental Politics and Pleasures In Posthuman Times*. Minneapolis: University of Minnesota Press, 2016.
- Chen, Mel Y. *Animacies: Biopolitics, Racial Mattering, and Queer Affect*. Durham, NC: Duke University Press, 2012.
- DeSilvey, Caitlin. *Curated Decay: Heritage Beyond Saving*. Minneapolis: University of Minnesota Press, 2017.
- Di Chiro, Giovanna. "Polluted Politics? Confronting Toxic Discourse, Sex Panic, and Eco-Normativity." In *Queer Ecologies: Sex, Nature, Politics, Desire*, edited by Catriona Mortimer-Sandilands and Bruce Erickson, 199–230. Bloomington: Indiana University Press, 2010.
- Gaard, Greta. *Critical Ecofeminisms*. Lanham, MD: Lexington, 2017.
- Haraway, Donna J. "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin." *Environmental Humanities* 6 (2015): 159–65.
- Haraway, Donna J. "Introduction: A Kinship of Feminist Figurations." In *The Haraway Reader*, edited by Donna Haraway, 1–6. New York: Routledge, 2004.
- Haraway, Donna J. "A Manifesto for Cyborgs. Science, Technology, and Socialist Feminist in the 1980s." In *The Haraway Reader*, edited by Donna Haraway, 7–46. New York: Routledge, 2004.
- Haraway, Donna J. *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Chicago: Prickly Paradigm Press, 2003.
- Mbembe, Achille. "Necropolitics," translated by Libby Meintjes. *Public Culture* 15, no. 1 (2003): 11–40.
- Murphy, Michelle. "Alterlife and Decolonial Chemical Relations." *Cultural Anthropology* 32, no. 4 (2017): 494–503.
- Neimanis, Astrida, Cecilia Åsberg, and Johan Hedrén. "Four Problems, Four Directions for Environmental Humanities." *Ethics and the Environment* 20, no. 1 (2015): 67–97.
- Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA: Harvard University Press, 2011.
- Nunn, Niel. "Toxic Encounters, Settler Colonial Logics of Elimination, and the Future of a Continent." *Antipode: A Radical Journal of Geography*. June 10, 2018. <https://doi.org/10.1111/anti.12403>.
- Oppermann, Serpil. "Toxic Bodies and Alien Agencies. Ecocritical Perspectives on Ecological Others." In *The Postcolonial World*, edited by Jyotsna G. Singh and David D. Kim, 412–23. New York: Routledge, 2016.
- Rich, Adrienne. "Notes towards a Politics of Location." In *Blood, Bread and Poetry*. London: Virago, 1986.
- Roberts, Celia. *Messengers of Sex: Hormones, Biomedicine, and Feminism*. Cambridge: Cambridge University Press, 2007.

- Roberts, Jody A., Nancy Langston, Michael Egan, Scott Frickel, Linda Nash, Barbara Allen, Sarah A. Vogel, Davis Frederick Rowe, Arthur Daemrich, and Michelle Murphy. "Toxic Bodies/Toxic Environments: An Interdisciplinary Forum." *Environmental History* 13 (2008): 629–703.
- Rose, Deborah Bird, and Thom van Dooren. "Unloved Others: Death of the Disregarded in the Time of Extinctions: Introduction." *Australian Humanities Review* 50 (2011): 1–4.
- Sandilands, Catriona Mortimer. "Melancholy Natures, Queer Ecologies." In *Queer Ecologies: Sex, Nature, Politics, Desire*, edited by Catriona Mortimer-Sandilands and Bruce Erickson, 331–58. Bloomington: Indiana University Press, 2010.
- Simmons, Kristen. "Settler Atmospheric." *Cultural Anthropology*, November 20, 2017. <https://culanth.org/fieldsights/1221-settler-atmospherics>.
- Tuana, Nancy. "Viscous Porosity: Witnessing Katrina." In *Material Feminisms*, edited by Stacy Alaimo and Susan Hekman, 188–213. Bloomington: Indiana University Press, 2008.
- van Dooren, Thom. *Flight Ways: Life and Loss at the Edge of Extinction*. New York: Columbia University Press, 2014.