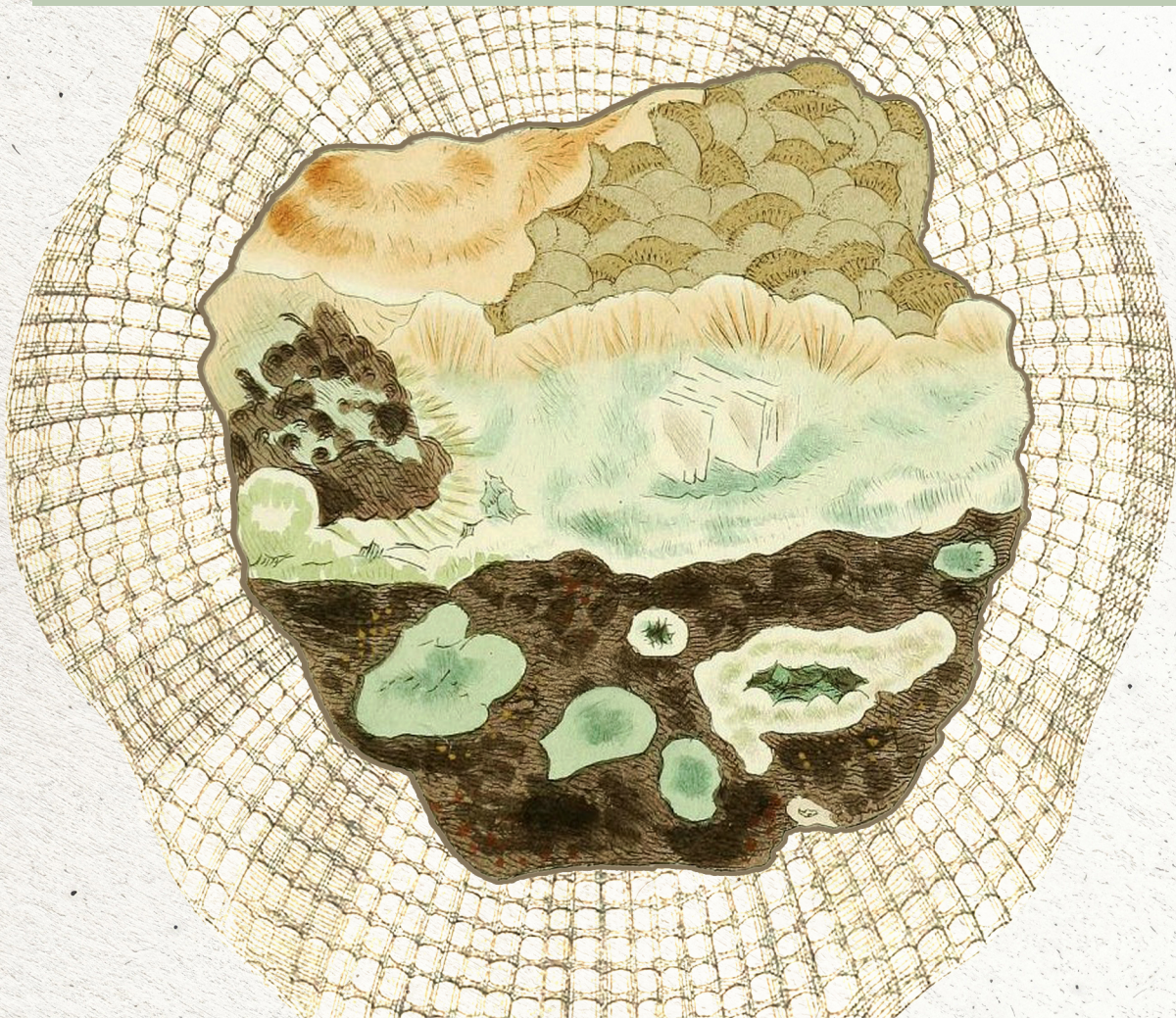


Reconnections

The Humanities in a Time of Climate Change



Editor: Thomas Mantzaris

Conversing with American Culture

Series General Editors

Tatiani G. Rapatzikou & Smatie Yemenedzi-Malathouni

Department of American Literature and Culture,
School of English, Aristotle University of Thessaloniki, Greece

The series by helaasdp is open to volumes in both Greek and English that use a variety of methodological approaches to American literature and culture with emphasis placed on different historical periods, literary texts and cultural trends within the national, comparative or global context.

Reconnections: The Humanities in a Time of Climate Change

**Edited by
Thomas Mantzaris**



Thessaloniki 2025



ePublishing

epublishing.ekt.gr

Publisher: Hellenic Association for American Studies Digital Publications
The e-book is uploaded on the website of the National Documentation Centre (EKT).

Volume editor: Thomas Mantzaris
(Centre for Literary and Intermedial Crossings, Vrije Universiteit Brussel)

Copyright © 2025 Hellenic Association for American Studies Digital Publications



This is an open-access publication distributed under the terms and conditions of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License (CC-BY-SA 4.0).

To view a copy of the license, visit the following page:
<https://creativecommons.org/licenses/by-nc-sa/4.0/deed.en>.

Cover: “An agate landscape on climate change” by Nassia Kefala
Cover design: Nassia Kefala

ISBN: 978-618-85422-2-8 (e-book, pdf)



Acknowledgements

First and foremost, I wish to thank all the essay contributors for entrusting me with their research, as well as for all the dedication and professionalism they exhibited throughout the process. This volume is a testament to the quality of their work, and I am very glad it brings together early-career researchers from several countries and universities across Europe.

Moreover, I would like to thank the Presidents of the European Association for American Studies (EAAS), Ingrid Gessner (2024-) and Philip McGowan (2016-2024), for their Preface, which places the contents of this volume within a firm and international institutional context. I also thank Theodora Tsimpouki, President of HELAAS, for her Foreword and for supporting this venture from its onset. My special thanks go to graphic designer Nassia Kefala for her exceptional cover.

Finally, I would like to thank the general editors of HELAAS Digital Publications for their efforts and the National Documentation Centre (EKT) for providing a venue for this volume.

The editor

Thomas Mantzaris

Table of Contents

Foreword

Theodora Tsimpouki	vii
--------------------------	-----

Preface

Ingrid Gessner & Philip McGowan	ix
---------------------------------------	----

Introduction

Thomas Mantzaris.....	1
-----------------------	---

Part I: Connecting Again

Ecological Affects in Literature: The Role of Aliveness in American Fiction

Loredana Filip.....	19
---------------------	----

Tales of Interconnectedness: Exploring Environmental Issues and Ecological Connections through *The Atomic Tree* and *Tree* VR Projects

Paschalia Mitskidou.....	35
--------------------------	----

Environmental Degradation, Corporate Capitalism and Posthuman Ecological Futures in Paolo Bacigalupi's *The Windup Girl* (2009)

Evripidis Karavasilis.....	54
----------------------------	----

Dried Bodies, Ashen Earth: The Grotesque Corporeal Aesthetics of Environmental Catastrophe in Cormac McCarthy's *The Road*

Christina Koukouli.....	68
-------------------------	----

Part II: No Ground for Indigenous Communities

Re-Membering Disembodied Subjects and Landscapes: Cultural Survival, Indigenous Environ-Mentalities and Ecological Activism in Linda Hogan's *Solar Storms* (1997)

Foteini Toliou.....	82
---------------------	----

“Girl Who Comes Out Fighting”: Indigenous Girlhood in Eco-Crisis in Rebecca Roanhorse's *The Sixth World*

Yıldız Aşar	98
-------------------	----

After the Ruin: Narrating Ecological Disaster and Envisioning Communal Restoration in Thomas King's *The Back of the Turtle* (2014)

Niki Grigoria Karamanidou	123
---------------------------------	-----

Part III: In Deeper Oceans

What's in a Name? An Exercise in Pacing an “AI”'s Story Differently

Judith Campagne.....	143
----------------------	-----

“I Invoke Cunt”: Ecofeminist Manifestos and the Pains and Pleasures of the Female Earth

Laura Handl157

Holding Water to Hold Water: Comparing Levees and Tajines as Bodies of Water

Lukas H. Seidler.....174

Part IV: Storytelling Called to Arms

“I Count My Hopes”: Humanities and Narrating the Environmental Crisis

Susen Halank189

Call to Action, *Remember Nature*: Literary Visuality, Visual Sustainability, and Multimodality as Advocates of Environmental Sensibility

Maria Virginia Tsikopoulou208

Biographical Notes224

Foreword

It's a pleasure to open this singular volume that gathers and collates the work of early-career researchers across Europe who collectively address climate change, interrogating its social dimensions and their representation in literature and film. The challenges of climate change are not new. However, in this inaugural edition in English of the Hellenic Association for American Studies (HELAAS) in cooperation with the National Documentation Center, Thomas Mantzaris, the Young Scholar Representative for HELAAS has brought together a group of passionate early-career scholars from Greece, along with their peers from Germany, the Netherlands, Spain and Belgium, all of who are motivated by the prospect of generating insights and creating knowledge that is useful and may help tackle the grand challenge of climate change.

The initiative for this volume was given in March 2024, when, on behalf of HELAAS, Dr. Mantzaris undertook the organization of the 4th Young Scholar Symposium which was held in Athens in hybrid form. The international participation of early career researchers and high quality of the symposium's presentations was the inspiration behind this collection of essays. The included articles seek to raise consciousness of the planetary emergency we now face in relation to climate crisis, to confer on how the humanities can help promote an ecological worldview, and to critically engage with questions about the role language, literature and art can play in finding more ecologically attuned ways of inhabiting nature. These young scholars join their voices, in their attempt to offer vital insights and creative solutions toward environmental sustainability, to extend engagement and collaboration not just within but also beyond the academy.

Indeed, cooperation, connectedness, and relationality have been the goals of HELAAS, since its foundation in 1993. A more recent initiative that was inspired by the enthusiasm of our association's members is the creation of the Young Scholars group. Their main objective is to strengthen the communication and dialogue between junior members, offer them practical experience and connect them with other postgraduate communities in Europe by organizing annual symposia and promoting certain research initiatives. The present collection of essays is the end result of such a creative effort.

Based on the realization of our interconnectedness with each other and with the natural world, this volume seeks to engage with climate change and sustainability issues, in order to contribute to environmental awareness and hopefully to open possibilities for collective action toward climate justice.

On behalf of the HELAAS board,

Theodora Tsimpouki, President
(National and Kapodistrian University of Athens)

Preface

Reconnections: The Humanities in a Time of Climate Change appears at a crucial moment for planet Earth. According to the World Meteorological Organization, 2024 was the warmest year on record, extending a decade-long streak of escalating global temperatures (WMO Press Release). We live in a present already transformed by droughts, fires, floods, and forced migrations. The acceleration of the climate crisis demands new tools, not only the technologies of mitigation and adaptation, but also the creative, ethical, and critical instruments cultivated by, and enhanced through interaction with, the humanities. The humanities make the urgency of climate change less abstract. They provide us with the language, images and calls for response through which catastrophe is rendered tangible; they offer the ethical frameworks through which responsibility is allocated; and they produce the imaginative resources through which alternatives are conceived. This timely collection brings together research from early-career researchers across Europe to show how literature, art, media, education, and technology can illuminate the textures of the climate crisis, revealing the connections between local harm and global systems, and encouraging forms of innovative solidarity rooted in justice.

The framework of environmental justice is especially important here. As Joni Adamson, Mei Mei Evans, and Rachel Stein argued more than two decades ago in their landmark *The Environmental Justice Reader: Politics, Poetics, and Pedagogy* (2002), the movement is animated by the insistence that all people have the right to share equally in the benefits of a healthy environment. Crucially, “environment” does not only refer to remote wilderness areas or pristine landscapes, but to the places where communities “live, work, play, and worship” (4). This widening of the definition insistently links the ecological struggle to the struggle for social justice. Environmental justice movements have revealed that climate change, toxicity, and pollution do not fall on everyone evenly, but disproportionately burden communities of color, Indigenous peoples, women, workers, and the poor.

In this light, climate change cannot be understood simply as a “natural” disaster, nor can it be addressed through technical fixes alone. It must be seen as a political and

cultural problem, one that is deeply entangled with histories of racial violence, colonialism, heteropatriarchy, ableism, and the unequal outworkings of global capitalism. To respond adequately to the crisis, we must therefore respond, not only to rising seas and warming air, but to global systems of oppression that dictate whose lives are rendered precarious and whose futures are secured.

At stake is the recognition that the climate crisis is not simply a question of carbon emissions or temperature targets, but of how we tell stories about the world and about our own lives on it. Do we narrate the future as one of inevitable decline, or as a shared field of possible transformation? Do we remember and deconstruct the histories of exploitation that produced our present crisis, or do we erase them in favor of “green” fantasies of technological salvation? Do we imagine “nature” as something separate from humanity, or do we acknowledge our irrevocable entanglement with all other forms of life on earth? As the essays in this collection reinforce time and again, the humanities create a critically engaged space that helps us to pose these questions with rigor and urgency.

Indeed, to read this volume is to be reminded of what is stake for scholarship itself. At a time when the value of the humanities is often questioned, *Reconnections* demonstrates that, far from being irrelevant, cultural inquiry is indispensable to planetary survival. To analyze a novel, a film, or a digital project is not a retreat from urgent action but a way of participating in it. The classroom, the archive, and the seminar room are not isolated from “the street”: they are intimately connected to it. As environmental justice movements have shown, cultural work is activist work.

In this sense, the collection also resonates with the broader histories of American Studies and its related interdisciplinary fields. From its origins, American Studies has been shaped by—and continues to express itself as—political struggle; indeed, it has often itself become the target of political backlash in any given historical moment of conservative revisionism. American Studies scholars have moved from reinforcing national mythologies to contesting them, from telling stories of American exceptionalism to foregrounding uncomfortable realities like migration, Indigenous dispossession, incarceration, gendered violence, and racial capitalism. That trajectory underscores the enduring truth that scholarship is never neutral: it either reinforces existing structures of

power or equips us to challenge them. Climate change sharpens this reality, because to ignore it is to bolster the very systems that caused the crisis, while to confront it is to imagine alternatives, to reimagine possible futures with a modicum, if neither an expectation nor a guarantee, of hope.

To say that the humanities matter in a time of climate change is therefore not simply to defend the disciplines but to reimagine them. It is to recognize that cultural critique must always remain unsettled and dynamic, responsive to shifting conditions and newly emerging crises. The alternative is intellectual calcification, the withering of our collective capacity to imagine change. What this collection demonstrates, by contrast, is a field alive with responsiveness, one that embraces the unsettledness of the present as an opportunity for creativity and solidarity, and one that offers hope in an equitable future based on ethically shared resources and mutually beneficial understanding.

It is also worth emphasizing the generational dimension of this work. The authors are all early career researchers who insist that, even within crisis, there are possibilities for rethinking, reorienting, and reconnecting. Their scholarship embodies what might be called a pedagogy of resilience: one that not only analyzes harm but also cultivates the imagination necessary for survival. These scholars, from across the European Association for American Studies (EAAS)' network of researchers and educators, represent and articulate the future of our fields as well as the options for humanity at this critical time.

In this way, *Reconnections* is not only a collection of essays but also a model of how to inhabit the present. It reminds us that to live in a time of climate change is to live in a time of profound interconnection: between human and nonhuman, between past and future, between art and politics. The volume's title captures this beautifully: ecology and connection, environment and community, e-technology and co-existence.

The task we face, that the earth faces, is daunting. Climate change is global in scale, systemic in cause, and devastating in effect. Yet, as this volume demonstrates, our responses must also be global, systemic, and imaginative. The humanities cannot reduce CO₂ emissions, but they can help us confront the crisis as a human one: to allocate responsibility, to nurture solidarity, to cultivate resilience alongside innovation, and to imagine futures worth living in, and for.

In that spirit, we commend this volume to readers as both a scholarly achievement and a political intervention. It testifies to the creativity and commitment of a generation of researchers who refuse to separate ecological survival from social justice, who insist that the humanities are not luxuries but lifelines, and who remind us that to tell stories is already to participate in shaping the world. The climate crisis demands connection across disciplines, across communities, across generations. This book embodies that demand.

Ingrid Gessner, EAAS President

(University College of Teacher Education Vorarlberg)

& Philip McGowan, EAAS President (2016-2024)

(Queen's University Belfast)

Works Cited

Adamson, Joni, Mei Mei Evans, and Rachel Stein, editors. *The Environmental Justice Reader: Politics, Poetics, and Pedagogy*. U of Arizona P, 2002.

WMO Press Release. "WMO Confirms 2024 as Warmest Year on Record at about 1.55°C above Pre-Industrial Level." *World Meteorological Organization*, 10 Jan. 2025, <https://wmo.int/news/media-centre/wmo-confirms-2024-warmest-year-record-about-155degc-above-pre-industrial-level>. Accessed 6 Sept. 2025.

Introduction

Thomas Mantzaris
Vrije Universiteit Brussel

Climate change has become the subject of extensive scientific, scholarly, and artistic work, and yet has still not made critical impact on policy change or our relation to the environment. Though the accumulation of individual effort and collective impulse is encouraging, climate records are being broken exponentially, while the milestone of greenhouse gas emissions peaking in 2025 seems exceedingly challenging. On July 23, 2025, The International Court of Justice (ICJ) issued an historic advisory opinion, emphasizing the legal obligations of states, under international law, to uphold their commitments to fight the “urgent and existential threat posed by climate change” (36). UN Secretary-General António Guterres characterized it as “a victory for our planet, for climate justice and for the power of young people to make a difference” (United Nations, “World Court”). Steering the focus of humanities research toward climate change and calibrating research projects toward environmental sustainability objectives have, therefore, never been more pertinent. *Reconnections* is a step to that end, an attempt to connect amid the climate crisis, to join forces in our understanding of it, and to inspire broader networks of change based on the realization that our future depends on our common ground, literally in this case.

This volume is based on the workings of the 4th HELAAS Young Scholar Symposium, “(E-co)nnnections: The Humanities in a Time of Climate Change,” which was held at the National and Kapodistrian University of Athens on March 2, 2024.¹ On that day, young scholars of the Hellenic Association for American Studies (HELAAS) convened together and shared their cross-disciplinary research on climate change, while they also connected with peers from the German (GAAS), British (BAAS), and Italian (AISNA) Associations for American Studies in hybrid format. Building upon that foundation, this volume encompasses contributions from early-career researchers across Europe, providing a valuable platform for their work on American Studies and climate change. Following the recent launching of the Postgraduate and Early-Career Researchers

¹ Additional information about the 4th HELAAS Young Scholar Symposium can be accessed at: <https://helaas.enl.auth.gr/yss4/>.

Copyright © 2025 Hellenic Association for American Studies Digital Publications (Helaasdp). This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution ShareAlike 4.0 International License (CC-BY-SA 4.0). ISBN: 978-618-85422-2-8 (e-book, pdf).

Network within the European Association for American Studies (EAAS),² this volume also embodies a sustained effort toward increased research collaboration across sister associations within EAAS.

The research papers included here highlight the potential of early-career researchers to probe into the pressing issue of climate change from multiple angles, emphasizing the crucial role of the humanities in shaping global action. It is one of the volume's primary goals to highlight the diversity of humanities research on representations of climate change, which is reflected in the contributors' focus that ranges from literary texts, VR projects, and films, to political manifestos, and the branding of an AI supercomputer. While the volume contributors are based in European institutions, their essays investigate the representation of the climate crisis across the continents, in real and imagined worlds, future and contemporary. This is apt to the subject, as climate change breaks down geographical boundaries, transcends national borders, and leads to a nuanced, and sometimes violent understanding, of how local developments connect with global impact.

So, in this framework, what is the role of the humanities? The essays collected in *Reconnections* respond to this question with analytical vigor and conviction: to provide the checks and balances to technological progress; to pause amid the frenzy of change and critically reflect; to engage with representations of the climate crisis and affect policy change; to mobilize the analytical and methodological tools of the humanities toward solutions to the climate crisis; to offer insights into the present that go beyond the fast-paced, hybrid media system of our times (Chadwick) and the flood of digital media content; to frame sociopolitical, economic, and cultural discourses within a climate-based agenda; and to emphasize the significance of truth and facts, in a time of post-truth politics, alternative facts rhetoric, and deepfake imagery.

Painting the Picture

On January 20, 2025, President Donald Trump issued an Executive Order (Putting America First in International Environmental Agreements), withdrawing The United States from the Paris Agreement for a second time, actualizing his election campaign

² Information about the EAAS Postgraduate and ECR Network is available here: <https://eaas.eu/networks/>.

rhetoric and the often-expressed intention to “drill, baby, drill.”³ The repercussions of this decision are already reverberating in the world, taking a toll on the global efforts to tackle the effects of climate change and bend the global emissions curve. But perhaps this decision was not unexpected, as President Trump has repeatedly called climate change a “hoax,” openly disputed the science behind it, and avoided commenting on his climate policy when asked during the live Presidential debate with Vice-President Kamala Harris on ABC News on September 10, 2024.⁴ The beginning of 2025 witnessed the devastating wildfires in California, catastrophic floods in Texas, severe winter storms and record-breaking drought across the globe, a stark reminder of nature’s power. May 2025 observed 26.6°C in Iceland and 14.3°C in Greenland, while 2024 was “the hottest year on record” for Europe, which has also been described as “the fastest-warming continent on Earth” (Copernicus Climate Change Service and World Meteorological Organization 2).⁵ At the same time, the Helene and Milton hurricanes in Florida (September-October 2024) saw the rise of AI slop, low-quality imagery that were reproduced on a mass scale online and led to inauthentic representations of the natural disaster.

In times of increased dependence on the instant delivery of digital content, image authenticity and information manipulation are bound to be major challenges in the representation of the climate crisis. To combat disinformation, the Global Initiative for Information Integrity on Climate Change was announced in November 2024, a partnership between the Brazilian government, the United Nations, and UNESCO, that is also supported by the communications initiative, Verify for Climate.⁶ At the same time, the European Commission’s Proposal for a Directive on Green Claims (March 2023) aims to restrict greenwashing and unsubstantiated environmental claims in EU products, connecting consumer behavior with business responsibility. The anxiety to identify reliable data on climate change is exacerbated by the rise of post-truth politics,

³ As part of Agenda 47 and the official 2024 GOP platform of the Republican Party, it is stated: “Under President Trump, the U.S. became the Number One Producer of Oil and Natural Gas in the World — and we will soon be again by lifting restrictions on American Energy Production and terminating the Socialist Green New Deal” (7). On the same day, President Trump issued another Executive Order (Unleashing American Energy) dismantling efforts aimed toward green, sustainable energy, materializing his campaign commitments and positioning as regards climate change.

⁴ Climate change policy was the final topic of discussion between the two contenders during the debate.

⁵ The Climate Risk Index (CRI) identifies the human and economic toll of extreme weather on countries: <https://www.germanwatch.org/en/cri>.

⁶ See <https://shareverified.com/topics/climate/>.

misinformation across media (Schirmacher and Mousavi), and climate denial (Dinan), which feed skepticism and obscure the urgency of the environmental crisis. In response to this quest for factual evidence, The Intergovernmental Panel on Climate Change,⁷ Copernicus Climate Change,⁸ World Bank's Climate Change Knowledge Portal,⁹ and Climate TRACE¹⁰ pose valuable resources. In addition, NASA's Climate Change¹¹ is a critical provider of space data, highlighting the importance of accurate and early information on the development of climate change and our changing planet, despite the mounting issue of space debris.

But where do we stand now? The United Nations Environment Programme issued the Emissions Gap Report 2024 with the title *No More Hot Air...Please! With a Massive Gap between Rhetoric and Reality, Countries Draft New Climate Commitments*, showing trivial progress on a global level, far from the ambitious projections of limiting the temperature rise to 1.5 degrees above the pre-industrial levels by 2100. On a global level, rising temperatures and sea levels lead to community displacement and loss of cultural heritage, with the cases of Tuvalu near Australia, Carteret Island in Papua New Guinea, and Kiribati in the South Pacific receiving media attention, while an estimated 218 million internal displacements appear to have occurred over the past decade, according to the Internal Displacement Monitoring Centre (IDMC)'s latest report. With rising conflicts around the world, forced population mobilities constitute an undercurrent to technological progress that engineers a domino effect. Slowly but definitively, communities displaced for environmental reasons¹² seep into a wider network of

⁷ See <https://www.ipcc.ch/>.

⁸ See <https://climate.copernicus.eu/>.

⁹ See <https://climateknowledgeportal.worldbank.org/>.

¹⁰ See <https://climatetrace.org/>.

¹¹ See <https://science.nasa.gov/climate-change/>.

¹² I deliberately refrain from using the term "refugee." Although the Cambridge Dictionary defines a refugee as "someone who is forced to leave their home country or area because climate change has made it impossible for them to continue to live or work there," and the term is used in popular media and academic scholarship, it has been criticized for its lack of legal ground (refugee definition as established in the 1951 Geneva Refugee Convention). The International Organization for Migration (IOM) provides the following definition: "Environmental migrants are persons or groups of persons who, predominantly for reasons of sudden or progressive change in the environment that adversely affects their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad" (par. 6). Other terms include "climate migrants" and "environmentally/climate displaced persons."

immigration around the globe, amplifying population mobility and making the climate crisis more concrete.

But human actions disrupt natural ecosystems in ways that are not immediately discernible or recognizable. On February 10, 2021, the main story on the front page of *The New York Times* (International edition) focused on the work of marine scientist and oceanographer Carlos M. Duarte. “Silencing Nature’s Soundtrack” by Sabrina Imbler drew attention to the impact of anthropogenic noise pollution on the oceans, highlighting Duarte’s research on the disruptions of human activity to marine life (Duarte et al.).¹³ An increased attention to the ocean life has been registered, giving rise to initiatives such as Blue Climate Initiative,¹⁴ Mission Blue,¹⁵ and the field of “blue humanities” (Oppermann).

As the battlefield rages from outer space explorations to deep-sea mining, fueling the quest for valuable natural resources like nodules (Hein et al.) and moondust (Bromley et al.), we are constantly reminded of the Earth’s fragile environment and our responsibility to uphold its stability. It is to this end, and to record the steps toward humanity’s demise in case it happens, that a giant steel monolith is being built in a remote location in Tasmania: Earth’s Black Box (operational since 2021) collects climate change data and records related actions on the planet’s health for future generations.¹⁶ While concern over climate change is mounting, outer space explorations vividly remind us of our place in the universe. The discovery of Stephenson 2-18, the largest known star, puts our planetary concerns into perspective, while the stunning images from NASA’s James Webb Space Telescope depict the powerful beauty of nature, inspiring awe and respect in our actions.

The upcoming UNFCCC COP30 in Brazil (November 10-21, 2025) raises expectations amid increased international political turmoil, and is symbolically hosted at the Amazon rainforest, a site of nature preservation and accelerating deforestation. Ironically, a new highway is built through the rainforest for the purposes of the COP30

¹³ The Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction (BBNJ Agreement) adopted in June 2023 provides a necessary framework for protecting ocean life in international waters.

¹⁴ More information on Blue Climate Initiative is available here: <https://www.blueclimateinitiative.org/>.

¹⁵ More information on Mission Blue (led by Dr. Sylvia Earle) is available here: <https://missionblue.org/>.

¹⁶ More information on Earth’s Black Box can be accessed at: <https://www.earthblackbox.com/>.

climate summit in Belém (Nesi), raising concerns over environmental damage and wildlife in the area, and disrupting an already fragile ecosystem.

Meanwhile, mountains of garbage in India, Pakistan, Bangladesh, Indonesia, and Taiwan, are evidence of towering human-generated waste, a consequence of excessive consumption, inefficient waste management, and poor recycling culture. The fast fashion industry has started to come under scrutiny over the textile waste it produces, which often ends up in dumpsites in the Atacama Desert in Chile, or to sub-Saharan countries like Ghana, polluting the natural habitat and critical water supplies, and causing significant health issues to the local population. In recent years, the challenges of waste management in popular mountain destinations have also been put in the spotlight, with Everest measuring the footprint of climbing expeditions in tons of garbage around the summit.

And yet, even if we factor in the environmental impact of toxic spills, consumerism, the fossil fuel industry, the surging energy demand for AI, and the shortcomings of existing policies, we still wouldn't be close to painting an accurate picture of the alarming state of the planet. Against this backdrop, narrating the climate crisis forms an ethical responsibility to inform against disinformation, to inspire policy reform toward greater efficiency, and to form a global alliance to address the vulnerability of the planet.

The Power of Stories and the Role of the Humanities

Storytelling related to climate change has appeared in various forms, from literature and art to films and tv shows, street painting and animation, while critical scholarship on the role of creative media engagements (Binns and Najdowski) and storytelling (Coren and Wang) in battling climate change has also started to emerge, as has on the role of the humanities (Sutton) and that of literature in particular (Dimick). Also, we are witnessing the rise of book series devoted to environmental humanities¹⁷ as well as increased lines of research devoted to the climate crisis from various humanities perspectives.

¹⁷ See, for instance, *Studies in Environmental Humanities* (Brill), *Environmental Humanities in Pre-modern Cultures* (Amsterdam University Press), *Routledge Environmental Humanities*, *Environmental Humanities and Indigeneity* (Peter Lang), and *Environmental Humanities* (Cambridge University Press).

In screen media, cinematic television and films on climate change have invigorated a genre mainly represented by documentaries in the past. The phenomenal *Extrapolations* (2023), contemporary miniseries like *The Swarm* (2023) and *The Commons* (2019), and the tv show *Snowpiercer* (2020-2024), mobilized the artistic affordances of cinematic storytelling to depict dystopian visions of the future. In the film industry, movies dramatized the impact of climate change (*The Day After Tomorrow*, *Interstellar*) or provided political satire on the handling of the issue (*Don't Look Up*), while *Yellowstone* (2018-2024) and *Killers of the Flower Moon* (2023) drew attention to Native American land and histories of displacement, hinting toward environmental (and social) justice.

Climate change fiction (also known as “cli-fi”) erupted in the first two decades of the twenty-first century, resulting in a corpus of texts as diverse as the variables inducing climate change. Whether climate change fiction constitutes a sub-genre of speculative fiction, science fiction, and what the fine lines of its distinction from dystopian and post-apocalyptic fiction may be, falls beyond the scope of this volume. It is likely that climate change fiction, the science behind it, and the global turn of events will come to inform all fiction, as “almost any narrative with representational ambitions will be forced to engage with the reality”: As Schneider-Mayerson acutely suggests in “Climate Change Fiction,” “works that portray a stable climate as the mute and reliable background to human drama might then be considered, in an ironic reversal, to be mere fantasy, or historical fiction” (318). In this regard, the depiction of human stories against an unstable environmental background may increasingly becoming “standardized,” with texts such as Maja Lunde’s *The End of the Ocean* (2017), Don DeLillo’s *Zero K* (2016), and Ian McEwan’s *Solar* (2010) being cases in point.

Meanwhile, it is important to recognize that the representation of climate change in literature is far from uniform. Rather, it ranges from novels that thematically probe into the issue, to multimodal texts that experiment with the page surface (see Duncan Speakman’s ambient narrative *It Must Have Been Dark by Then* or Blake Butler’s post-apocalyptic *Scorch Atlas*), present “genre-bending storytelling techniques” (Caracciolo et al. 20) or are defined as “eco-weird” (Ulstein). Often cited texts of climate change fiction include Barbara Kingsolver’s *Flight Behavior* (2012), Kim Stanley Robinson’s *The*

Ministry for the Future (2020) and *Science in the Capital* trilogy (2004-2007), J. G. Ballard's *The Burning World* (1964), *The Drought* (1964), *The Drowned World* (1962) and *The Wind from Nowhere* (1962), Octavia E. Butler's *Parable of the Sower* (1993), Richard Powers's *The Overstory* (2018) and *Bewilderment* (2021), and Margaret Atwood's *The MaddAddam Trilogy* (2003-2013), among others. The volume contributors expand this corpus by drawing attention to texts less frequently examined, paving avenues for cross-disciplinary scholarly research, and demonstrating the importance of humanistic approaches to the current climate crisis.

But how effective are narratives about climate change in mobilizing audiences to take action and enact meaningful change? Empirical studies note that the strong emotions generated to readers may actually demobilize them and prove counterproductive (Schneider-Mayerson, "The Influence of Climate Fiction" 490), while other research findings suggest that, following an immediate spike of interest, the effect of reading "diminishe[s] to statistical insignificance after a one-month interval" (Schneider-Mayerson et al., "Environmental Literature as Persuasion"). While raising awareness and convincing sceptics of the reality of climate change are crucial endeavors, optimizing that effort entails having concrete evidence on the efficiency of representing environmental issues in literature, films, and other media forms.¹⁸ The rise of empirical research on the effectiveness of storytelling in addressing environmental concerns and combating climate change seems promising (Malecki et al.; Lahtinen and Löytty; Schneider-Mayerson et al., *Empirical Ecocriticism*; Weik von Mossner), and may provide valuable input into existing delays in meaningful climate action (Ekberg et al.).

Literature's engagement with nature and the perils of climate change also extend to inspiring artistic projects like *Future Library*¹⁹ by the Scottish artist Katie Paterson, famous for her works capturing the sound of melting glaciers and the mapping of dead stars. A brief description of Future Library, as it appears on the official website, is as follows:

¹⁸ In an empirical study on readers' responses to Paolo Bacigalupi's *The Water Knife* (2015), Schneider-Mayerson notes that although "the novel succeeded in constructing an empathetic connection between readers and climate migrants," for some "it reinforced—or even encouraged—ecopolitically problematic perspectives" ("Just as in the Book" 352, 357).

¹⁹ For more information, see: <https://www.futurelibrary.no/>

A forest in Norway is growing. In 100 years, it will become an anthology of books. Every year, a writer is contributing a text that will be held in trust, unpublished, until the year 2114. The texts will be printed on paper made from the trees, only to be read a century from now.

Contributing authors already include Margaret Atwood, David Mitchell, Han Kang, Karl Ove Knausgård, Ocean Vuong, Tsitsi Dangarembga, and Valeria Luiselli, among others. Their work, titled but unknown in terms of length and content, is stored in the specially designed “Silent Room” at Oslo’s public library, Deichman Bjørvika. In times of environmental uncertainty and short-term objectives, Parterson’s Future Library is a commitment to literature’s and the planet’s endurance, an artistic initiative that emphasizes storytelling’s intrinsic connection to the natural world.

However, addressing the issue of climate change is also an ongoing exercise in confronting sharper historical truths. Malcolm Ferdinand’s *Decolonial Ecology: Thinking from the Caribbean World* (2022) calls for a way forward that addresses the historical entanglements of colonialism that led to the present day (also Sultana; Ghosh). Kyle P. White also cautions against the “ancestral fantasies” of both exploiting Indigenous peoples and “claiming moral high ground as saviors” (238). Rising to the challenge is, therefore, more than policy change and decisive action; it entails recognizing the steps that led to the present crisis and ensuring that solutions encompass all of humanity. For this task, research in the humanities is crucial.

Volume Structure

Research on climate change representation is inherently wide-ranging, and this is reflected in the essays of this volume. To address the breadth of perspectives and areas of focus, the volume is organized into four parts: Connecting Again (Part I), No Ground for Indigenous Communities (Part II), In Deeper Oceans (Part III), and Storytelling Called to Arms (Part IV). Collectively, the essays demonstrate the richness of humanities research on climate change, casting a critical lens on the ways this global crisis is represented, approached, and understood.

Part I: Connecting Again

The essays of the first part re-imagine our relationship with nature, focusing on human-nonhuman interactions that challenge anthropocentric narratives and embrace a

deeper understanding of our position in the ecosystem. In “Ecological Affects in Literature: The Role of Aliveness in American Fiction,” **Loredana Filip** examines human-nonhuman relationships by focusing on ecological affects. Through the relational concept of “aliveness,” Filip demonstrates how literary studies enrich the discourse on climate change by proposing a turn toward the mundane in the humanities, emphasizing humility over exceptionalism in our relation to nature. **Paschalia Mitskidou** offers an intimate outlook on the interactions between human and non-human worlds in her essay, “Tales of Interconnectedness: Exploring Environmental Issues and Ecological Connections through *The Atomic Tree* and *Tree* VR Projects.” Mitskidou demonstrates how Virtual Reality projects offer an incisive multisensory experience into the life of ecosystems, by enabling the user to experience the memories of a 400-year-old tree that survived the Hiroshima bombing (*The Atomic Tree*) and the life cycle of a tree in the Peruvian Amazon rainforest (*Tree*). The subsequent essays move from a real WWII disaster to post-apocalyptic scenarios represented in fiction. In “Environmental Degradation, Corporate Capitalism and Posthuman Ecological Futures in Paolo Bacigalupi’s *The Windup Girl* (2009),” **Evripidis Karavasilis** examines the post-apocalyptic reality of twenty-third century Bangkok in *The Windup Girl*, where calories function as a new form of currency and drive the world market. Through the lens of Rosi Braidotti’s theory in *The Posthuman* (2013), Karavasilis highlights the optimism in Bacigalupi’s novel for a resolution that affords posthuman subjects a sense of belonging and hope. But not all post-apocalyptic tales are hopeful, as **Christina Koukouli** notes in her essay, “Dried Bodies, Ashen Earth: The Grotesque Corporeal Aesthetics of Environmental Catastrophe in Cormac McCarthy’s *The Road*.” Koukouli examines McCarthy’s novel through Timothy Morton’s “dark ecology” and observes that the grotesque representation of human bodies and the natural landscape offers limited possibilities for regeneration. Emerging out of post-apocalyptic narratives, a nuanced sense of connection between self and the environment is fostered.

Part II: No Ground for Indigenous Communities

The second part is devoted to indigenous communities around the globe that face the damaging consequences of human activity first-hand. No Ground for Indigenous Communities is an exercise in recognizing shared responsibility for histories of territorial

displacement, colonialism, and land exploitation. **Foteini Toliou** turns her attention to indigenous resistance in the US-Canada borderlands, with an ecofeminist reading of Linda Hogan's *Solar Storms* that emphasizes Native American "environ-mentalities." In "Re-Membering Disembodied Subjects and Landscapes: Cultural Survival, Indigenous Environ-Mentalities and Ecological Activism in Linda Hogan's *Solar Storms* (1995)," Toliou emphasizes the actions of female characters to resist disembodiment, strive for environmental justice, and uphold their cultural heritage. **Yıldız Aşar**'s essay, "'Girl Who Comes Out Fighting': Indigenous Girlhood in Eco-Crisis in Rebecca Roanhorse's *Sixth World*," also focuses on a female character, Maggie, in the aftermath of the Big Water, as "trauma survivor and agent of hope." Aşar reads Roanhorse's speculative, post-apocalyptic texts through an ecofeminist lens, and shows how the forging of connections can lead to forms of female empowerment, decolonialism, and healing. To pursue these quests, indigenous communities often need to overcome environmental challenges such as toxic waste, that pollute their land and have harmful effects on their health (see also Nicolo Mbue's *How Beautiful We Were*). In the final essay of this part, "After the 'Ruin': Narrating Ecological Disaster and Envisioning Communal Restoration in Thomas King's *The Back of the Turtle* (2014)," **Niki Grigoria Karamanidou** examines the representation of a toxic spill and its repercussions on the local Native Canadian community and their land, through the concept of "slow violence" (Nixon).

Part III: In Deeper Oceans

The third part features essays that challenge dominant narratives and probe deeper into the climate crisis. The contributors of *In Deeper Oceans* unravel established narratives on supercomputers, environmental justice, and water management, revealing critical dimensions. **Judith Campagne** turns her attention to the narrative branding of the supercomputer Gefion, emphasizing the political and mythological dimensions of naming. "What's in a Name? An Exercise in Pacing an 'AI's Story Differently" provides a fresh outlook on artificial intelligence, one that challenges discourses that connect AI to "a horizon of promises," including accelerated solutions to the environmental crisis. While supercomputers and AI technologies may be often presented as the key to the future, their environmental footprint and promotion of technology-based solutions mask critical concerns for the environment as well as for the way we approach solutions. In "'I

Invoke Cunt’: Ecofeminist Manifestos and the Pains and Pleasures of the Femme Earth,” **Laura Handl** focuses on ecofeminist manifestos as a form of theorizing the Earth. Through a comparative reading of feminist scholar Jane Caputi and the ecolesbian text “The Anthropussy” (Nuñez et al.), Handl cautions against techno-optimist escapism and calls for environmental justice informed by a political imagination at the juncture of science and scholarship. In the final essay of this part, “Holding Water to Hold Water: Comparing Levees and Tajines as Bodies of Water,” **Lukas H. Seidler** conducts a comparative analysis on the materiality of levees and tajines as bodies of water. His analysis challenges apocalyptic narratives of water management and provides an alternative reading of our relation to the changing hydrosphere.

Part IV: Storytelling Called to Arms

The fourth part vividly charts the use of literary storytelling as a device for environmental activism. Storytelling Called to Arms traces how narrative engagement with the environment reaches a broad audience and can impact social change. In “‘I Count My Hopes’: Humanities and Narrating the Environmental Crisis,” **Susen Halank** investigates how different forms of narratives work to create a broader story, which she claims can be more impactful to our understanding of the climate crisis. Her combined reading of filmic and literary narratives draws attention to the effects of plastic waste on environmental damage. **Maria Virginia Tsikopoulou**’s “Call to Action, Remember Nature: Literary Visuality, Visual Sustainability, and Multimodality as Advocates of Environmental Sensibility” is centered on the multimodal character of the collective work *Remember Nature: 140 Artists’ Ideas for Planet Earth* (2021), connecting its visual elements and medial characteristics to environmental action. Tsikopoulou brings together the notions of “literary visuality” (Bodola and Isekenmeier) and “visual sustainability” (Crippa)²⁰ to highlight the increasing connections between literature, multimodality, design, and the environment.

Reconnections brings together early-career researchers from Aristotle University of Thessaloniki, Dresden Institute of Technology, Friedrich-Alexander-Universität Erlangen–Nürnberg, University of Bamberg, Universitat de Barcelona, Maastricht

²⁰ See: <https://studiobenedettacrippa.com/visualsustainability/>.

University, Vrije Universiteit Brussel, as well as independent researchers, marking a milestone in research collaborations within EAAS. This volume joins a sea of scholarly writing, scientific research, artistic engagement, and literary works on climate change, aiming to articulate the complexities of environmental crises related to climate change with fresh analytical perspectives and inspire social change—in hopes of making the waves of climate change subside, rather than recede.

Works Cited

- Atwood, Margaret. *The MaddAddam Trilogy*. 2003-2013. Anchor, 2014.
- Bacigalupi, Paolo. *The Water Knife*. Knopf, 2015.
- . *The Windup Girl*. Orbit, 2009.
- Ballard, James Graham. *The Burning World*. Berkley Medallion, 1964.
- . *The Drought: A Novel*. 1964. Liveright, 2012.
- . *The Drowned World*. 1962. Liveright, 2013.
- . *The Wind from Nowhere*. Berkley Medallion, 1962.
- Binns, Daniel, and Rebecca Najdowski, editors. *Confronting the Climate Crisis: Activism, Technology and Ecoaesthetics*. Palgrave Macmillan, 2025.
- Bodola, Ronja, and Guido Isekenmeier, editors. *Literary Visualities: Visual Descriptions, Readerly Visualisations, Textual Visibilities*. Walter de Gruyter, 2017.
- Braidotti, Rosi. *The Posthuman*. Polity, 2013.
- Bromley, Benjamin C., et al. “Dust as a Solar Shield.” *PLOS Climate*, vol. 2, no. 2, 2023, <https://journals.plos.org/climate/article?id=10.1371/journal.pclm.0000133>. Accessed 23 July 2025.
- Butler, Blake. *Scorch Atlas*. Featherproof, 2009.
- Butler, Octavia. *Parable of the Sower*. 1993. Grand Central Publishing, 2019.
- Caracciolo, Marco, et al. “Climate Fiction: A Posthumanist Survey.” *Interférences Littéraires/Littéraire Interferentia*, no. 27, 2022, pp. 6-21.
- Chadwick, Andrew. *The Hybrid Media System: Politics and Power*. 2nd ed., Oxford UP, 2017.
- “Climate Refugee.” *Cambridge Dictionary*, <https://dictionary.cambridge.org/dictionary/english/climate-refugee>. Accessed 23 July 2025.
- The Commons*. Created by Shelley Birse. Playmaker Media, 2019.
- Convention and Protocol Relating to the Status of Refugees. The United Nations Refugee Agency, 1951, <https://www.unhcr.org/media/1951-refugee-convention-and-1967-protocol-relating-status-refugees>. Accessed 23 July 2025.
- Copernicus Climate Change Service (C3S) and World Meteorological Organization (WMO). *European State of the Climate: Report 2024*. ECMWF and WMO, 2025.

- https://library.wmo.int/viewer/69475/download?file=ESOTC_2024_full_report_en.pdf&type=pdf&navigator=1. Accessed 23 July 2025.
- Coren, Emily, and Hua Wang, editors. *Storytelling to Accelerate Climate Solutions*. Springer, 2024.
- The Day After Tomorrow*. Directed by Roland Emmerich. Twentieth Century Fox, 2004.
- “Debate Replay: VP Harris and Former President Trump | ABC News Presidential Debate.” *ABC News*, 11 Sep. 2024, <https://www.youtube.com/watch?v=4dOgWZsDB6Q&t=5782s>. Accessed 23 July 2025.
- DeLillo, Don. *Zero K*. Pan Macmillan, 2016.
- Dimick, Sarah. *Unseasonable: Climate Change in Global Literatures*. Columbia UP, 2024.
- Dinan, William, et al. “Online Climate Denialism: Eco-systems and Echo Chambers.” *The Routledge Handbook of Environment and Communication*, edited by Anders Hansen and Robert Cox, 2nd ed., Routledge, 2023, pp. 292-305.
- Don’t Look Up*. Directed by Adam McKay. Hyperobject Industries, 2021.
- Duarte, Carlos M., et al. “The Soundscape of the Anthropocene Ocean.” *Science*, vol. 371, no. 6529, 2021, <https://www.science.org/doi/10.1126/science.aba4658>. Accessed 23 July 2025.
- Ekberg, Kristoffer, et al. *Climate Obstruction: How Denial, Delay and Inaction are Heating the Planet*. Routledge, 2023.
- European Commission. Proposal for a Directive on Green Claims. 23 Mar. 2013. European Commission, https://environment.ec.europa.eu/publications/proposal-directive-green-claims_en. Accessed 23 July 2025.
- Extrapolations*. Created by Scott Z. Burns. Apple and Media Res, 2023.
- Ferdinand, Malcolm. *Decolonial Ecology: Thinking from the Caribbean World*. Polity, 2022.
- Ghosh, Amitav. *The Great Derangement: Climate Change and the Unthinkable*. The U of Chicago P, 2016.
- Hein, James R., et al. “Deep-ocean Polymetallic Nodules as a Resource for Critical Materials.” *Nature Reviews Earth & Environment*, vol. 1, 2020, pp. 158–169.
- Hogan, Linda. *Solar Storms*. Scribner, 1995.
- Imbler, Sabrina. “Silencing Nature’s Soundtrack.” *The New York Times*, 10 Feb. 2021, pp. 1+.
- Internal Displacement Monitoring Centre (IDMC). *Global Report on Internal Displacement: GRID 2024*. The International Displacement Monitoring Centre, 2024.
- International Court of Justice. *Obligations of States in Respect of Climate Change*. Advisory Opinion. 23 July 2025. *International Court of Justice*, <https://www.icj->

cij.org/sites/default/files/case-related/187/187-20250723-adv-01-00-en.pdf.

Accessed 28 July 2025.

International Organization for Migration (IOM). Ninety-Fourth Council Session: Discussion Note: Migration and the Environment. IOM, 2007.

Interstellar. Directed by Christopher Nolan. Paramount Pictures / Warner Bros. Pictures / Legendary Pictures / Syncopy, 2014.

Killers of the Flower Moon. Directed by Martin Scorsese. Apple Studios / Imperative Entertainment / Sikelia Productions / Appian Way Productions, 2023.

King, Thomas. *The Back of the Turtle*. Harper Perennial, 2014.

Kingsolver, Barbara. *Flight Behavior*. 2012. Harper Perennial, 2013.

Lahtinen, Toni, and Olli Löytty. "On the Limits of Empirical Ecocriticism: Empathy on Non-Human Species and the Slow Violence of Climate Crisis." *Green Letters: Studies in Ecocriticism*, vol. 28, no. 1–2, pp. 77–90.

Lunde, Maja. *The End of the Ocean*. Scribner, 2017.

Malecki, Wojciech P., et al. "The Role of Hope and Fear in the Impact of Climate Fiction on Climate Action Intentions: Evidence from India and USA." *Poetics*, vol. 108, 2025, pp. 1–11.

Mbue, Imbolo. *How Beautiful We Were*. 2021. Random House, 2022.

McCarthy, Cormac. *The Road*. 2006. Picador, 2019.

McEwan, Ian. *Solar*. Jonathan Cape, 2010.

Morton, Timothy. *Dark Ecology*. Columbia UP, 2016.

Nesi, Chris. "Massive Stretch of Amazon Rainforest Destroyed for Upcoming COP30 Climate Summit's 4-Lane Highway: 'This is a Loss.'" *New York Post*, 12 Mar. 2025, <https://nypost.com/2025/03/12/world-news/amazon-rainforest-destroyed-to-build-road-for-climate-summit/>. Accessed 23 July 2025.

Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Harvard UP, 2013.

Núñez, Isabella Blea, et al. "The Anthroponussy: An Ecolesbian Manifesto." *Journal of Lesbian Studies*, 2024, pp. 1–16.

Obrist, Hans Ulrich, and Kostas Stasinopoulos. *Remember Nature: 140 Artists' Ideas for Planet Earth*. Penguin Random House UK, 2021.

Oppermann, Serpil. *Blue Humanities: Storied Waterscapes in the Anthropocene*. Cambridge UP, 2023.

Powers, Richard. *Bewilderment: A Novel*. W. W. Norton & Company, 2021.

———. *The Overstory: A Novel*. W. W. Norton & Company, 2018.

Robinson, Kim Stanley. *The Ministry for the Future*. Orbit, 2020.

———. *Science in the Capital*. Spectra, 2004–2007. 3 vols.

The Republican Party. "2024 GOP Platform: Make America Great Again!" [www.donaldjtrump.com](https://rncplatform.donaldjtrump.com/?_gl=1*1u0y5ub*_gcl_au*ODIzNzYyNzA),
https://rncplatform.donaldjtrump.com/?_gl=1*1u0y5ub*_gcl_au*ODIzNzYyNzA

- [0LjE3NDMyNjA4NDk.&_ga=2.124209997.656623596.1743260849-685218258.1743260849](https://www.un.org/bbnjagreement/sites/default/files/2024-08/Text%20of%20the%20Agreement%20in%20English.pdf). Accessed 23 July 2025.
- Schirmmacher, Beate, and Nafiseh Mousavi, editors. *Truth Claims Across Media*. Palgrave Macmillan, 2024.
- Schneider-Mayerson, Matthew. "Climate Change Fiction." *American Literature in Transition, 2000-2010*," edited by Rachel Greenwald Smith, Cambridge UP, 2017, pp. 309-321.
- . "The Influence of Climate Fiction: An Empirical Survey of Readers." *Environmental Humanities*, vol. 10, no. 2, 2018, pp. 473-500.
- . "'Just as in the Book'? The Influence of Literature on Readers' Awareness of Climate Injustice and Perception of Climate Migrants." *ISLE: Interdisciplinary Studies in Literature and Environment*, vol. 27, no. 2, 2020, pp. 337-364.
- Schneider-Mayerson, et al. *Empirical Ecocriticism: Environmental Narratives for Social Change*. U of Minnesota P, 2023.
- . "Environmental Literature as Persuasion: An Experimental Test of the Effects of Reading Climate Fiction." *Environmental Communication*, vol. 17, no. 1, 2023, pp. 35-50.
- Snowpiercer*. Created by Josh Friedman and Graeme Manson. CJ Entertainment / Dog Fish Films / Studio T / Lone Lemon Productions / Tomorrow Studios / ITV Studios, 2020-2024.
- Speakman, Duncan. *It Must Have Been Dark by Then*. Ambient Literature, 2017.
- Sultana, Farhana. *Confronting Climate Coloniality: Decolonizing Pathways for Climate Justice*. Routledge, 2024.
- Sutton, Sahah. *The Arts and Humanities on Environmental and Climate Change: Broadening Approaches to Research and Public Engagement*. Routledge, 2023.
- The Swarm*. Created by Frank Doelger. ZDF, 2023.
- Ulstein, Gry. "Forms and Themes of the Eco-Weird: Experimentation and Play in a Warming World." *The Call of the Eco-Weird in Fiction, Films, and Games*, edited by Brian Hisao Onishi and Nathan M. Bell, Palgrave Macmillan, 2025, pp. 211-242.
- United Nations. Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction. *United Nations*, <https://www.un.org/bbnjagreement/sites/default/files/2024-08/Text%20of%20the%20Agreement%20in%20English.pdf>. Accessed 23 July 2025.
- United Nations, Climate Action. Global Initiative for Information Integrity on Climate Change. *United Nations*, <https://www.un.org/en/climatechange/information-integrity>. Accessed 23 July 2025.

- United Nations, UN News. “World Court Says Countries Are Legally Obligated to Curb Emissions, Protect Climate.” 23 July 2025. United Nations, <https://news.un.org/en/story/2025/07/1165475>. Accessed 28 July 2025.
- United Nations Environment Programme. *Emissions Gap Report 2024: No More Hot Air...Please! With a Massive Gap between Rhetoric and Reality, Countries Draft New Climate Commitments*. United Nations Environment Programme, 2024.
- United States, Executive Office of the President [Donald J. Trump]. Putting America First in International Environmental Agreements. 20 Jan. 2025. *The White House*, <https://www.whitehouse.gov/presidential-actions/2025/01/putting-america-first-in-international-environmental-agreements/>. Accessed 23 July 2025.
- . Unleashing American Energy. 20 Jan. 2025. *The White House*, <https://www.whitehouse.gov/presidential-actions/2025/01/unleashing-american-energy/>. Accessed 23 July 2025.
- Weik von Mossner, Alexa. *Affective Ecologies: Empathy, Emotion, and Environmental Narrative*. The Ohio State UP, 2017.
- Whyte, Kyle P. “Indigenous Science (Fiction) for the Anthropocene: Ancestral Dystopias and Fantasies of Climate Change Crisis.” *Environment and Planning E: Nature and Space*, vol. 1, no. 1-2, 2018, pp. 224-242.
- Yellowstone*. Created by Taylor Sheridan and John Linson. Paramount Network, 2018-2024.

Part I
Connecting Again

Ecological Affects in Literature: The Role of Aliveness in American Fiction

Filip Loredana
Friedrich-Alexander-Universität Erlangen–Nürnberg

Abstract

In the (post)Anthropocene, the humanities are crucial in reshaping our perceptions and interactions with the environment. This paper aims to explore how literature fosters an awareness of human-nonhuman kinship, a critical understanding for navigating our ecological future. By examining a spectrum of ecological affects—such as anxiety, grief, and wonder—this study seeks to move beyond discussions of fear versus wonder in our engagement with nature. By focusing on the affect of “aliveness,” this paper proposes a new framework for understanding our relationship with the world. This term, evoking discussions of vitalism, everyday aesthetics, and animation, emphasizes the vitality and interconnectedness of all life forms. Through a new materialist lens, the paper delves into ecological considerations of empathy and the role of bodies, highlighting how literature can animate our ethical and aesthetic responses to the environment. By doing so, it underscores the potential of literary studies to enrich the discourse on climate change and human-nonhuman relationships.

As environmental concerns become more urgent, the need to reconsider our relationship with the natural world intensifies. How do we feel our place in the world today? Paradoxically, we live in an era marked by both an absence of feeling—what Fredric Jameson famously described as the “waning of affect” in postmodern culture—and a sense of emotional overload, particularly anxiety (61). “Eco-anxiety,” a term increasingly used to describe the psychological response to environmental crises, captures a spectrum of emotions, including fear, dread, anger, and grief, all stemming from a profound sense of loss witnessed in the face of climate change (Coffey et al.). At the same time, ecological feelings are far more nuanced than a simple binary of awe and fear. This complexity is highlighted in the newly released volume *Ecological Feelings: A Rhetorical Compendium* (2025), edited by Joshua Trey Barnett, which broadens the affective repertoire to include feelings such as “care, concern, contempt, empathy, fear, grief, hope, joy, numbness, optimism, possessiveness, regret, and *saudade*.”

Building on the work of affect scholars such as Linda Zerilli, Eve Kosofsky Sedgwick, Lauren Berlant, Sianne Ngai, and Sara Ahmed, this paper explores the interconnection of thinking and feeling, emotion and judgment, art and politics. Ecological feelings, as both “aesthetic and political at once,” suggest that aesthetic

interventions carry political implications, while political developments reflect the emotional dynamics of societies (Hillman). This paper contends that political and individual responses to environmental issues are deeply influenced by our relationships to other humans, nature, the nonhuman, and ourselves. In this context, the humanities play a critical role in shaping these relationships, particularly by reframing our perceptions.

I propose *a turn toward the mundane* within the humanities, particularly in our approach to ecological feelings. This shift is especially relevant within the American context, where cultural narratives often favor the exceptional. American discourse frequently gravitates toward the utopian, dystopian, and sublime, leaving the ordinary and everyday underexplored in literary research, despite the growing influence of everyday aesthetics (Saito). This preference for what Sianne Ngai terms “higher passions and emotions” (11), risks neglecting the subtler, more ordinary feelings that shape daily ecological encounters. Beyond the beautiful and the sublime, what alternative aesthetic categories might better reflect our relationship with the environment?

This paper introduces the concept of “aliveness” as a vital affect for understanding everyday ecological encounters and reevaluating our intimacy with loss. Aliveness provides an alternative perspective on “ecological grief” (Harland), not as a condition from which to recover, but as a continual reminder of a shared fragility that evokes a sense of humility. By foregrounding this affect, the paper challenges dominant binaries—fear versus awe, anxiety versus beauty, control versus empathy—and instead embraces a rich spectrum of coexisting emotions. These emotions resist easy categorization and complicate the rhetoric of overcoming and of “emotional hygiene” that often dominate discussions of feelings (Winch; Filip). Aliveness, in particular, emphasizes that these emotions are not isolated but intertwined, reflecting the complexity of human-nonhuman relationships.

Aliveness presupposes an intimacy with loss and pain—a recognition that they are intrinsic to life and cannot be resolved or transcended. This acknowledgment reframes vulnerability as an opportunity for humility, cultivating a deeper awareness of interconnectedness. First introduced in “The Future of the Enhanced Self” through a nature scene that illustrated its affective potential, aliveness has since been developed in my work to trace its articulation in contemporary speculative fiction (*Self-Help in the*

Digital Age). It deserves more critical attention, especially since it has the potential to recontextualize our relationship with the world. Aliveness intersects with themes of everyday aesthetics, vitalism, and animation, offering a productive framework for exploring how these concepts overlap and inform one another. This paper will take a closer look at these intersections, unpacking them to reveal their broader implications for ecological thinking.

Aliveness and Everyday Aesthetics: Horizontal Humility in *The Overstory*

Aliveness has profound implications for everyday aesthetics. Often overlooked as a feeling, it is neglected not only because of its ambiguous and general nature but also due to its triviality—a taken-for-granted aspect of life. Aliveness does not belong to the “high” aesthetic categories of passion or beauty but operates instead as a quiet, steady presence in daily life. By examining aliveness more closely, we engage in a form of everyday aesthetics that directs attention to the mundane world surrounding us. Simply recognizing that this mundane world deserves attention is already an acknowledgment of its agency—an acknowledgment that requires more practice in our scholarly work.

A turn toward the mundane can disrupt dominant American cultural narratives, which often prioritize ideals of greatness and exceptionalism. These narratives tend to frame nature through grandiose imagery: majestic landscapes, expansive wilderness, or oceanic grandeur (Murray; Wowra; Paul; Saito; Madsen). Even traditions like Transcendentalism, which celebrate ordinary experiences—as in Thoreau’s reflections on a “pond” in *Walden* (1895)—frequently present such simple moments as gateways to individual transcendence and self-elevation. This paper does not seek to revive Transcendentalist ideals, even as it embraces a focus on the mundane. Instead, it highlights the unremarkable and familiar aspects of human-nonhuman interactions, shifting attention away from the sublime and its associations with awe and grandeur. This approach captures the quieter, yet equally meaningful, presence of the nonhuman in daily life.

Focusing on mundane encounters does not suggest they serve as precursors to grand revelations or steps toward personal genius. Rather, it emphasizes their grounding in the ordinary, fragmented rhythms of daily interactions. These moments do not demand epiphanies or romanticized transcendence; instead, they act as interruptions—

opportunities to foster humility and “unbecoming.” Such interruptions reveal interdependence without resorting to narratives of self-expansion. By turning attention to these smaller, quieter connections, we cultivate an ecological awareness rooted in modesty and reciprocity.

Aliveness, in this sense, offers a humility distinct from the awe traditionally associated with sublime landscapes in Romantic literature. The sublime, as theorized by Edmund Burke, often evokes fear and wonder at nature’s overwhelming power. However, this experience risks reinforcing human exceptionalism. Awe in the face of the sublime positions humans as privileged observers, seemingly humbled by nature’s grandeur, yet ultimately affirming their separation from it. Precisely this separation sustains the anthropocentric discourse by framing nature as an “other” to be marveled at, controlled, or conquered. In other words, as long as humans imagine themselves as distinct from and superior to the natural world, efforts to transcend or dominate nature will keep abounding.

In contrast, the humility cultivated through aliveness directs our attention downward—or horizontally—toward the small, the ordinary, and the overlooked. It invites us to notice tiny creatures, fleeting moments, and neglected spaces: the light filtering through leaves, the buzz of insects, the interplay of air and trees. Contemporary American literature offers many examples of this type of horizontal humility, though they remain unnoticed due to their ordinariness. For instance, Richard Powers exemplifies this horizontal humility in his work, including *The Overstory* (2018). Here, humans become part of a web of interconnected lives rather than masters of it, challenging anthropocentric exceptionalism. This modesty does not arise from fear but from an acknowledgment of kinship—a recognition that humans are not the center of the universe but part of a shared fabric of existence that includes trees.

If the aim is to cultivate environmentally conscious citizens, it is not enough to depict nature as a grand, monolithic “Mother Nature” figure or a sublime force demanding awe. Instead, as *The Overstory* suggests, we must train our attention to the small and the proximate—to appreciate what is already before us but often goes unnoticed. This shift reclaims nature as “nature”—with a small “n,” unburdened by grandiose idealizations. It is no longer about a nurturing Mother Nature who punishes or

rewards but about a reciprocal relationship, where humans care for the world as they might for a child—not out of superiority but out of love and responsibility.

Patricia Westerford, the novel's dendrologist, reads Thoreau "over wood fires at night" and finds deep resonance in his words:

Shall I not have intelligence with the earth? Am I not partly leaves and vegetable mould myself? And: What is this Titan that has possession of me? Talk of mysteries!—Think of our life in nature,—daily to be shown matter, to come in contact with it,—rocks, trees, wind on our cheeks! the solid earth! the actual world! the common sense! Contact! Contact! Who are we? where are we? (129)

While these lines echo the Transcendentalist call to deepen our connection with nature, *The Overstory* recontextualizes them within a broader ecological framework. Thoreau and Westerford's voices seem to blend, and the repetition of "Contact! Contact!" does not capture a yearning for connection but rather an acknowledgment of its ever-presence, announced by the intertwined nature of human and nonhuman existence. The "Titan" that "has possession" of the speaker in Thoreau's original text might evoke a form of individual genius or sublime inspiration; yet, in *The Overstory*, Westerford's reading subtly shifts its meaning. Her scientific and ecological perspective undercuts the individualism of genius, reorienting "Contact!" away from personal revelation and toward the recognition of interconnectedness in the everyday.

This recognition gains further resonance in the passage immediately following, where Westerford is described foraging as she drifts farther west: "This country is awash in food free for the eating. You just need to know where to look" (129). Her movement westward contrasts sharply with the myth of the American frontier, where expansion often signified conquest and dominion over nature. Instead, Westerford's journey westward is one of foraging, attuned to the land's offerings rather than its exploitation. This reimagining of the American myth foregrounds survival not as domination but as coexistence, a mode of living that depends on attentiveness and reciprocity rather than mastery.

Even the simple act of splashing water on her face at a service station highlights the theme of contact, transforming an ordinary, mundane habit into a moment of connection. Water touching skin—a daily ritual so often taken for granted—becomes emblematic of how contact with the nonhuman world is integral to survival, not in

grandiose or dramatic ways, but in quiet, essential ones. The description of Westerford's reflection in the mirror underscores this transformation: "She looks marvelously weathered, old beyond her years. She has gone to seed" (129). Here, beauty is redefined. No longer does youth or perfection hold the highest value; instead, the marks of age, the signs of having lived a life of contact with the atmosphere and the natural world, are celebrated. To be "marvelously weathered" is to embody aliveness—an existence shaped by connection with the elements, of being caressed by the wind.

This idea of connection finds an extended metaphor in *The Overstory's* treatment of the wind, which serves as a dynamic mediator between humans, trees, and the broader natural world. The wind caresses human cheeks, but it also "waves the pines" (1) and hemlocks "wave their feathery leading shoots" (304). Poplars repeat the "wind's gossip" (3), and in the wind, catkins wave like whitecaps, while branches "flicker between dark and paler green" (6-7). The wind does not merely touch humans but engages trees and their processes—maple trees, for instance, release "more seeds in updrafts than when the wind is blowing downward" because the upward currents allow seeds to travel farther (116). This movement underscores a relational approach that is not focused solely on the human, but on networks of connection.

The novel further articulates this relational dynamic through Westerford's insight: "Patty learns that real joy consists of knowing that human wisdom counts less than the shimmer of breeches in a breeze. . . . The only dependable things are humility and looking" (115). These moments foreground a humility born of observing the most mundane aspects of the natural world, rather than its "grandeur." The wind's interactions with trees, from spreading seeds to animating branches, highlight the active agency of the nonhuman. These acts are not framed as serving humanity but as integral to the rhythms of life, suggesting that the vitality of nature exists independently of human involvement while remaining inextricably intertwined with it.

Aliveness and Vitality: Bugs and "Vibrant Matter"

Aliveness shares affinities with concepts of vitality, invoking the sense that something is infused with life and energy. It belongs to the same affective family as vigor, alertness, and livelihood, standing in contrast to lethargy, apathy, boredom, or listlessness. The underlying meanings of liveliness and spirit suggest a vitalist approach

to life. However, aliveness differs from traditional vitalism, which posits a life force separate from the physical (Donohue and Wolfe; Normandin and Wolfe; Driesch; Bergson). While nineteenth century ideas like animal magnetism, mesmerism, and notions of the “soul” attempted to challenge mechanistic approaches to life, advances in biochemistry and molecular biology have largely discredited these views. Even so, vitalism persists in new forms.

As Giovanni Federspil and Nicola Sicolo observe, “Today, nobody believes that living beings are inhabited by a soul or by a vital force that opposes the physicochemical forces and is even capable of altering their effects. The death of this kind of vitalism, however, does not remove all vitalistic concepts, nor does it necessarily mean the victory of mechanistic metaphysics” (342). Furthermore, new approaches have emerged; Henri Bergson’s *élan vital* (*Creative Evolution*) remains influential in philosophical thought, and new materialist thinkers like Jane Bennett and Rosi Braidotti have revived aspects of vitalism. Bennett’s “vital materialism” (17) posits that all matter possesses a form of vitality or agency, hence “vibrant matter,” while Braidotti’s concept of *zoe* (20)—the life of animals and non-human entities—advances a more ecological understanding of interconnectedness, challenging the clear distinction between living and non-living.

This relational approach invites a new way of engaging with the environment, defined by care and kinship. It rejects the anthropocentric impulse to dominate or fear and instead fosters an ethos of coexistence and mutual nurture. Within this framework, grand landscapes are no longer prerequisites for appreciating nature’s vitality. Rocks, trees, and wind on our cheeks are what matter and what we come into contact with every day. Nature is already present, hovering above our heads in the form of trees, insects, air, and light (Powers, *The Overstory* 3). By shifting our focus to these everyday connections, we open the possibility for a deeper, more sustainable relationship with the world around us.

These aspects seem to invoke the notion of “sentimental ecology,” a rhetorical trope in which “the crucial sentimental ideas of community, domesticity, maternal care,

and affective emotional interconnections inform writing about nature” (Magee 4-5).¹ Sentimental writing has been dismissed as trivial and sensationalist, yet it continues to be a relevant topic in American literature and political discourses (cf. Gerund and Paul). The aliveness depicted in this paper, though, is not synonymous with a sentimental approach. It shares similar ideas and concerns, but it departs from the sentimental in key ways, especially in its willingness to foreground pain and discomfort. Even if “sentimentalist humanity is held together by an empathic pleasure in a variety of feelings” (Mikirtumov 19), sentimentalism maintains a utopian longing, a promise of “redemption” and harmonious communities (Parkins 647).

Utopias, by their very nature, remain out of reach. They suggest an idealized image of nature as something separate from us—either a pristine wilderness to be preserved or a pastoral harmony we can never fully restore. This framing reinforces a sense of loss and unattainability, one that is coupled with an ecological yearning and sense of nostalgia that is forever in search of lost innocence.² By contrast, the concept of aliveness resists this utopian impulse. Rather than idealizing nature as something distant or unattainable, aliveness invites us to engage with the ordinary and the present. It fosters an appreciation for the mundane details of life—those small, overlooked moments and interactions that embody the vitality of our shared world. This approach acknowledges that nature is not an untouched, “sentimental idyll” but a network of relationships in which we are already entangled (Alpers 324).

Aliveness brings us closer to the everyday, lived reality of nature as it exists in the present—imperfect, fragmented, and intimately connected, even with bugs. Unlike moonlight or a serene landscape—elements of nature often idealized in literature for their beauty or transcendence—bugs resist such romanticization. Bugs evoke discomfort, unease, and even terror, yet they are also “vibrant matter.” As we read in *The Overstory*, “bugs swarm, iridescent, parti-colored, minuscule-film monsters” (266), using color and motion to collapse the line between menace and wonder, animating the scene with an energy that depends on the viewer’s gaze. Their uncanny beauty both attracts and repels;

¹ Magee analysed this sentimental ecology as evidenced in the work of various authors and practices, including Susan Fenimore Cooper’s work, “the language of flowers,” or the works of Rachel Carson and Barbara Kingsolver.

² See also the discussion of the pastoral in Alpers.

they are tiny “monsters” in their otherness, yet they share the viewer’s aliveness. The bugs’ luminosity suggests an aliveness that glows, sparks, and asserts its presence, though this vitality is not an inherent quality of matter, like an “aura,” but emerges in the interaction between things. Iridescence depends on the angle of view.

Powers explores this tension in *Plowing the Dark*, too, where the protagonist, held captive in a solitary room, finds his relationships with bugs radically transformed. Ordinarily, bugs are creatures we strive to avoid or eradicate—intrusions into human spaces that symbolize disorder or fear. Initially, the protagonist’s first impulse is to “swat, smash, and sweep” them away, to keep them off his body (186). Yet, in the isolation of captivity, these tiny creatures become his only companions, offering a kind of solace. Soon, “You see yourself on your hands and knees, playing with your six-legged cellmates” (187).

Solitude forces the protagonist to notice what might otherwise go unseen, to engage with a form of life that often exists at the margins of human awareness. It proves “how little of you is yours,” and makes him realize that aliveness depends on connection, human or otherwise (187). As such, this encounter underscores the relational nature of aliveness: to feel alive is not merely to exist in isolation but to be inextricably connected to the nonhuman, even in moments of terror or discomfort. This relationship with bugs does not offer an escape from fear or the unknown; rather, it makes space for these emotions within the experience of aliveness. The presence of bugs, with their unsettling proximity, resists the human impulse to tidy nature into idyllic or picturesque forms. Instead, bugs compel us to grapple with the otherness of the nonhuman world—an otherness that is neither entirely alien nor wholly comforting. Aliveness, in this sense, requires us to sit with this tension, to engage with the discomfort and vulnerability that come from sharing the world with creatures so different from ourselves.

Aliveness is not employed to draw a line between life and death but to interrogate the porous boundaries that exist between them. Adam Appich, a character in *The Overstory*, becomes fascinated with ants and observes something profound in their behavior: “Purpose. Will. A kind of awareness—something so different from human intelligence that intelligence thinks it’s nothing” (54). His realization underscores the

agency of nonhuman entities, an agency that does not rely on human observation to exist. Ants interact, forage, and build in ways that exemplify vibrant matter.

This vibrant matter manifests itself not only in moments imbued with human nostalgia, such as an imaginary daughter floating across the grass, “catching lightning bugs in a jar” (459), but also in scenes that reflect the independent rhythms of nature: “Clouds of small black bugs swarm across the grass tips, unhinged by the coming cold” (383). Aliveness in these instances occurs beyond human intervention or recognition. Contact exists in endless variations, challenging traditional depictions of death.

In *The Overstory*, aliveness is pervasive, even in the context of death. Death is not the cessation of vitality but the transformation of one form into countless others. Birds feed on the “rafts of eggs that bugs and butterflies leave all over the branches” (52). A healthy forest thrives on dead trees: “Birds turn them to use, and small mammals, and more forms of insects lodge and dine on them than science has ever counted” (121). This cycle of transformation is encapsulated in Patricia Westerford’s reflection: “She wants to raise her hand and say, like Ovid, how all life is turning into other *things*” (121; my emphasis). Aliveness thus highlights the continuity of contact and interaction, underscoring that life persists in various forms through relational processes.

This perspective extends the discussions initiated by thinkers like Bennett and Braidotti, who emphasize nonhuman agency and interconnectedness. However, aliveness differs from a purely vitalist approach by centering the concept of contact rather than an inherent animating force. This emphasis on relationality reframes how we understand vitality, intervening into discussions of animation, too.

Aliveness and Animation: To Be a Thing

Aliveness is not equivalent to the concept of animation. To be animated traditionally implies a dualist separation between a body or form and an animating force that imbues it with life. This dualism often perpetuates a vitalist notion of a secret “spark” or essence that defines aliveness. Aliveness, by contrast, rejects the premise of an external force or supernatural vitality. This distinction is significant in contemporary debates about artificial intelligence and machines, often depicted as devoid of life. The assumption that AI lacks the “creative” energy attributed to humans subtly reinforces vitalist narrative, suggesting that life and aliveness are uniquely tied to humanity. Such

framing positions machines and technology as separate from nature, perpetuating anthropocentric ideas of human exceptionalism.

The Overstory challenges this anthropocentric framework by shifting the focus from animation to relationality. All matter is already alive through its participation in webs of interaction and relationship. Life emerges through dynamic interactions, challenging the notion of animation as a process of “activating or giving life to inert matter” (Ngai 92). For example, Neelay Mehta, a computer genius in the novel, marvels at the inner workings of a microprocessor. He likens it to a “bug with square legs” and discovers that it contains “thousands and thousands of transistors” intricately designed to create functionality (Powers, *The Overstory* 92-93). In programming, too, we encounter the concept of “branching”—a term that bridges the organic and the artificial. Powers writes: “There are trees that spread like fireworks and trees that rise like cones. Trees that shoot without a ripple, three hundred feet straight skyward. Broad, pyramidal, rounded, columnar, conical, crooked: the only thing they do in common is branch, like Vishnu waving his many arms” (95). These analogies do not position technology as an inferior imitation of nature, but rather reveal its shared logic. Technology belongs to nature—not as something apart from it, but as something that has emerged within and through it.

The question, then, is not “can we equal nature?” but “can we act as a responsible part of it?” The tragedy is not that we are outside nature, but that we have forgotten we are inside it. This enmeshment is reinforced by Powers’ recurring network imagery, which conveys a vision of relational complexity that blurs the divide between the organic and the artificial. In this way, *The Overstory* resists nostalgia or the idealization of a pure, untouched nature, and instead suggests that technological matter, too, is part of the broader, vibrant web of interconnected existence.

Aliveness, therefore, resists the dualist assumption that life depends on an external animating force. Instead, it posits that all matter exists in a constant state of interaction, challenging narratives of mastery and control. For instance, notions like ventriloquism or the act of “imbuing” inert matter with life reinforce the idea of dominance and manipulation, implying that materiality is passive without external intervention. Aliveness, however, disrupts such ideas, proposing a vision of vitality rooted in shared existence and mutual entanglement.

This perspective also critiques traditional narratives such as the Frankensteinian concept of creating life or animist beliefs that ascribe life to matter through mystical forces. Instead, aliveness reframes mundane materiality as already alive, even if it remains in the blind spot of human perception. As stated in the novel, “Other creatures—bigger, slower, older, more durable—call the shots, make the weather, feed creation, and create the very air . . . [We are] Plant-blind. Adam’s curse. We only see things that look like us” (113).

Yet literature, as a lively thing teeming with interactions, fosters new attachments and ways of seeing: “He tells her how the word beech becomes the word book, in language after language. How book branched up out of beech roots, way back in the parent tongue. How beech bark played host to the earliest Sanskrit letters. Patty pictures their tiny seed growing up to be covered with words” (116). By tracing the etymology of books to trees, Powers positions them as central to the idea of aliveness. By sustaining a “greater proximity with life,” literature constantly reminds us of the affective attachments we carry and create (Carr 6).

The power of literature, then, does not lie in a mystical “creative spark” that awakens us into being, but in its capacity to sustain aliveness through its pages. Books, like trees, are vibrant matter—not because they are animated by some external force but because they shape interactions and foster relationality. In this sense, they are conduits of vitality, drawing readers into networks of connection that span the natural and the human. By illuminating these entanglements, literature sustains aliveness not as an isolated phenomenon but as an ongoing, dynamic process of relational becoming.

Conclusion

Through its exploration of aliveness, *The Overstory* reshapes our understanding of vitality, relationality, and the interconnectedness of human and nonhuman worlds. Rather than adhering to traditional frameworks that separate life from death, animate from inanimate, or human from nature, the novel embraces a vision of aliveness as pervasive, dynamic, and grounded in contact. This perspective challenges the anthropocentric narratives that situate humans as separate from or superior to nature, urging readers instead to recognize the intricate webs of interaction in which all beings participate.

The novel reimagines aliveness as an ever-present quality that pervades even the most mundane aspects of existence. Acts as ordinary as foraging, splashing water, or noticing the shimmer of leaves in the wind become profound moments of connection, underscoring the vitality inherent in the world around us. By focusing on these everyday exchanges, the novel invites a relational approach to the world that resists both idealization and domination. It shifts the focus from monumental landscapes and sublime encounters to the mundane, emphasizing that aliveness is not something to be sought elsewhere but something already present, surrounding us in our everyday lives. Aliveness, in this sense, is not found in grand gestures of mastery or conquest but in the quiet, ongoing interactions that make up the fabric of existence.

This reframing moves beyond traditional narratives that idealize or sentimentalize nature as something separate and unattainable. Instead, it roots ecological awareness in the present, encouraging us to cultivate care and responsibility in our daily lives. By shifting attention to the overlooked—bugs, trees, rocks, wind—*The Overstory* underscores the intimacy of our shared vulnerability. Bugs, in particular, emerge as potent symbols of this relational aliveness, embodying both the discomfort and beauty of being-in-relation. Their presence highlights the fragility of connection and the ambivalence that marks human-nonhuman interactions, challenging us to see aliveness as a shared condition that encompasses joy, loss, fear, and humility.

This perspective also calls for a reexamination of our attachments—how we are bound to the world and to one another, and how these ties shape our responses to ecological crises. Rather than longing for a pastoral past or envisioning grand utopian futures, aliveness invites us to focus on the seemingly insignificant choices we make each day: how we interact with the nonhuman (how we use water, manage waste, or care for our local environments). These small gestures, often dismissed as trivial, have the potential to foster sustainable habits and deepen our relationship with the natural world. In doing so, they redefine our role within the ecological web, not as dominators or saviors but as participants in a shared and vibrant existence.

Aliveness bridges philosophical and ecological debates by rejecting both mechanistic and vitalist views of life. It reframes vitality not as a secret spark or essence but as an ongoing process of interaction and relationality. This approach resists

anthropocentrism and fosters a more expansive understanding of vitality that encompasses not only human experiences but also the nonhuman and even the inanimate. *The Overstory* reminds us that the vitality of life is not found in transcendence or separation but in the simple, overlooked moments of contact that define our shared existence.

Works Cited

- Alpers, Paul. "Schiller's Naïve and Sentimental Poetry and the Modern Idea of Pastoral." *Cabinet of the Muses*, edited by M. Griffith and D. J. Mastronarde, Scholars Press, 1990, pp. 319–331.
- Barnett, Joshua Trey. *Ecological Feelings: A Rhetorical Compendium*. Michigan State UP, 2025, forthcoming.
- Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Duke UP, 2010.
- Bergson, Henri. *Creative Evolution*. Holt, 1911.
- Braidotti, Rosi. "Posthuman Critical Theory." *Critical Posthumanism and Planetary Futures*, edited by Debashish Banerji and Makarand R. Paranjape, Berlin, 2016, pp. 13–32.
- Burke, Edmund. *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful*. 1757. University of Michigan, 1844.
- Carr, Julie. *Someone Shot My Book*. U of Michigan P, 2018.
- Coffey, Yumiko, et al. "Understanding Eco-Anxiety: A Systematic Scoping Review of Current Literature and Identified Knowledge Gaps." *The Journal of Climate Change and Health*, vol. 3, 2021, article no. 100047, <https://doi.org/10.1016/j.joclim.2021.100047>. Accessed 23 July 2025.
- Donohue, Christopher and Charles T. Wolfe, editors. *Vitalism and Its Legacy in Twentieth Century Life Sciences and Philosophy*. Springer, 2023.
- Driesch, Hans. *The History and Theory of Vitalism*. Macmillan, 1914.
- Federspil, Giovanni, and Nicola Siculo. "The Nature of Life in the History of Medical and Philosophic Thinking." *American Journal of Nephrology*, vol. 50, no. 4–6, 1994, pp. 337–343.
- Filip, Loredana. "The Future of the Enhanced Self and Contemporary Science Fiction: TED Talks and Dave Eggers' *The Circle* (2013)." *Current Objectives of Postgraduate American Studies*, vol. 20, no. 1, 2019, pp. 24–39.
- . *Self-Help in the Digital Age: TED Talks, Speculative Fiction, and the Role of Reading*. De Gruyter, 2024.
- . "Toward Multisensory Aesthetics: Mundane Materiality in Richard Powers' *Plowing the Dark* and *The Overstory*." *AmLit–American Literatures*, vol. 5, no. 2, 2025, pp. 109–127.
- Gerund, Katharina, and Heike Paul. "Sentimentalism." *Handbook of the American Novel*

- of the Nineteenth Century*, edited by Christine Gerhardt, De Gruyter, 2018, pp. 1–17.
- Harland, Paul W. “Ecological Grief and Therapeutic Storytelling in Margaret Atwood’s *Maddaddam Trilogy*.” *ISLE: Interdisciplinary Studies in Literature and Environment*, vol. 23, no. 3, 2016, pp. 583–602.
- Hillman, James. “Aesthetics and Politics.” *Tikkun*, Nov.-Dec. 1996, pp. 38+. *Canadian Periodicals Index Quarterly*. Web. 7 Apr. 2013.
- Jameson, Fredric. *Postmodernism, or the Cultural Logic of Late Capitalism*. Duke UP, 1991.
- Madsen, Deborah L. *American Exceptionalism*. Edinburgh UP, 1998.
- Magee, Richard Michael. “Sentimental Ecology: Susan Fenimore Cooper and a New Model of Ecocriticism.” Fordham University, 2002, *ETD Collection for Fordham University*, AAI3061337, <https://research.library.fordham.edu/dissertations/AAI3061337>. Accessed 23 July 2025.
- Mikirtumov, Ivan B. “Sentimentalism and Romanticism: The Structure of Affect.” *Philosophy Journal*, vol. 16, no. 4, 2023, pp. 19–34, <https://doi.org/10.21146/2072-0726-2023-16-4-19-34>. Accessed 23 July 2025.
- Murray, Derek Conrad. “National Identity, Ideology, and the American Landscape.” *Art Journal*, vol. 83, no. 4, 2024, pp. 5–6. <https://doi.org/10.1080/00043249.2024.2408996>. Accessed 23 July 2025.
- Ngai, Sianne. *Ugly Feelings*. Harvard UP, 2007.
- Normandin, Sebastian and Charles T. Wolfe, editors. *Vitalism and the Scientific Image in Post-Enlightenment Life Science, 1800-2010*. Springer, 2013.
- Paul, Heike. *The Myths That Made America: An Introduction to American Studies*. Transcript, 2014.
- Parkins, Ilya. “Feminist Sentimentalism? Ambivalent Feeling in Inclusive Digital Wedding Media.” *Cultural Studies*, vol. 37, no. 4, 2023, pp. 647–668. <https://doi.org/10.1080/09502386.2022.2039257>. Accessed 23 July 2025.
- Powers, Richard. *Plowing the Dark*. 2001. Random House, 2011.
- . *The Overstory: A Novel*. W. W. Norton & Company, 2018.
- Saito, Natso Taylor. “Human Rights, American Exceptionalism, and the Stories We Tell.” *Emory International Law Review*, vol. 23, 2009, pp. 41–68. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1546045. Accessed 23 July 2025.
- Saito, Yuriko. “Aesthetics of the Everyday.” *The Stanford Encyclopedia of Philosophy*, Summer 2024 Edition, edited by Edward N. Zalta and Uri Nodelman, Stanford University, <https://plato.stanford.edu/entries/aesthetics-of-everyday/>. Accessed 23 July 2025.
- Thoreau, Henry David. *Walden*. Walter Scott, 1895.

- Winch, Guy. "Why We All Need to Practice Emotional First Aid." *TED*, 16 Feb. 2015, https://www.ted.com/talks/guy_winch_why_we_all_need_to_practice_emotional_first_aid. Accessed 23 July 2025.
- Wowra, Lea. "America the Beautiful, or the Exclusive? The Other in US Nature Conservation." *E-International Relations*, 21 Sep. 2023, <https://www.e-ir.info/2023/09/21/america-the-beautiful-or-the-exclusive-the-other-in-us-nature-conservation/>. Accessed 23 July 2025.

Tales of Interconnectedness: Exploring Environmental Issues and Ecological Connections through The Atomic Tree and Tree VR Projects

Paschalia Mitskidou
Aristotle University of Thessaloniki

Abstract

The essay examines two nonfiction VR projects that focus on environment-related topics, *The Atomic Tree* (2019) by Adam Loftén and Emmanuel Vaughan-Lee and *Tree* (2017) by Milica Zec and Winslow Porter. *The Atomic Tree* explores the connections between the human and non-human worlds by immersing the user into the memories of a 400-year-old Japanese bonsai tree that survived the 1945 atomic bombing of Hiroshima. *Tree* follows the life cycle of a rainforest tree; the participant experiences the tree's growth from a seedling to its fullest form, and witnesses its fate firsthand. Both VR projects offer an intimate look into the interconnectedness of humans and the natural environment, and help illustrate the abstract issue of human-induced climate change and its effects on multiple ecosystems, thereby enabling alternative readings of the relations that shape one's perception of the natural world. The analysis emphasizes the affordances of the VR medium and the ways in which the case studies challenge traditional notions of storytelling and allow new conceptualizations of space to emerge, aiming to explore the potential paths that nonfiction VR could open up toward more nuanced understandings of local and global environmental issues.

The present article focuses on two nonfiction Virtual Reality (VR) projects. *The Atomic Tree* (2019) by Adam Loftén and Emmanuel Vaughan-Lee and *Tree* (2017) by Milica Zec and Winslow Porter offer an intimate look into the connections between human and non-human worlds, while also helping illustrate the abstract issue of human-induced climate change and its effects on multiple ecosystems. By exposing the audience to environments that would be otherwise inaccessible and allowing them to encounter some of their hidden aspects, these VR projects encourage an introspective journey and enable alternative readings of the relations that shape one's perception of the natural world. The analysis emphasizes the affordances of the VR medium and the ways in which the case studies challenge traditional notions of storytelling and allow new conceptualizations of space to emerge, aiming to explore the potential paths that nonfiction VR could open up toward more nuanced understandings of local and global environmental issues. Prior to delving into the details of each project, a brief introduction is pertinent regarding the impact of VR technologies on narrative and creative practices in the context of the shifting digital landscape of the early twenty-first century.

Today, narrative forms are in a state of constant evolution and transformation, especially due to their merging with digital technologies. Electronic literature continuously furthers and enriches expression, linking technology with artistic vision. Hartmut Koenitz et al. note that interactive digital narratives enhance “the experiential dimensions of human expression, with multimodal manifestations, procedural generation and novel structures” (6). At the same time, within present participatory culture, new dynamics are evidenced between creators and audiences, who are able to connect and interact through an array of narrative genres. After the heyday of VR in the 1990s and early 2000s, the hype surrounding the technology gradually faded, until the next wave of development in the mid-2010s, when interest in VR was renewed and spurred discussions in academic as well as popular discourses about its potential as a narrative medium. VR narratives are among the diverse new media textualities and hybrid forms of storytelling that have emerged in the first quarter of the twenty-first century. VR transforms the user’s experience, who is now conceived as a participant or interactor; the idea is that one is being transported *inside* a story that unfolds around them and provided with a firsthand perspective of the represented places and events. Documentary filmmaking and journalism are, in many ways, rooted in the same traditions. As both practices migrate into the digital domain, forms are converging (Uricchio et al.), while VR is regarded as an efficient tool for delivering stories with greater impact and covering current affairs with a social dimension (Doyle et al. 7-9).¹ In the last decade, filmmakers, artists and journalists have been experimenting with VR in nonfiction projects that raise awareness of environmental issues and bring attention to the spatial and temporal scale of climate change.²

¹ In 2015 *The New York Times* launched their VR application by sending out Google Cardboard viewers (which are powered by a smartphone) to over a million of their subscribers; other media outlets such as *The Guardian* and *PBS Frontline* were also among the early adopters of VR.

² For example, *Collisions* (2016) by Lynette Wallworth tells the story of indigenous elder Nyarri Morgan of the Martu Tribe, who recounts his memories of nuclear bomb tests in the remote Western Australian desert in the 1950s; *Oil in Our Creeks* (2018) by Zahra Rasool presents the past, present and future of a community in Nigeria grappling with the local impact of the global oil trade on their environment; *Gondwana* (2022) by Ben Joseph Andrews is a free-roaming, durational VR installation that immerses participants in the world’s oldest tropical rainforest, the Daintree Rainforest in Queensland, Australia. Over the course of each twenty-four-hour showing the conditions in the rainforest shift, providing an artistic rendering of the forest’s gradual degradation, which is based on climate data projections up to the year 2090.

The forms of narrative made possible by the VR medium come with their own distinctive features. As Marie-Laure Ryan et al. argue, the unique affordance of digital media is that they allow movement in a three-dimensional space: “[The] represented world offers the user the opportunity to travel and explore its space . . . users are placed in an environment that can be dynamically reconfigured in response to their actions” (93). This attribute of digital media spatiality is evidenced in the construction of immersive virtual environments that are visually and spatially complex, navigable, and can be altered by the users’ participation. The VR projects currently produced exemplify (in varying degrees) Ryan’s observation that VR provides an immersive and interactive experience which requires the presence of the user’s body in the virtual world, “a condition easily satisfied in a VR system . . . [because] [i]n VR we act within a world and experience it from the inside” (12). In her view, the experience of space in VR has an emergent quality; space is responsive to body movement and “the corporeal participation of the user in VR can be termed world-creative in the same sense that performing actions in the real world can be said to create reality . . . navigating the virtual world is a way . . . to make it flow out of the acting body” (208-209). By enabling the user to navigate simulated landscapes, VR affords an embodied experience of space that is dynamic and also temporalized, thus turning it into “a lived experience” (Ryan 56). VR operates in dimensions other than mere representation; the procedurality of computational media turns information into modular, malleable materials, hence allowing the creation of narrative spaces that can be interacted with and modified by users. Meanwhile, with the development of digital technologies, the possibility of enriching textual representation by using multimodal signs is being explored. According to Ryan, “[t]he strength of new media . . . reside[s] . . . in creating multi-modal texts and worlds that provide a rich sensory and imaginative experience” (157). VR narratives embrace multimodality through a combination of text with different types of sensorial signs (visual, aural, tactile, olfactory), driven by the idea that engaging the senses results in an enhanced experience of the narrative. The immersive and interactive properties, in tandem with the multimodal manifestations and the corporeal involvement that the VR medium enables, provide a spatial, embodied and experiential kind of storytelling.

The analysis that follows demonstrates how each VR project takes advantage of the aforementioned capabilities of the medium. The discussion starts with a section dedicated to *The Atomic Tree*, which falls within a category of VR known as Cinematic VR (CVR), and continues with the *Tree* project, an example of interactive VR.³ The next section is concerned with empathy, a rather fraught concept in the context of nonfiction VR narratives, and the conclusion offers some closing thoughts on the issues discussed.

The Atomic Tree

Directed by Adam Loftén and Emmanuel Vaughan-Lee, and narrated by Peter Coyote, *The Atomic Tree* is a ten-minute journey into the memories of a 400-year-old Japanese white pine bonsai tree, known as the Yamaki tree, that witnessed and survived the 1945 atomic bombing of Hiroshima.⁴ This project was inspired by David George Haskell's book *The Song of Trees* (2017), in which he recounts the story of the tree. The filmmakers collaborated with Haskell on the narrative of the VR feature and conducted extensive research, prior to traveling to Japan to film on location. There, they became acquainted with the tree's history, its birthplace on the island of Miyajima, and its life after it was transported to the Yamaki family home.

The Atomic Tree is an example of CVR, with unique visual and spatial assets that blend stereoscopic 360 videos collected at various locations (i.e. live-action landscape shots) with more traditional documentary footage and 3D animations. As Vaughan-Lee notes, “[w]e felt that we needed to bring in the animation special effect, in order to really transcend the human component, and bring viewers into the tree’s world” (Benardello); animations were used to visualize the tree’s rings and the atomic blast, which constitutes

³ CVR (or 360-degree VR) refers to VR pieces shot on a 360-degree camera that captures real-world environments and live situations with cinematic visual imagery; the user is anchored at the center of the piece and is able to look in every direction but the possibilities for interactivity this option affords are limited. In interactive or room-scale VR, on the other hand, the user is granted the opportunity to explore and have some form of interaction with the virtual environment, which is digitally rendered. Although there is a lack of consensus over terminology, what qualifies as VR and the kind of projects each category encompasses, ultimately both CVR and interactive VR projects can be situated across the spectrum of works currently produced by means of a range of VR technologies.

⁴ Loftén and Vaughan-Lee's first VR feature, *Sanctuaries of Silence* (2017), also focuses on the natural world; it explores the impact of noise pollution and transports the user to the Hoh Rainforest, on the west-end of the Olympic National Park in the state of Washington, US. According to the filmmakers, while working on this piece, they realized the opportunities that the VR medium offers “for creating a multidimensional connection with the natural world and . . . an experience that builds respect for [the] environment” (Gayet).

the climax of the story. The creators envisioned this project as an exploration of the memories that are held within the tree's rings; from Japan's ancient cedar forests and Buddhist temples to the home of bonsai master Masaru Yamaki in Hiroshima, where the pine was nurtured for five generations, and the botanical garden of the National Bonsai & Penjing Museum in Washington D.C. where the tree now stands,⁵ *The Atomic Tree* takes the users on a journey into these memories that form a multi-layered narrative spanning time and geographic space.

The scenes are witnessed from an intimate distance and are carefully chosen to capture the essence of a story of survival in the face of a devastating catastrophe, the humanitarian and environmental impact of which is still being felt today, but additionally of a story of resilience and renewal over a period of time that exceeds human time-scales. As Loftin points out, "we had to visualize, in advance, exactly what our audience member will be able to experience as a person, while at the same time, put them in the perspective of something that's non-human. That's not necessarily just the tree, but also the air, spirit and energy of the forest system, and how the audience member can experience that perspective" (Benardello). *The Atomic Tree* is a nuanced VR experience that immerses the users in a rich visual environment; there is a calm, almost meditative quality to it. Sara Pérez-Seijo et al. assert that in VR, "[i]t is not a matter of seeing the story, but of feeling *being* where it happens" (74). Through the creation of scenes that can be "inhabited," the audience is placed at the center of a story that is woven around them and allows their imagination and sensitivity to come into play; the narrative fragments are pieced together in a manner that echoes how memory works and is especially well-suited to a story revolving around remembrance. The voice-over narration—a convention of documentary film that is not an organic part of the virtual space—detracts somewhat from the immersive quality of the VR piece, but it is admittedly attuned to its overall atmosphere, serving as a supplement to the imagery while complementing the introspective tone and slow pace of the experience.

⁵ The Yamaki white pine tree was donated to the United States in 1976, "as part of Japan's bicentennial gift to the American people" ("Repotting the World-Famous Yamaki Pine"); fifty-three bonsai trees from private collections formed the museum's Japanese Collection, serving as symbols of peace, reconciliation and perseverance ("Museum Collections").

The Atomic Tree illustrates the importance of space as a key narrative element in VR, in the way it uses space as more than a mere setting; it embraces the various locations almost as characters, each communicating their story which intersects with that of the bonsai tree (*The Atomic Tree*'s "protagonist"), thus enabling the users to share its journey. Sarah Jones suggests that more nonfiction VR experiences should focus on place. The medium's capability of placing the users within an alternative virtual space and the spatial storytelling VR affords provide new opportunities for practitioners. Jones finds that the concept of "storyliving," a term increasingly used in cultural and commercial circles, could be a productive approach, namely creating an environment which will serve as a framework for the users, in order to experience a story that can take on different meanings. In her view, this would allow "for the audience to experience the location and develop an understanding of the place that will determine any response they have," thus "expand[ing] perspectives and [leaving] the audience . . . with a powerful emotional experience" (91), albeit one that involves a non-directed narrative and lets them develop their own understanding of the issue at hand. *The Atomic Tree* is effective in drawing the audience into the story and creating an intimate space where they can engage with the subject. Seeing this approach in conjunction with Ryan's aforementioned arguments about VR, the virtual space can be conceived as a set of affective and interpretive relationships; it becomes a lens through which real-world space is contemplated, in a way that may link the attendant memories created during the experience with one's personal reality.

The Atomic Tree was originally presented in 2019 at the South by Southwest Film & TV Festival in Austin, Texas, as an immersive experience (for a VR headset) that was part of an installation designed to look like a Japanese tea garden. Through this carefully arranged space that served as a transitional area, Lofton and Vaughan-Lee wished to transport the audience into the story. Such areas produce a sense of anticipation, they are visually interesting, but more importantly, their purpose is to create an atmosphere that engulfs the audience members and prepares them for the proper VR experience. In CVR, one is able to select their field of view but this format does not permit movement in space. On the contrary, in procedurally generated VR features that are made for high-end headsets, the users have the ability to physically walk around and explore the virtual

space. These capabilities enhance the feeling of being “present” in the virtual world and in turn result in a heightened awareness of one’s surroundings. But even without the levels of agency and interactivity that the latter VR format affords, the 360-degree vision “create[s] a sense of first-person point of view” while also enabling the users “to appreciate the detail and texture of the mise-en-scène” (Pett 77). Due to the power of narrative and visuals, as well as the intimate experience VR provides, *The Atomic Tree* aptly conveys the interdependence of multiple ecosystems on the planet. Trees have always formed networks alongside other life forms; in its exploration of the interconnectedness of the human and non-human worlds as experienced by the Yamaki tree—the “community of relationships among the seen and the unseen” (*The Atomic Tree*)—this VR project invites reflection on their close ties and foregrounds their connection as one of kinship.⁶

Moving forward, the following section looks at the *Tree* VR project, drawing attention to the ways in which it utilizes the affordances of the VR medium to approach its environment-related theme.

Tree

In Milica Zec and Winslow Porter’s *Tree*, the environment is computer-generated and the audience can interact realistically with the virtual space. The VR project was produced by Zec and Porter’s New Reality Company⁷ as part of HTC VIVE’s “VR for Impact” initiative.⁸ *Tree* is based on a short narrative-driven story with an engaging dramatic arc. The eight-minute feature introduces the participants to the life cycle of a tree in the Peruvian Amazon rainforest, from a seed rising through the soil to its full

⁶ *The Atomic Tree* is available on YouTube (www.youtube.com/watch?v=SSmepuOh0Ik) as a 360-degree video for PC and mobile devices but as per the official website (emergencemagazine.org/archive/story/atomic-tree/index.html), the use of a VR headset is recommended for best results.

⁷ *Tree* is Zec and Porter’s second VR project; their first one, *Giant* (2016), takes the user into a makeshift basement shelter, where a family struggles to survive in an active war zone. The experience is inspired by true events from Zec’s childhood in Serbia.

⁸ As stated in the company’s blog, the initiative was launched by HTC VIVE in 2017, with the mission to sponsor Virtual Reality and Augmented Reality content developers whose work “create[s] positive impact and change in support of the United Nation’s Sustainable Development Goals” (Farrell).

growth, allowing them to encounter hidden aspects of this environment and witness the tree's fate firsthand until it is finally destroyed in a slash-and-burn farming operation.⁹

The VR project does not rely on any traditional kind of narration; as Porter notes, their aim was “to show users the life of a tree in a universal way, without words or language and instead inviting them into a visceral and solitary state of being” (Reid). The creators ensured that the atmosphere and the various elements of the rainforest environment—the Madre de Dios region in Peru—were accurately recreated, while the titular tree was based on a kapok tree, a species native to Central and South America. In *Tree*, one becomes the protagonist but as a life form other than human, embodying a tree in the middle of a lush Amazon landscape and seeing their arms morphing into branches and their bodies turning into a trunk. VR can provide new experiences of embodiment; in this case, users are placed into a virtual “body” that is activated through their movements, and with which they can interact with the virtual environment and its elements. The possibilities for interactivity enhance the sense of bodily immersion, because the events taking place in the virtual space are linked to the physicality of the user, and this results in a dynamic, embodied experience of the story. Through this change of perspective, the intention is to enhance the participants' capacity to imagine life from different points of view and enable them to form a more intimate connection with other non-human organisms.

Tree debuted at the 2017 Sundance Film Festival and has been presented in numerous public events around the world. At the Tribeca Film Festival the same year, the presentation included an installation featuring living plants and controlled physical elements that allowed the audience to experience the story with unique sensory triggers; beyond the visuals and the rich soundscape, users could smell the forest scents and feel a bird landing on a branch or the vibration of their trunk as it emerged from the ground; while simulated wind, lightning and fire were used to show how these phenomena can affect the tree. In collaboration with Zec and Porter, the researchers Xin Liu and Yedan Qian from the Fluid Interfaces Group at the MIT Media Lab, designed and constructed

⁹ Slash-and-burn relates to a method of agriculture that involves cutting down and burning off existing vegetation before new seeds are sown and is typically used for clearing forest land for farming. This method exhausts the soil and is responsible for deforestation, which, as Zec notes, “is a bigger contributor to climate change than the entire transport industry combined . . . yet it's not common knowledge. In addition to forest degradation, it accounts for ten percent of global greenhouse gas emissions” (Rowsome).

the multisensory aspects of the experience. The team enhanced the virtual space through tactile, olfactory and temperature feedback, precisely synced “to match the virtual visual details inside the headset with the intensity, texture, and timing of the physical experiences” (Liu and Qian). In addition, before each audience member put on the VR headset, they were given a kapok tree seed to plant in a bed of soil that was part of the installation; this served as a symbol of their virtual avatar’s creation and also as an entry point to the story which reinforced the participatory character of the experience. Zec notes that “[t]he first environment we depict is that of a seed underground, so viewers immediately connect the physical seed to their character” (Reid). By incorporating such performative elements and aligning the physical and virtual space, the goal was to provide a more holistic experience of the storyworld. Liu and Qian observe that “[t]he design of multi-sensory experiences is a complicated process of composition and choreography” but ultimately “*Tree* [is] tapping into more senses to help people connect with the narrative.” Their approach recalls Ryan’s remark that in VR “[t]he perceptions of the various senses are . . . fused in a global experience that enables the user to apprehend the virtual world under many facets at the same time” (208). The construction of a stimulating multisensorial environment, where virtual and physical sensations are combined, generates a tangible feeling of being immersed into the recreated rainforest landscape and in turn enhances the narrative component of the experience. As an audience member describes, “I started off as a small seed in the ground, surrounded by brown soil. As the seed germinated, I found myself pushing upwards and breaking out into the bright sunlight . . . Everything around looked fresh and wondrous . . . Soon, I had burst through the forest’s canopy layer and found myself with a majestic view of the surrounding Amazon rainforest” (Ng). Another participant notices the poignant scene with the final destruction of the tree: “[e]specially that moment when people appear at your feet and you feel a rumble reverberating through your core. Because they’ve slowly started chopping you down” (Wilson). Their personal experience of the story is formed via their interaction with the space itself, which is organized in a unified whole, whereas the physical space serves as an extension of the virtual environment and a kind of stage set for said experience to unfold. This iteration of *Tree*, which engages the senses and

allows the participants to experience a different state of being, aspires to engender a new appreciation for the realities of non-human agents and the broader ecosystem.

The VR production focuses on one of the most essential building blocks of carbon-based life, conveying a message about the preservation of an endangered ecosystem: “We want to encourage our viewers to feel the journey into the lens of nature and, as such, begin to personalize the toll of man-made climate change and deforestation” (“Tree: A VR Journey”), Zec and Porter note. They collaborated with the Rainforest Alliance, an organization that conserves forestland worldwide, in partnership with indigenous forest communities and farmers; *Tree* launched on HTC’s Viveport platform as a 3D-stereoscopic experience for a VR headset (for a cost of USD 4.99) to help the Alliance’s conservation efforts of threatened tropical rainforests.¹⁰ Therefore, the creators are overtly committed to raising awareness of the critical role of forests as a defense against global warming and to incentivizing users to support this particular cause. Discussing the perceptual and imaginative difficulties people encounter when trying to grasp the risks associated with anthropogenic climate change, Alexa Weik von Mossner maintains that “[t]he tragedy of the Anthropocene . . . is that humans now “collectively wield a geological force” but at the same time experience difficulties when trying to understand the potential consequences . . . because they are too abstract and distant. This is where storytelling comes into play” (56). Von Mossner’s observation highlights the role that VR narratives (and storytelling in general) can play in turning the spotlight on specific human activities and the ways in which they drastically affect the natural environment.

By bringing attention to the biologically diverse ecosystem of the Amazon rainforest, which one can experience from a unique perspective, *Tree* helps illustrate certain aspects of the abstract issue of climate crisis, thus making them more emotionally proximate to a broader public. Still, whether this also creates lasting loyalty to the cause or produces tangible effects remains an open question. Hence, the discussion around VR

¹⁰ Paige Farrell writes that “Viveport . . . pledged to donate funds for the first 1,000 purchases of *Tree* to the Rainforest Alliance to support its vital work to conserve the world’s most critically threatened tropical rainforests.” In early 2025, *Tree* is no longer available on Viveport. More information about *Tree* can be found on the official website www.treeofficial.com/.

as a means of eliciting empathetic responses from users, on which the analysis focuses next, is significant in the context of nonfiction VR.

Nonfiction VR and the Discourse around Empathy

Empathy is a concept that frequently arises in relation to VR narratives and has been a much-debated issue in the field of VR since the technology has made its comeback. Creators use the VR medium to present issue's that deserve people's attention and sometimes socially oriented works are accompanied by claims concerning VR's (almost inherent) capacity for generating compassion and empathy. Although the emotional impact of VR cannot be overlooked, uncritically embracing its supposed empathy-enhancing potential disregards the fact that empathy is a layered concept as well as a complex tool with politics and power dynamics to its deployment.

Many researchers and scholars (Sundar et al.; Nielsen and Sheets; Schutte and Stilinović) argue that the immediacy of VR experiences and the intimacy they engender can be very affecting. Jeremy Bailenson, who leads the Stanford Virtual Human Interaction Lab (VHIL), asserts that "[n]o medium . . . can fully capture the subjective experience of another person, [much less of another life form] but by richly evoking a real-seeming, first-person perspective, virtual reality does seem to promise to offer new, empathy-enhancing qualities," thus foregrounding a relation between empathy and VR's perspective-taking affordance. Furthermore, David M. Markowitz and Bailenson note that VR "often helps to introduce new and challenging climate change topics" and can be an effective medium for sparking the audience's interest in the environment (61). They claim that the embodied experience VR enables is more conducive to changing the way people feel toward nature, as it increases their connectedness to the natural world and awareness of phenomena related to the mechanisms of climate change (61). However, they stress the need for further investigating the kind of VR experiences that are most

appropriate to deliver impactful environment-related stories and their long-term effectiveness.¹¹

Other scholars maintain critical attitudes as to VR's empathy-inducing potential and the emphasis placed on the emotions VR projects can trigger (Sutherland; Hassan; Laws; Hamilton). Turo Uskali and Pasi Ikonen identify "a shift toward more emotive public communication and media culture" in today's world due to "the rise of the internet and social media, which have enabled new emotional communication forms and habits" (50). They note that when creators are intent on evoking empathy, the impartiality and objectivity that are prerequisites for nonfiction works might be compromised, and thus VR risks becoming "a form of audience manipulation" (75). Such ethical considerations are even more important in view of the nature of the VR medium and its claims to realism. Any VR narrative is constructed with a certain intention; the choices involved in VR storytelling, especially regarding the selection of the represented elements, the ideological values conveyed and the interests that inform the representation are critical, so that the emotional impact of VR is not misused or exploited. Steve F. Anderson also expresses concerns about the fact that nonfiction VR is overly invested in affective experience, particularly when it pertains to issues of social justice or environmental advocacy. Concentrating on VR documentary, he states that in their majority such works "rel[y] on subjective experiences of intensity and immediacy, in many cases, making an appeal directly to the body through emotion and affect rather than intellect or reason" (356). The rhetoric around VR's empathetic capabilities was dominant during the 2010s and has been instrumental in defining the character of nonfiction VR and its claims to informing pro-social attitudes, which in Anderson's view are orchestrated by technology corporations and the VR market, as a way to legitimize and promote the technology

¹¹ Pia Spangenberg et al. conducted an experimental study using the *Tree* VR project as stimulus material. The study "compared the effects of the viewing condition (iVR or desktop) while embodying a tree on nature relatedness, perspective-taking and . . . perceived immersion." Their results show that the perceived feeling of immersion and not the viewing condition is a critical factor, therefore "immersive VR technology itself does not automatically lead to higher nature relatedness." However, the qualitative data demonstrate that embodying a non-human life form can "evoke reflective processes on a more universal level, relating to the distant biosphere of the Amazon rainforest and nature as a whole." They suggest that "[f]urther research is needed to explore the optimal duration and design of similar applications in order to provoke self-reflective processes and ultimately, nature relatedness" (e.g., the role of sensory stimuli, levels of possible interaction, additional points of view), while the long-term effects of such experiences should be a focal point in future studies.

(357). The VR industry indeed operates within a capitalist socioeconomic system and its development is enmeshed in media politics, business strategies and profit imperatives that can influence the future directions of VR and the type of content that is produced. The arguments briefly outlined above are certainly valid and merit careful consideration; further theoretical and critical engagement is required to assess the potentialities and limitations of VR, especially when it comes to projects focusing on sensitive topics.

The VR medium may be capable of generating reflection and new perspectives, nonetheless, overemphasizing its potential for creating empathy or even regarding it as a vector for social change is problematic (Jones 86, 89); a VR experience can be convincing or emotionally resonant, but this will not necessarily translate into an altered mindset or meaningful action, and nonfiction VR need not be defined by empathy, with its sole focus being to elicit an “appropriate” emotional response on the user’s part. It should be acknowledged, though, that the discussion around the concept brought attention to VR and creators were given the opportunity to experiment with the medium, as evidenced by the majority of the VR projects produced in the last decade that are nonfiction and deal with critical social issues. Changing attitudes and environmental beliefs is a daunting task and the opportunities VR opens up go hand in hand with substantial challenges. Pérez-Seijo et al. suggest that scholarly inquiry needs to investigate through a more humanistic-driven analytical lens, “the links between emotion, intelligence, and action at the crossroads of tech mediality and the dichotomy attention/intention” (71), as this might offer important insights that will inform future projects. The selected case studies are digital artifacts that engage the users aesthetically, emotionally and intellectually; their examination within a framework of humanistic inquiry approaches environmental concerns primarily as social and human questions, in an attempt to offer a balanced perspective that illuminates not only the VR medium’s strengths but also the risks its use entails. This approach aligns with the themes of the present volume and its emphasis on the critical role of the humanities in capturing the Anthropocene and fostering understanding of climate change and its implications.

Both *The Atomic Tree* and *Tree* offer imaginative ways of experiencing remote realities and illuminate the new takes on space that VR allows to emerge, while also affording vantage points that reveal the beauty and fragility of the natural world.

Elizabeth Cowie observes that documentary film aligns the spectator's scopophilic and epistemophilic drives, namely "a curiosity to know satisfied through sight . . . What is involved is the wish to see what cannot normally be seen, that is, what is normally veiled or hidden from sight." This wish is evoked in the VR projects under analysis, which leverage VR's affordances so that a broader audience is exposed to novel stimuli and to aspects of the natural world that would otherwise remain invisible or inaccessible. It is suggested that the subjective spatial constructions VR technologies forge, enable alternative readings of the web of relations that shape one's perception of the real-world space(s) each VR project captures or recreates. Users are hopefully empowered to see past the technology and gain a fresh outlook on the intricate ways in which they are interconnected with the environment. In this respect, by (re)acquainting people with the hidden workings of complex ecosystems that are essential to their survival, VR might possibly encourage them to become more attentive to the natural world and perceive climate change as a process in which human and non-human agents are entangled. Meanwhile, as spaces where environmental topics and ecological connections are presented and negotiated, the case studies analyzed here provide a framework within which creators, researchers and the public can engage in discussion and debate.

Conclusion

Through experimentation with digital spaces, narrativity is reinvented. VR technologies and immersive storytelling have played a part in disrupting older formats and bringing forth a reconfiguration of the media ecosystem, which is characterized by a hybridization of formats and narrative practices. Formed by the interplay of technological innovation and cultural expression, VR is a representational medium with the potential, albeit one yet not fully exploited, for meaningful stories that can shed light on the limit points of today's world. This article proposes the relevance of the experiential dimension provided by the VR format and the employment of its narrative and visual resources to dismantle anthropocentric views of human-nature separability and prompt reflection on environmental issues. That being said, it would be more productive to regard VR not as a revolutionary medium but as one of the latest additions to a series of analog and digital media, with its own distinct affordances and creative possibilities. As Janet Murray

perceptively observes, “[i]f we want to encourage VR practices that serve humane and ethical purposes, it is important that our analytical discourse be anchored in the very real perils and challenges of the human lifeworld” (25), instead of investing the technology with overly ambitious expectations of transformative effects.

Although VR can be accessed by a wider and more mainstream audience, its use is still rather marginal on a global scale.¹² Now that the early experimentation phase of the 2010s is over and the novelty of the technology wears off, “a gradual standardization [of the VR format] within a framework of innovation and change” (López-García and García-Orosa 11) is evident and at this stage the accessibility of the technology is an important consideration. Pérez-Seijo et al. contend that “the ability to experience places and events with our own eyes and ears . . . can transcend language and culture barriers, and can even have a democratising effect, as long as the tools are accessible” (71). VR technology needs to be affordable and available to different individuals and communities, not an exclusive technology for the few, especially given the uneven access to VR equipment and the existing digital divide worldwide;¹³ this involves not only addressing the obstacles inhibiting mainstream adoption but also reducing the barriers to entry for creative professionals, regardless of race, gender and ethnicity, for instance. This way, space will be created for diverse voices and perspectives, and more inclusive projects that portray a range of backgrounds and experiences.

The selected VR projects highlight the importance of digitally mediated creative expression for the construction of meaning in present-day culture and the insights that the humanities can offer at a time of accelerated environmental change. Bladow and Ladino

¹² As stated on the *Statista* website, “[t]echnological advancements and declining costs of hardware are making AR & VR more accessible to a wider range of customers . . . businesses and individuals are increasingly turning to these technologies” (“AR & VR – Worldwide”). At present, more than 171 million people around the world use VR and in the United States alone there is an estimate of 77 million users of the specific technology. Between 2020 and 2023 the number of VR hardware users (mainly VR headsets) worldwide grew from 30 million to 97.7 million and by 2027 the number is anticipated to exceed 130 million (Kumar). However, the digital divide is a reality on a global scale, with 3.7 billion people still not having access to an internet connection; the majority of those live in developing regions of the world, especially in rural and remote areas, and factors such as income disparity, racial inequality and gender bias are closely intertwined with this complex issue (Barry).

¹³ Markowitz and Bailenson highlight the importance of VR experiences that are “public, free, [and] scalable across platforms” (63). In their view, “immersive, desktop, and mobile VR can deliver meaningful climate change content and test how people think, feel, and respond to the issues” (63), a point worth considering given that the majority of 360-degree VR is experienced via web browsers or mobile applications.

contend that environmental humanities scholars should find “more compelling ways to foreground connections between environmental and social justice,” suggesting that “[p]erhaps looking for micro-moments of affective intersection and building from them may be one small way forward” in the current sociopolitical climate (3). Micro-moments like the ones audiences can experience through *The Atomic Tree* and *Tree* VR projects might open a path toward more nuanced notions of the Anthropocene, showcasing the diverse ways in which the dramatic shifts motivated by the unfolding climate crisis can be approached and understood.

Works Cited

- Anderson, Steve F. “New (Old) Ontologies of Documentary.” *Reclaiming Popular Documentary*, edited by Christie Milliken and Steve F. Anderson, Indiana UP, 2021, pp. 356-370.
- “AR & VR – Worldwide.” *Statista*, www.statista.com/outlook/amo/ar-vr/worldwide. Accessed 23 July 2025.
- The Atomic Tree*. Directed by Adam Loftin and Emmanuel Vaughan-Lee, GoProjectFilms, 2019.
- Bailenson, Jeremy N. *Experience on Demand: What Virtual Reality Is, How It Works, and What It Can Do*. W.W. Norton & Company, 2018.
- Barry, Joe. “Bridging the Digital Divide: The Challenge.” *Analog Devices*, 3 Oct. 2022, www.analog.com/en/signals/articles/bridging-the-digital-divide-challenge.html. Accessed 23 July 2025.
- Benardello, Karen. “SXSW 2019 Interview: Emmanuel Vaughan-Lee and Adam Loftin Talk *The Atomic Tree* (Exclusive).” *Shock Ya*, 2 Jun. 2019, www.shockya.com/news/2019/06/02/sxsw-2019-interview-emmanuel-vaughan-lee-adam-loftin-the-atomic-tree-exclusive/. Accessed 23 July 2025.
- Bladow, Kyle, and Jennifer Ladino, editors. *Affective Ecocriticism: Emotion, Embodiment, Environment*. U of Nebraska P, 2018.
- . “Toward an Affective Ecocriticism: Placing Feeling in the Anthropocene.” *Affective Ecocriticism: Emotion, Embodiment, Environment*, edited by Kyle Bladow and Jennifer Ladino, U of Nebraska P, 2018, pp. 1-22.
- Collisions*. Directed by Lynette Wallworth, produced by Nicole Newnham, 2016.
- Cowie, Elizabeth. “The Spectacle of Reality and Documentary Film.” *DocBox*, no. 10, 30 June 1997, www.yidff.jp/docbox/10/box10-1-e.html. Accessed 23 July 2025.
- Doyle, Patrick, et al. *Viewing the Future? Virtual Reality in Journalism*. Knight Foundation, Mar. 2016, kf-site-production.s3.amazonaws.com/publications/pdfs/000/000/182/original/VR_report_web.pdf. Accessed 23 July 2025.

- Farrell, Paige. "HTC VIVE and New Reality Launch "Tree" on VIVEPORT to Fight Deforestation and Climate Change." *VIVE Blog*, 24 Jan. 2019, blog.vive.com/us/htc-vive-new-reality-launch-tree-viveport-fight-deforestation-climate-change/. Accessed 23 July 2025.
- García-Orosa, Berta, et al., editors. *Emerging Practices in the Age of Automated Digital Journalism: Models, Languages and Storytelling*. Routledge, 2023.
- Gayet, Mathieu. "'Experiencing the Trees Memories' – Emmanuel Vaughan-Lee & Adam Lofton (THE ATOMIC TREE)." *XRMust*, 6 Mar. 2019, xrmust.com/xrmagazine/interview-the-atomic-tree/. Accessed 23 July 2025.
- Gondwana*. Directed by Ben Joseph Andrews, produced by Emma Roberts, 2022.
- Hamilton, Kathryn. "Voyeur Reality." *The New Inquiry*, 23 Feb. 2017, thenewinquiry.com/voyeur-reality/. Accessed 23 July 2025.
- Haskell, David George. *The Songs of Trees: Stories from Nature's Great Connectors*. Viking Penguin, 2017.
- Hassan, Robert. "Digitality, Virtual Reality and the 'Empathy Machine.'" *Digital Journalism*, vol. 8, no. 2, 2020, pp. 195-212. *Taylor & Francis Online*, <https://doi.org/10.1080/21670811.2018.1517604>. Accessed 23 July 2025.
- Jones, Sarah. "It's Not Just About Empathy: Going Beyond the Empathy Machine in Immersive Journalism." *Immersive Journalism as Storytelling: Ethics, Production, and Design*, edited by Uskali et al., Routledge, 2021, pp. 82-95.
- Koenitz, Hartmut, et al. "Introduction: Perspectives on Interactive Digital Narrative." *Interactive Digital Narrative: History, Theory and Practice*, edited by Hartmut Koenitz, Gabriele Ferri, Mads Haahr, Diğdem Sezen and Tonguç Ibrahim Sezen, Routledge, 2015, pp. 1-8.
- Kumar, Naveen. "Virtual Reality Statistics 2025: Users Data (Updated)." *Demandsage*, 27 Nov. 2024, www.demandsage.com/virtual-reality-statistics/. Accessed 23 July 2025.
- Laws, Ana Luisa Sánchez. "Can Immersive Journalism Enhance Empathy?" *Digital Journalism*, vol. 8, no. 2, 2020, pp. 213-228. *Taylor & Francis Online*, <https://doi.org/10.1080/21670811.2017.1389286>. Accessed 23 July 2025.
- Liu, Xin, and Yedan Qian. "If You Were a Tree." *MIT Media Lab*, 13 June 2017, www.media.mit.edu/posts/tree-treesense/. Accessed 23 July 2025.
- López-García, Xosé, and Berta García-Orosa. "Digital Journalism: From Reinvention to Constant Innovation." *Emerging Practices in the Age of Automated Digital Journalism: Models, Languages, and Storytelling*, edited by Berta García-Orosa et al., Routledge 2022, pp. 8-18.
- Markowitz, David M., and Jeremy N. Bailenson. "Virtual Reality and the Psychology of Climate Change." *Current Opinion in Psychology*, vol. 42, 2021, pp. 60–65. *ScienceDirect*, <https://doi.org/10.1016/j.copsyc.2021.03.009>. Accessed 23 July 2025.

- Mufson, Beckett. "The Future of Virtual Reality Smells Like Dirt." *VICE*, 27 Apr. 2017, www.vice.com/en/article/the-future-of-virtual-reality-smells-like-dirt/. Accessed 23 July 2025.
- Murray, Janet H. "Virtual/Reality: How to Tell the Difference." *Journal of Visual Culture*, vol. 19, no. 1, 20 Apr. 2020, pp. 11-27. *Sage Journals*, <https://doi.org/10.1177/1470412920906253>. Accessed 23 July 2025.
- "Museum Collections." *National Bonsai Foundation*, www.bonsai-nbf.org/collections. Accessed 23 July 2025.
- Ng, Lester. "I Was a Kapok Tree for a Few Minutes and This Is What I Learnt at the Tree VR Experience, Gardens by the Bay." *Little Day Out*, 18 Nov. 2019, www.littledayout.com/i-was-a-kapok-tree-for-a-few-minutes-and-this-is-what-i-learnt-at-the-tree-vr-experience-gardens-by-the-bay/. Accessed 23 July 2025.
- Nielsen, Søren Lund, and Penelope Sheets. "Virtual Hype Meets Reality: Users' Perception of Immersive Journalism." *Journalism*, vol. 22, no. 10, Oct. 2021, pp. 2637-2653. *Sage Journals*, <https://doi.org/10.1177/1464884919869399>. Accessed 23 July 2025.
- Oil in Our Creeks*. Directed by Zahra Rasool, co-produced by Zahra Rasool, Uzodinma Iweala and Contrast VR/AI Jazeera English (AJE), 2018.
- Pérez-Seijo, Sara, et al. "Immersed in the News. How VR and 360-Degree Video Have Triggered a Shift in Journalistic Storytelling." *Emerging Practices in the Age of Automated Digital Journalism: Models, Languages, and Storytelling*, edited by García-Orosa et al., Routledge, 2022, pp. 67-77.
- Pett, Emma. *Experiencing Cinema: Participatory Film Cultures, Immersive Media and the Experience Economy*. Bloomsbury Academic, 2021.
- Reid, Stephen. "VR for Impact: Inside Tree." *VIVE Blog*, 22 May 2017, blog.vive.com/us/vr-for-impact-inside-tree/. Accessed 23 July 2025.
- "Repotting the World-Famous Yamaki Pine." *National Bonsai Foundation*, 2 Apr. 2020, www.bonsai-nbf.org/blog-archive/2020/4/2/repotting-the-world-famous-yamaki-pine. Accessed 23 July 2025.
- Rowsome, Alice. "Can Virtual Reality Help Us Tackle Climate Change?" *VICE*, 10 May 2017, www.vice.com/en/article/can-virtual-reality-help-us-tackle-climate-change/. Accessed 23 July 2025.
- Ryan, Marie-Laure, et al. *Narrating Space/Spatializing Narrative: Where Narrative Theory and Geography Meet*. Ohio State UP, 2016.
- Ryan, Marie-Laure. *Narrative as Virtual Reality 2: Revisiting Immersion and Interactivity in Literature and Electronic Media*. Johns Hopkins UP, 2015.
- Schutte, Nicola S., and Emma J. Stilinović. "Facilitating Empathy through Virtual Reality." *Motivation and Emotion*, vol. 41, 16 Oct. 2017, pp. 708-712. *Springer Nature Link*, <https://doi.org/10.1007/s11031-017-9641-7>. Accessed 23 July 2025.

- Spangenberg, Pia, et al. "Becoming Nature: Effects of Embodying a Tree in Immersive Virtual Reality on Nature Relatedness." *Scientific Reports*, vol. 12, no. 1, 25 Jan. 2022. *Nature*, <https://doi.org/10.1038/s41598-022-05184-0>. Accessed 23 July 2025.
- Sundar, S. Shyam, et al. "Being There in the Midst of the Story: How Immersive Journalism Affects Our Perceptions and Cognitions." *Cyberpsychology, Behavior, and Social Networking*, vol. 20, no. 11, 2017, pp. 672–682. *Mary Ann Liebert, Inc.*, <https://doi.org/10.1089/cyber.2017.0271>. Accessed 23 July 2025.
- Sutherland, Ainsley. "The Limits of Virtual Reality: Debugging the Empathy Machine." *MIT Open Documentary Lab Docubase*, 2015, docubase.mit.edu/lab/case-studies/the-limits-of-virtual-reality-debugging-the-empathy-machine/. Accessed 23 July 2025.
- Tree*. Directed by Milica Zec and Winslow Porter, New Reality Company, 2017.
- "Tree: A VR Journey from the Perspective of a Tree." *MIT Open Documentary Lab Docubase*, 2017, docubase.mit.edu/project/tree/. Accessed 23 July 2025.
- Uricchio, William, et al. *Mapping the Intersection of Two Cultures: Interactive Documentary and Digital Journalism*. MIT Open Documentary Lab, 2015, opendoclab.mit.edu/interactivejournalism/Mapping_the_Intersection_of_Two_Cultures_Interactive_Documentary_and_Digital_Journalism.pdf. Accessed 23 July 2025.
- Uskali, Turo, et al., editors. *Immersive Journalism as Storytelling: Ethics, Production, and Design*. Routledge, 2020.
- Uskali, Turo, and Pasi Ikonen. "The Impact of Emotions in Immersive Journalism." *Immersive Journalism as Storytelling: Ethics, Production, and Design*, edited by Uskali et al., Routledge, 2021, pp. 49-59.
- Weik von Mossner, Alexa. "From Nostalgic Longing to Solastalgic Distress: A Cognitive Approach to *Love in the Anthropocene*." *Affective Ecocriticism: Emotion, Embodiment, Environment*, edited by Kyle Bladow and Jennifer Ladino, U of Nebraska P, 2018, pp. 51-69.
- Wilson, Mark. "Escape from the Horror of 2017 by Becoming a Tree." *Fast Company*, 4 Mar. 2017, www.fastcompany.com/90181318/escape-from-the-horror-of-2017-by-becoming-a-tree-2. Accessed 23 July 2025.

Environmental Degradation, Corporate Capitalism and Posthuman Ecological Futures in Paolo Bacigalupi's *The Windup Girl* (2009)

**Evripidis Karavasilis
Universitat de Barcelona**

Abstract

The present paper critically engages Paolo Bacigalupi's *The Windup Girl* (2009) and explores the interrelation of climate change, hypercapitalist mass production and the rights of non-human bodies in a post-apocalyptic world. Following planetary degradation and the rise of biotechnological food production, twenty-third-century Thailand has secured its borders to ward off calorie companies, which govern the world. The narrative circulates around Anderson Lake, a calorie man working for AgriGen, trying to uncover Bangkok's unique seedbank. There, he meets Emiko, a member of the New People, which are genetically engineered beings created to serve and sexually please corporate businessmen. Environmental crises, capitalism and posthuman subjectivities amalgamate in Bacigalupi's imaginary of a grave ecological future. The various power dynamics created by the government's new environmental and economic policies, as well as the intrusion of calorie companies in the food industry, invite readers to rethink the implications of climate change. In a future dystopia crafted by global warming and poor resource management, the world is degraded by GMOs, political turmoil and socioeconomic disequilibrium, yet Bacigalupi ingeniously presents Emiko's reclamation of identity and Earth's overall transformation. New People redefine the world and disprove humans' self-proclaimed superiority. Drawing from Rosi Braidotti's groundbreaking theory, which blurs the rigid boundaries between humans and non-humans and invites a reconsideration of posthuman subjects by adding an environmental dimension, the research paper probes into *The Windup Girl* through the lens of ecological posthumanism and investigates the posthuman condition in Bacigalupi's ecological future.

Described as “a worthy successor to William Gibson” (Grossman), Paolo Bacigalupi engages in science fiction to explore issues relating to environmental science and biotechnology. Winner of the Hugo and Nebula Awards for Best Novel as well as the John W. Campbell Memorial Award for Best Science Fiction Novel, *The Windup Girl* (2009) is a critically acclaimed biopunk narrative, which brings to the fore multiple issues of dystopian, twenty-third-century Thailand. The rise of modernity through colonialism and global capitalism during the historical period which Bacigalupi names “Expansion” has resulted in environmental and financial crises. Natural resources have been depleted and transportation of goods has been limited due to the lack of fuels, leading to “Contraction,” the following era when the story is set. In this future speculative world, AgriGen, among other calorie companies founded in the US, has expanded its financial and political power worldwide, taking control of food production by means of bioengineering natural resources. One of the novel's protagonists, Anderson Lake, is a calorie man who represents

AgriGen and infiltrates Bangkok so as to gain access to its seedbank. His search leads him to Emiko, the titular windup girl and a member of the genetically engineered New People.

Agriculture and biotechnology have been crucial topics in Bacigalupi's creative work. In two of his short stories published in the collection *Pump Six and Other Stories* (2008), "The Calorie Man" and "Yellow Card Man," the author introduces his post-Expansion world, delineates the nature of windups and establishes their perceived inferiority in the social milieu: "It is perhaps the only thing a good Buddhist and a good Muslim and even the *farang* Grahamite Christians can agree on: windups have no souls" ("Yellow Card Man" 159).¹ In a similar fashion, *The Windup Girl* depicts Emiko as a social outcast, marked by her genetic difference and forced to sexually please corporate businessmen.

Former scholarly research on Bacigalupi's novel has highlighted both the environmental ramifications of energy depletion and Emiko's unique posthuman nature. In his essay, "The Anthropocene, the Posthuman, and the Animal," Lars Schmeink thoroughly analyzes the ecological and cultural landscape that Bacigalupi envisions in his post-Expansion world. More specifically, in reference to the evolution of species in the story, he argues that "the human and the posthuman vie for the same natural niche in an overextended ecosystem, both claiming the top position of the proverbial food chain" (110). Another critical analysis of the novel, by Mis Tamanna and Shalini Attri, centers on Emiko's manufacturing as a female New Person and her subsequent abuse. Tamanna and Attri's ecofeminist critique in "Shifting Dynamics of Balance" accentuates the historical value of the story which "lies in the oppression and exploitation of women, and their subordination as domestic beings visible in the widening gap between nature and culture" (197-198). At a closer look, Bacigalupi's narrative typifies Rosi Braidotti's proposition that the conceptual dichotomy between humans and non-humans is in fact not that simple. In *The Posthuman*, Braidotti advocates that "[t]he boundaries between the categories of the natural and the cultural have been displaced and to a large extent blurred by the effects of

¹ For more information on Bacigalupi's short stories and their link to his subsequent novel, see Hageman.

scientific and technological advances” (3).² Braidotti offers a unique interpretation of ecological posthumanism and exposes the long-lasting effects of capitalism both on nature and on its human/non-human inhabitants. Viewing *The Windup Girl* through Braidotti’s theory, the current paper examines the multi-faceted power relations between the human and the posthuman, and investigates the interrelation of climate change, hypercapitalism and biotechnology in the future dystopian world.

“The raft is sinking”: Global Warming, Biotechnology and Calorie Companies

The Windup Girl depicts a world where the Earth’s temperature has irrevocably increased, with global warming turning the natural environment hostile. Images of insufferable heat predominate the text and portray the deteriorating world following energy depletion: “The sun peers over the rim of the earth, casting its blaze across Bangkok. It rushes molten over the wrecked tower bones of the old Expansion and the gold-sheathed *chedi* of the city’s temples, engulfing them in light and heat” (87).³ The sun is described as suffocating the environment in a never-ending sultriness. Bangkok, in particular, is encircled by coastal walls which prevent high water tides from inundating the city and create a “claustrophobic stink” (341). Meanwhile, Japan now lies “entirely on the water, on floating bamboo rafts . . . impervious to the floods and tides of the Chao Phraya River” (419). These images signify that the rise in temperature and sea levels has fully transformed Earth and people rely on handmade technology to forestall their extinction. As Schmeink wryly points out, Bacigalupi’s version of Earth has regressed “to a state as it was before the Anthropocene” (79). After centuries of energy exploitation and poor resource management, the Earth has reached a point of stagnation. Ironically, the world’s alleged progress through the rapid advancement of science and technology (especially since the

² The imperative that nature and culture be reunified has been stressed in scholarly work for decades. Both Bruno Latour in *We Have Never Been Modern* (1991) and Donna Haraway in *The Companion Species Manifesto* (2003) speak of “naturecultures” to reject previous dichotomies and propose instead a more collective approach to how our world and (non-)human societies have developed. Over twenty years prior to Braidotti’s seminal text, French psychoanalyst Félix Guattari in *The Three Ecologies* (1989) also maintained that “[n]ow more than ever, nature cannot be separated from culture; in order to comprehend the interactions between ecosystems, the mechanosphere and the social and individual Universes of reference, we must learn to think ‘transversally’” (43). In alignment with Guattari’s theory, Braidotti emphatically rejects conceptual dualisms regarding nature and culture and further adds the feminist and posthuman lenses to explore the ecological implications of biotechnology.

³ Unless otherwise stated, all references will be from this novel.

mid-twentieth century), has turned full circle and has drawn humans back to outdated means of survival. In this regard, ecocriticism has accentuated the connection “between the humanistic emphasis on Man as the measure of all things and the domination and exploitation of nature,” while it has also “condemn[ed] the abuses of science and technology” (Braidotti 48). Climate change and the misuse of natural resources by human activity have made Earth an inhospitable environment for humans and non-humans alike.⁴ Global warming affects New People the most: “[h]eat swallows [Emiko]” (Bacigalupi 58), as the narrator observes. A major drawback in Emiko’s construction is her lack of skin pores, which prevents her body from self-regulating its temperature, and so in Bangkok’s scorching atmosphere, “she is subject to overheating” (425). At this point, Bacigalupi skillfully blends bioengineering with climate change, substantiating “the deep interconnection with nature and the posthuman subjectivity at play” (Schmeink 86).

Genetically Modified Organisms (GMOs) have substituted natural resources in Bacigalupi’s fictional world and are now consumed to cover basic necessities. Calorie companies cultivate seeds that cannot be reproduced and governments have no alternative but to purchase gene-hacked, sterile ones. Gibbons, a former AgriGen scientist, marvels at biotechnological advancements and goes on to argue that “[n]ature has become something new. It is ours now, truly” (Bacigalupi 350). Even amidst environmental crises, humans resort to exploitative tactics and continue to manipulate natural resources. The human application of biotechnology justifies Braidotti’s categorization of the particular branch of science among “the four horsemen of the posthuman apocalypse”—the other three being nanotechnology, information technology, and cognitive science—since biotechnology reinforces “[t]he bio-genetic structure of contemporary capitalism” (59). Planetary degradation and biotechnological food production have paved the way for calorie companies like AgriGen to control the flow of foodstuff across the globe. With the increased privatization of the food industry, calories function as a new form of currency. In this context, “[t]he human body is reduced to weight and calories – no more than a

⁴ The consequences of human activity on both humans and nature demonstrate James Lovelock’s “Gaia Theory,” which rejects conventional approaches to species evolution as adapting to Earth’s atmosphere and advocates instead the interconnection of all living and non-living beings. In Lovelock’s words: “Life does not regulate or make the Earth comfortable for itself. I now think that regulation, at a state for life, is a property of the whole evolving system of life, air, ocean, and rocks” (144).

commodity available in superfluous amounts” (Schmeink 82). On the brink of Earth’s demise, consumerist culture and accumulation of wealth drive the genetic modification of produce. Scott Selisker draws attention to the multi-faceted effects of GMOs, most pertinently in terms of politics, as governments in Bacigalupi’s story are at the mercy of profit-driven corporations, newly found diseases and genetically engineered plant genomes (506). Kanya, a representative of the Environment Ministry in Thailand, comments: “We are not fighting the rising waters. We are fighting money” (Bacigalupi 244), clearly stating that everything amounts to the global market and the calorie companies’ profiteering. In fact, the “hypercapitalist greed” dominating the market has transformed “the political landscape in most parts of the world into a ‘corpocracy’” (Schmeink 78). The link between ecological destruction and hypercapitalism has previously been drawn by Donna J. Haraway in her seminal essay *A Cyborg Manifesto*, where she notes that “the appropriation of nature as resource for the productions of culture” has re-shaped the contemporary world and facilitated the rise of patriarchal capitalism (7). Throughout Bacigalupi’s narrative, Western politics, science, and biotechnology command food production and calorie distribution in order to assert control over a gradually disintegrating Earth and a decaying food economy. With planetary resources depleted, calories have substituted monetary economy and drive the world market, while corporations continue to enforce hypercapitalist and consumerist ideologies.

The only standing force against the domination of bioengineering and calorie companies is the Thai Kingdom, which secretly stores and preserves unhacked, natural, seeds. The Thai seedbank⁵ is regarded as “a treasure trove of biological diversity” (Bacigalupi 125), a means of survival and resistance, which is why Lake strives to uncover it. At the very beginning of the novel, he navigates a Bangkok street market where he discovers the *ngaw*, a fruit thought extinct, and is instantly bewildered:

Sun pours down. Shoppers jostle and bargain, but nothing touches him. He rolls the *ngaw* around in his mouth, eyes closed, tasting the past, savoring the time when this fruit must once have flourished, before cibiscosis and genehack weevil and blister rust and scabis mold razed the landscape.

⁵ A year prior to the publication of *The Windup Girl*, the Svalbard Global Seed Vault was established in Norway. Also known as “Doomsday Vault,” the seedbank is “a reserve of seeds for use in case of an apocalyptic event or a global catastrophe” (Duggan). The existence of such a repository brings Bacigalupi’s fictional future dystopia closer to present reality.

Under the hammer heat of tropic sun, surrounded by the groan of water buffalo and the cry of dying chickens, he is the one with paradise. (3)

Locating the long-forgotten fruit somehow disorients Lake and transports him back to a pre-Expansion era. The *ngaw* serves as “a beacon of aesthetic pleasure and rebirth in the otherwise bleak and barren future” that unfolds in Bacigalupi’s world (Selisker 500). As the narrator puts it, Lake “has found a resurrection” (Bacigalupi 4)—that is, the revival of a world before climate change, gene-hacked produce and capital-driven biotechnology. Bangkok (also known as “the City of Divine Beings”) defies the new economic authority of calorie companies and keeps natural resources unbesmirched by genetic modification. Although countries like India and Vietnam, have fallen victims to AgriGen’s influence, Thailand has secured traditional seed cultivation thanks to the Environment Ministry’s closing its borders. Mengtian Sun supports that Thailand has achieved independence via a nationalistic regime that prevents anything “unnatural” (such as GMOs and windups) from entering the country (292). Throughout global history, national borders have forever been sites of political turmoil and have reinforced nationalistic sentiments. Humans (and non-humans alike) cannot freely move from one nation-state to another, while the right to relocation has historically been distributed unequally among different races and ethnicities. In Bacigalupi’s narrative, borders acquire an additional, ecological connotation, as it is natural products, like the *ngaw*, which cannot legally transcend them.

“She was only ever a windup”: Human Exceptionalism and Species-ism against Posthuman Subjects

In “The Climate of History,” Indian historian Dipesh Chakrabarty affirms that “[c]limate change, refracted through global capital . . . accentuate[s] the logic of inequality” (221). In other words, environmental degradation and the rise of capitalism allows for new forms of prejudice and discrepancy to emerge. Bacigalupi’s choice of situating these new inequalities in a speculative world by no means dilutes their potentiality; as Haraway reminds us, “the boundary between science fiction and social reality is an optical illusion” (*A Cyborg Manifesto* 6). Posthuman subjects, initially conceived as figments of imagination, now share and shape our lived experiences. Evidently, New People are among the most disadvantaged beings in *The Windup Girl*, as they are genetically programed to satisfy human needs. Originally from Japan, they work with diligence and dedication,

attributes which are embedded in Japanese culture. In fact, they are engineered to “value discipline. Order. Obedience” (425). As Keith M. Booker indicates, the New People’s subservient nature makes them the optimal workers in the capitalistic machine since, by their very nature, they carry out tasks most competently and at a minimal cost (280). Biotechnology has thus allowed the construction and exploitation of New People to appease human greed. Their victimization underlies their very existence: The New People’s “duty was to serve, their honor was to serve, and their reward would come in the next life, when they became fully human. Service would yield the greatest rewards” (221). As follows, the New People’s subordination extends their mere functionality—performing tasks undesirable yet beneficial to humans—and is attributed to their non-humanness.⁶ Humanity is even promised as a reward for their servitude. This form of degradation exemplifies what Braidotti terms “species-ism,” meaning “the anthropocentric arrogance of Man as the dominant species whose sense of entitlement includes access to the body of all others” (76). Humans readily employ biology to justify their superiority over other, non-human, bodies. Along these lines, New People are considered genetically inferior solely because they are not human themselves but constructed by humans. In reality, as Hageman points out, the windups “[undermine] the ontological stability of ‘human beings’ in the novel” (293). The intolerance toward posthuman subjectivity lies in the New People nullifying human superiority by disputing the boundaries between humans and non-humans. In Braidotti’s words: “The post-anthropocentric turn, linked to the compounded impacts of globalization and of technology-driven forms of mediation, strikes the human at his/her heart and shifts the parameters that used to define *anthropos*” (57). Braidotti conjoins science and politics with ecology in a unique fashion that amends the human/non-human division and brings environmental post-anthropocentrism to the forefront. Questioning the excessive emphasis on the human subject, brought about by the Age of Enlightenment, the posthuman condition re-evaluates the criteria of who counts as “human” and rearranges the taxonomy of the species.

⁶ In reference to the windups’ un-naturality, it is important to note Braidotti’s perception of “advanced capitalism” as “a spinning machine that actively produces differences for the sake of commodification” (58). Windups are excluded as different from humans so that they can be manipulated more easily. In the process, their commodification serves the capitalist need for labor.

Throughout the narrative, readers are time and again reminded of Emiko's genetic difference, that is, her non-humanness. As the narrator informs us, Emiko has been sold to Raleigh, a sex club owner in Bangkok, by a Japanese businessman because it was "more economical" (Bacigalupi 163) for him than taking her back to Japan. Emiko is conspicuously treated as a product, validating that "[t]he genetic code of living matter . . . [has become] the main capital" (Braidotti 7). Most distinctive in the design of windups, however, is the way they move. Emiko is described as "a silly marionette creature" performing "herky-jerky *heechee-keechee*" movements (Bacigalupi 54), which make her immediately recognizable and constantly belittled. She is also portrayed as "[a]n illegal piece of genetic trash" (186), a characterization alluding both to Emiko's genetic inferiority and to windups' being refused entry to Thailand. Simply put, Emiko embodies the "Other" in Bangkok. Braidotti defines otherness as the polar opposite to sensibility and worldwide accepted morality, which for certain individuals entails essentialism and physical vulnerability: "These are the sexualized, racialized, and naturalized others, who are reduced to the less than human status of disposable bodies. We are all humans, but some of us are just more mortal than others" (15). In accordance with this definition of otherness, Emiko is excluded by the Thai society on account of her genetic construction and is susceptible to violence and exploitation. This is why she dreams of escaping to a place in the North where other windups reside in peace and where she can belong. Upon hearing of this place, Emiko finds "a sudden urge to live" (Bacigalupi 67). As Tamanna and Attri note, Emiko yearns to move to the North firstly because the climate there is cooler, exemplifying that "women dream of utopia for themselves as well as the environment" (194). Apart from ecological awareness, posthuman identity is founded upon "a strong sense of collectivity, relationality and hence community building" (Braidotti 49). Emiko seeks to live far from Bangkok's suffocating heat and relocate to a healthier environment, closer to nature. In this utopian Northern setting, she can also reunite with her own kind, who would not treat her as a victim of genetic construction, but as an equal. However, when she discovers that this place does not exist, Emiko loses all hope of fleeing her entrapment. In the end, human exploitation and the outcomes of climate change are inevitable for windups, who are not given the fundamental right to claim their own subjectivity.

In Raleigh's sex club, Emiko falls victim to capitalist greed, sexual abuse and public humiliation. Her genetic programming to be sexually pleasing does not only pertain to her obedient and enticing temperament but also to her very physicality. Emiko "is manufactured to have porcelain skin and reduced pores" (Bacigalupi 425) so that she is smoother to touch and hence more seductive. Even though her construction renders her vulnerable to Bangkok's extreme heat, her overt sexualization constitutes an existential purpose that exceeds any potential consequences on the self, body and psyche. Indeed, Haraway posits that biotechnology has rebuilt women's bodies and with them, has reinforced their social realities (*A Cyborg Manifesto* 33). The visitors at the club who sexualize Emiko are "corporate men . . . high on fantasies of multinational profiteering – the ways of the old world" (Bacigalupi 52-53). Even in the post-Expansion era, corporate-driven businessmen hold the authority and abuse female figures, be it human or posthuman. Further probing into the gender attributes of windup girls, one might wonder: "Why not make genetically modified men?" (Tamanna and Attri 196). Tamanna and Attri raise a rhetorical enquiry here, with the intention to demonstrate the perseverance of patriarchy and exploitation of women in Bacigalupi's future dystopia. As a matter of fact, "it would be misguided to assume that posthuman embodied subjects are beyond sexual or racialized difference" (Braidotti 97-98). Apart from sexualizing Emiko, Raleigh threatens to fire her when she refuses to cooperate, saying that "[he's] got plenty of natural girls offering natural sex" (Bacigalupi 229). This treatment not only reaffirms her biological inferiority but also promotes human sex workers as more desirable. Consequently, multiple forms of discrimination, including capitalism, sexism and species-ism, intersect and operate simultaneously in the environment of the sex club.⁷

As regards Emiko's performances, she is humiliated both by the male customers and the rest of the female sex workers. One of them, named Kannika, tortures her on stage while businessmen entertain themselves witnessing her abuse:

The men cheer at Emiko's degradation, encouraging escalation and Kannika, flushed with excitement, begins to devise new tortures. She squats over Emiko. Parts the cheeks of her ass and encourages Emiko to plumb her depths. The men laugh as Emiko obeys . . . Hands on Emiko's thighs, pushing them apart so that she

⁷ In her critique of anthropocentrism, Braidotti also draws a link among "the greenhouse effect, the status of women, racism and xenophobia and frantic consumerism" (93).

is completely exposed. Fingers play at her folds, penetrate her. Kannika laughs. ‘You want to fuck her? Fuck the windup girl?’ (Bacigalupi 363)

Bacigalupi’s graphic language encapsulates Emiko’s abuse and utter humiliation. Exposed to public display, Emiko is treated as a sex object, while Kannika and the men fetishize her bioengineered instinct to obey. As Kannika “pries Emiko’s legs wide,” instructing her to “[b]e a good little *heechy-keechy*” (363), her unique movements turn into an “object of a power play” (Schmeink 98). By definition, objectification diminishes the quality of being human since it “reduces humans to the status of manufactured and hence profit-driven technologically mediated objects” (Braidotti 106). In dialogue with Braidotti’s argument on the political aspects of posthumanism, biological and social differences have historically been employed to undermine the Other: “to be ‘different from’ came to mean to be ‘less than’” (28). The hierarchy that is inherent in categorization deems non-humans, such as windups, as lesser, disposable beings. Emiko is not awarded any human identification in the first place and, as such, is commodified as a sex object. By extension, as Schmeink points out, Emiko’s public degradation offers a safe “distance from the threats that her ontological status represents, but also from the socio-economic reality of inferiority” (98-99). In social terms, owing a windup denotes accumulation of property, higher status and thus power and respect. But since not everyone can afford to possess a girl like Emiko, the clients at the sex club restore socioeconomic balance by ridiculing her.

“She is the only person living”: Bangkok’s Collapse and the Survival of New People

Unexpectedly, the novel’s epilogue seems to reverse the hitherto unyielding power relations. GMO-inflicted diseases penetrate Bangkok, annihilating most residents (Lake among them) and bringing AgriGen’s operation in Thailand to an end. In line with Guattari’s theory, the Earth’s “techno-scientific transformations” engender an “ecological disequilibrium” which in turn “threaten[s] the continuation of life on the planet’s surface” (27). Greed, as it manifests itself throughout centuries of exploitation of nature, leads humans to demise. The coastal walls collapse and the City of Divine Beings is inundated in six days. In the meantime, “Emiko watches from the balcony of the finest apartment tower in Bangkok as water rushes in” (Bacigalupi 500); standing at the highest point in the city symbolizes her reaching the tip of the power pyramid in the post-Expansion world. In relation to climate change and newly emerging forms of inequality, Chakrabarty points out

that “some people will no doubt gain *temporarily* at the expense of others” (221; my emphasis). The merely ephemeral benefits of businessmen soon wane and the former victim, Emiko, replaces their position in the social hierarchy. As she witnesses her tormentors perish by inundation and disease, she also reclaims her right to her own subjectivity and negates her bioengineered subservience. Eric C. Otto claims that imagining such bleak future realities has the potential to instigate constructive transformations in the present world (180). Bacigalupi criticizes human exceptionalism and promotes instead an ecological awareness to prevent his dystopia from becoming a reality. By the end of the narrative, windups not only appear to be more caring about the environment, but also more adept to survive the ecological crisis. In many respects, they are more “humanistic” and more capable than humans, illustrating Haraway’s statement that “machines are disturbingly lively, and we ourselves frighteningly inert” (*A Cyborg Manifesto* 11). The human mind and intelligence are hence dethroned by the posthuman presence. Most importantly, Emiko seems to be the sole survivor of the ecological disaster. In the new Bangkok environment, she can lead a better life as the temperatures drop and she is no longer prone to overheating. By portraying a reversal in Emiko’s maltreatment, “Bacigalupi stresses the posthuman potential for change and a radical new subjectivity” (Schmeink 113). Gazing at Bangkok from the top of the tallest building, Emiko realizes that “[i]f it is not the place for New People that she once imagined, it is still a niche” (Bacigalupi 501). In other words, Emiko actualizes Raleigh’s promise of a utopian place for windups in the now flooded city, ensuring her survival and belonging as well as solidifying her posthuman subjectivity.

Bacigalupi veers away from the dystopian narratives of destruction commonly associated with climate change fiction and unveils a possibility for Earth’s recovery. Emiko soon meets another survivor of the ecological disaster, AgriGen’s scientist Gibbons. Notably, he is the only character in the novel who does not treat windups as inferior, but in fact stresses their capability to envisage a world devoid of human greed, ecological degradation and capitalist power structures. As Booker asserts, “Gibbons envisions the New Humans as leading the way toward a utopian, posthuman, postcapitalist future” (283). He thus assigns himself a Frankenstein-esque role of updating windups so that they are able to reproduce. The novel ends with Gibbons solemnly reassuring Emiko that “[he] can

do that for [her], and much, much more” (Bacigalupi 505). In contrast to the utilization of windups for sexual satisfaction, Gibbons intends to grant them the ability to reproduce and thus reverts their abuse. What is implied in his pledge is the possibility of Emiko (and the rest of her kind) becoming “part of the natural world” (505). By altering her genetic material, Gibbons also “promises to transform the biological makeup of the planet as a whole” (Selisker 514). Contemplating such a fundamental reshaping of Earth “in the context of the acceleration of techno-scientific mutations,” Guattari also contests the very forms of existing that the future holds (28). As Gibbons is willing to construct “a truly posthuman future,” he also leaves the possibility of “the eventual replacement of the human” (Schmeink 115). Bacigalupi thus closes the novel with a cryptic and yet promising twist that posthuman subjectivity will readjust life on Earth, inviting readers to contemplate posthuman potentialities.

The plethora of topics and manifold dimensions that intersect in *The Windup Girl* can be summarized in “the form of a search, a search for the human subject lost in the world of capitalism with nature as the background” (Tamanna and Attri 184). Bacigalupi bridges a number of issues degrading the future world, from environmental to sociopolitical, from natural to cultural, from human to posthuman, all of which amalgamate in Emiko’s character and life story. His future visualization of Bangkok is not immaterial to the contemporary world; rather, it constitutes a critique of present-day reality that urges readers to re-evaluate their understanding of climate change, GMOs and the capitalist market via a dystopian glimpse into the twenty-third century. Contrary to the questionable advances of technology, bioengineering and science, the novel’s epilogue allows for an optimistic, possibly utopian version of the world, where posthuman subjects can find belonging and avert an imminent apocalypse.

Works Cited

- Bacigalupi, Paolo. *The Windup Girl*. Orbit, 2009.
- . “The Calorie Man.” *Pump Six and Other Stories*. Night Shade, 2008, pp. 86-112.
- . “Yellow Card Man.” *Pump Six and Other Stories*. Night Shade, 2008, pp. 150-181.
- Booker, M. Keith. “A New Expansion: Climate Change, Posthumanism, and the Utopian Dimension in Paolo Bacigalupi’s *The Windup Girl*.” *Utopian Studies*, vol. 34 no.

- 2, 2023, pp. 273-287. *Project MUSE*, www.muse.jhu.edu/article/916237. Accessed 23 July 2025.
- Braidotti, Rosi. *The Posthuman*. Polity, 2013.
- Chakrabarty, Dipesh. "The Climate of History: Four Theses." *Critical Inquiry*, vol. 35, no. 2, 2009, pp. 197-222. *JSTOR*, <https://doi.org/10.1086/596640>. Accessed 23 July 2025.
- Duggan, Jennifer. "Inside the 'Doomsday' Vault." *Time*, 26 Feb. 2017, www.time.com/doomsday-vault/. Accessed 23 July 2025.
- Grossman, Lev. "The Windup Girl by Paolo Bacigalupi." *Time*, 8 Dec. 2009, https://content.time.com/time/specials/packages/article/0,28804,1945379_194386_8_1943887,00.html. Accessed 23 July 2025.
- Guattari, Félix. *The Three Ecologies*. Translated by Ian Pindar and Paul Sutton, The Athlone Press, 2000.
- Hageman, Andrew. "The Challenge of Imagining Ecological Futures: Paolo Bacigalupi's *The Windup Girl*." *Science Fiction Studies*, vol. 39, no. 2, 2012, pp. 283-303. *JSTOR*, <https://doi.org/10.5621/sciefictstud.39.2.0283>. Accessed 23 July 2025.
- Haraway, Donna J. *A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century*. U of Minnesota P, 2016.
- . *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Prickly Paradigm Press, 2003.
- Latour, Bruno. *We Have Never Been Modern*. Translated by Catherine Porter, Harvard UP, 1993.
- Lovelock, James. *Gaia: A New Look at Life on Earth*. Oxford UP, 2000.
- Otto, Eric C. "'The Rain Feels New': Ecotopian Strategies in the Short Fiction of Paolo Bacigalupi." *Green Planets: Ecology and Science Fiction*, edited by Gerry Canavan and Kim Stanley Robinson, Wesleyan UP, 2014, pp. 179-191.
- Schmeink, Lars. "The Anthropocene, the Posthuman, and the Animal." *Biopunk Dystopias: Genetic Engineering, Society and Science Fiction*, Liverpool UP, 2016, pp. 71-118. *JSTOR*, www.jstor.org/stable/j.ctt1ps33cv.6. Accessed 23 July 2025.
- Selisker, Scott. "'Stutter-Stop Flash-Bulb Strange': GMOs and the Aesthetics of Scale in Paolo Bacigalupi's *The Windup Girl*." *Science Fiction Studies*, vol. 42, no. 3, 2015, pp. 500-518. *JSTOR*, <https://doi.org/10.5621/sciefictstud.42.3.0500>. Accessed 23 July 2025.
- Sun, Mengtian. "Imagining Globalization in Paolo Bacigalupi's *The Windup Girl* and Chen Qiufan's *The Waste Tide*." *Science Fiction Studies*, vol. 46, no. 2, 2019, pp. 289-306. *JSTOR*, <https://doi.org/10.5621/sciefictstud.46.2.0289>. Accessed 23 July 2025.
- Tamanna, Mis, and Shalini Attri. "Shifting Dynamics of Balance: An Ecofeminist Critique of Paolo Bacigalupi's *The Windup Girl*." *Contemporary Literary Review India*, vol. 10, no. 1, 2023, pp. 181-201. *ProQuest*, www.proquest.com/scholarly-

[journals/shifting-dynamics-balance-ecofeminist-critique/docview/2813241741/se-2](#). Accessed 23 July 2025.

Dried Bodies, Ashen Earth: The Grotesque Corporeal Aesthetics of Environmental Catastrophe in Cormac McCarthy's The Road

**Christina Koukouli
Independent Scholar**

Abstract

This paper explores the intersection of grotesque aesthetics and environmental devastation in Cormac McCarthy's post-apocalyptic novel *The Road*. Evoking the contemporary pressing issues of environmental degradation and human induced climate change, the novel centered on a father and son's struggle for survival as they traverse a landscape of destruction and decay, scattered with decomposing human bodies and almost devoid of non-human life. By delving into the history and studies of the grotesque and specifically the grotesque body, this paper examines the ways in which the emphasis placed on the strange and gruesome corporeal imagery in the novel reflects the intricate and fragile relationship between the human body and the natural environment. Through an ecocritical lens, the grotesque body in the novel operates as a striking manifestation of ecological collapse; a metaphorical and visceral tool that mirrors the impact of ecological catastrophe on human corporeality. The paper applies Timothy Morton's theory on "dark ecology" to deepen the analysis of the grotesque by encouraging an acknowledgment of the dark and uncanny aspects of the environment such as the Anthropocene, thus emphasizing the need for coexistence with ecological realities and the disturbing impact of impending environmental catastrophes. By examining the convergence of ecological and corporeal grotesque in *The Road*, this paper presents the potency of the novel in highlighting the inextricable ties between human and non-human life.

In *The Uninhabitable Earth* (2019), David Wallace-Wells investigates the complexity of the current climate crisis while illustrating a powerful view of a bleak and, possibly, not very distant future, where human activity has transformed the earth into an unliveable planet. Commenting on the genre of climate fiction, Wallace-Wells postulates its elimination in the coming future, observing that "as climate change expands across the horizon - as it begins to seem inescapable, total - it may cease to be a story and become, instead, an all-encompassing setting" (145). Indeed, as we witness the rapid destruction of the Earth's ecosystems along with the alarming signs of climate change across the planet, and as large-scale environmental disasters seem imminent, climate fiction may eventually be rendered as a futile genre. On the other hand, however, climate fiction may offer a deeper and more nuanced understanding of the era of environmental crisis we are living in, helping us cope with the new ecological reality we are facing and highlighting the importance of our vital connections to non-human nature in a highly critical time.

Often categorized as climate fiction, a contemporary novel that adeptly portrays a dystopian future of mass environmental destruction, is Cormac McCarthy's *The Road*.

Copyright © 2025 Hellenic Association for American Studies Digital Publications (Helaasdp). This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution ShareAlike 4.0 International License (CC-BY-SA 4.0). ISBN: 978-618-85422-2-8 (e-book, pdf).

Published in 2006, *The Road* evokes the loss of the non-human world, yet it has been critically received with ambiguity, dividing critics and scholars as to whether it constitutes an anthropocentric narrative. While it has been hailed as “the most important environmental book ever written” (Stark 71) by writer and activist George Monbiot, scholars such as Hannah Stark, for instance, bring attention to the anthropocentric undertones of the story, arguing that “anthropocentrism pervades McCarthy’s text, in which humans are the only form of life that remains” (72). In addition, Adeline Johns-Putra contends that “the novel mourns the loss of human rather than nonhuman nature” (521). However, I argue that critics of *The Road* often focus on McCarthy’s portrayal of the lived experience of the human characters and their endeavor to survive in a hostile landscape, while little attention has been drawn to the grotesque aesthetics that permeate the environmentally devastated landscape that McCarthy imagines in conjunction with the recurring emphasis on the virtual absence and loss of nonhuman life. In other words, characterizing *The Road* as an anthropocentric novel pertains to a view that does not take into account that the absence of non-humans is itself a striking way to demonstrate the vital importance of ecological entanglements. *The Road* portrays a world that lacks the rich and complex network of nonhumans that constitute the natural environment and hence, while humans seem to be the only surviving beings in the story, they constantly struggle to sustain themselves in a land that is depleted of other life forms.

The critical reception of *The Road* can be seen to reflect Timothy Morton’s concern about the failure of the humanities in developing ecological values of a large scale. Exploring the ideological foundations that led to the current environmental crisis, Morton contends in *Dark Ecology* that “[h]umanistic tools for thought at Earth magnitude are lacking, and often because we have deliberately resisted fashioning them” (26). By “thought at Earth magnitude” Morton refers to a way of thinking that extends beyond anthropocentrism, transcending the limits of human perspective. It is a scale of thinking which encompasses the entirety of the Earth and its entangled ecosystems. For Morton, thought at Earth magnitude constitutes an essential part of ecological awareness as it deconstructs anthropocentric distinctions through an examination of our inextricable ties to non-human entities and compels us to embrace the uncanny ontology of all beings. The title of his book, *Dark Ecology*, is based on the term “dark ecology,” which refers to

ecological awareness, or “ecognosis” which, according to Morton, entails a persistent sense of strangeness that “doesn’t become less strange through acclimation” (5). It is a way of knowing that acknowledges the weird loops of our entangled existence, urging us to understand ourselves as a species surrounded and permeated by multitudes of other beings. “Ecognosis,” Morton writes, “involves realizing that nonhumans are installed at profound levels of the human—not just biologically and socially but in the very structure of thought and logic” (159). I contend that Morton’s philosophy in *Dark Ecology* seems to be in alignment with Stacy Alaimo’s feminist theory of transcorporeality, a notion which, as Alaimo herself has disclosed in an interview, “implies that we’re literally enmeshed with the physical world” (139). In *Bodily Natures*, Alaimo proposes transcorporeality as an alternative theoretical site which highlights the entangled materiality of our existence by emphasizing “the movement across human corporeality and nonhuman nature” (3). Alaimo argues that transcorporeal movement “necessitates rich, complex modes of analysis that travel through the entangled territories of material and discursive, natural and cultural, biological and textual” (3). By emphasizing an exploration of the transits and interactions between bodies, transcorporeality thus offers a deeper understanding of ecological interconnectedness. I argue that, in *The Road*, transcorporeal movement often appears through the grotesque imagery of human and nonhuman bodies, revealing the intricate relations between various life forms. Hence, a transcorporeal analysis of the novel can decenter the human experience and foreground the sustaining relations between humans and non-humans.

In this paper, therefore, I draw on Morton’s theory on dark ecology and, at the same time, I also incorporate a transcorporeal approach to re-examine McCarthy’s *The Road* through a fusion of ecological perspectives, emphasizing the bodily and material aesthetics of the narrative. I contend that, although *The Road* is a text that can be viewed as human-centered, if read through a transcorporeal and dark ecological lens, it can highlight the vital importance of our inextricable bonds to the environment, encompassing the entirety of the non-human world. In particular, I argue that the novel’s most potent symbol of ecological interconnectedness that ties those theories together is that of the grotesque body, the presence of which is foregrounded in the narrative. Through a brief investigation of the term grotesque and an exploration of Mikail Bakhtin’s theory on grotesque corporeality, I

further argue that, imbued with ecological meaning, the grotesque body can function as a symbol representing the fragile politics of coexistence on Earth, thus in a sense becoming what Morton would describe as a “tool for thought at Earth magnitude” (*Dark Ecology* 26).

Set in a post-apocalyptic world, *The Road* follows the survival journey of two unnamed figures, namely a father and his son, as they traverse through an utterly devastated landscape that seems to be almost devoid of both human and non-human life. The author refrains from addressing the source of the destruction that seems to have left the earth in ruins and it remains unspecified throughout the story. Nonetheless, his graphic descriptions of environmental destruction seem closely pertinent to the current environmental decline and the imminent threat of a human induced climate change. For instance, according to Johns-Putra, “*The Road* may not be a climate-change novel, but it owes much of its cultural impact to climate change, at least to the anxieties that have accompanied it” (520). Though the novel does not explicitly concern itself with anthropogenic climate change, McCarthy’s descriptions seem to depict a climate-disturbed biosphere; an earth depleted of its natural resources that has become an endless wasteland of ruined ecosystems, almost empty of any life form. The emptiness of the land becomes a theme that is established from the beginning of the novel; the man gazes at the landscape which the narrator describes as “Barren, silent, godless” (McCarthy 2), realizing there is little chance of survival there. As the man and the child continue their journey through the desolate land they often observe that there is “no sign of life” almost anywhere they go (McCarthy 11). Instead, what they predominantly encounter along the road is waste, abandoned places, dead trees and dead bodies. McCarthy thus creates a bleak illustration of a landscape that has been ravaged and “propels us into our future, rendered to express our worst fears about climate change” (Stark 74). The novel, therefore, can be read as a powerful illustration of the aftermath of a human induced ecological disaster, urging us to consider our devastating impact on the environment which is not separate from, but includes humans themselves. It is a story that echoes the transcorporeal view that the environment “is not located somewhere out there, but is always the very substance of ourselves” (Alaimo 4). Furthermore, as Louise Squire points out, a notable theme in *The Road* is “its depiction of ‘the loss of the world’ that humanity has somehow engendered and the arrival of a time when the planet no longer sustains

human life” (219). The theme of loss is especially powerful and manifests itself through the narrative’s grotesque corporeality, which is often encountered throughout the story in various forms of dead bodies. As the characters walk through a deeply ravaged landscape, they often come across lifeless and decomposing human bodies along the road, which McCarthy presents in gruesome detail, describing their skin as “dried and dusty” (16) and thus foregrounding not only their presence but also their connection to the apocalyptic landscape that is itself “covered in ash and dust” (11). My contention therefore is that, through their relation to the nonhuman sphere in the narrative, these bodies are depicted as profoundly grotesque.

Due to its rich cultural history, the term *grotesque* has evolved to encompass a plethora of meanings and hence it has been widely utilized as a theoretical tool in various branches of the humanities. In *The Grotesque in Art and Literature* (1963), Wolfgang Kayser provides a detailed historical and cultural account of the grotesque while he attempts to develop a definition of the term by illuminating its complexity and evolution through the centuries. According to Kayser, the origin of the term “grotesque” derives from the Italian word for cave, “grotta,” and it was coined in order to describe a particular ornamental style found in late fifteenth century excavations primarily in Rome and also in other parts of Italy (19). The Roman murals these excavations unearthed depicted images in which “human and animal figures are intertwined with foliage in ways which violate not only the laws of statics and gravity, but common sense and plain observation as well” (Harpham 461). As a literary and art aesthetic, the grotesque later spread to other European countries and was applied to various forms of culture spanning from the decorative arts to drama and literature. But while the grotesque has evolved through the centuries, a central element has persisted throughout its multiple variations; the amalgamation of human and nonhuman components. For instance, according to Kayser, the first example of the usage of the word “grotesque” in the German language refers to ‘the monstrous fusion of human and nonhuman elements’ (24). In addition, Kayser points out that the term *grotesque* in the Renaissance was used in order to denote:

a world totally different from the familiar one—a world in which the realm of inanimate things is no longer separated from those of plants, animals, and human beings, and where the laws of statics, symmetry, and proportion are no longer valid. (21)

I contend that this early conceptualization of the grotesque seems to be in alignment with its representation in *The Road*. The novel portrays an environment in complete and utter disorder, where humanity is no longer conceptually separated from nature and the non-human realm, as the cataclysmic event that has ruined the earth has virtually destroyed human culture. In this strange new world, humans and nonhumans are tightly enlaced in the same twisted fate.

Another important aspect that scholars point out as central to the grotesque is the element of the spectator; the exaggerated strangeness of the grotesque aims to affect the spectator on a visceral level and interestingly, as Harpham remarks, “while the forms of the grotesque have changed remarkably over the centuries, the emotional complex denoted by the word has remained fairly constant” (462). Furthermore, Michael Stieg observes that, “in the true grotesque we are kept aware of the connections between the alien world and our own” (253). Likewise, in *The Road*, the reader is reminded constantly that the desolate and hostile landscape the characters traverse was once a liveable and beautiful place. The man dreams of “walking in a flowering wood where birds flew before them he and the child and the sky was aching blue” (17). His dreams and memories interrupt the narrative as he contemplates his life before the catastrophe, thus connections between the past and the present world are repeatedly drawn throughout the trajectory of the novel. In his memories, the empty and grey land is lush and abundant with human and non-human life, reminding the reader that the grotesque dead bodies they encounter were once living, breathing beings.

Notably, the grotesque body in *The Road* acquires deeper layers of meaning in view of Russian philosopher Mikhail Bakhtin’s radical theory of the grotesque. In his thesis *Rabelais and his World*, published in 1965, Bakhtin offers a political view of the grotesque in light of the historical and cultural backdrop in which it flourished by conducting an analysis of *Gargantua and Pantagruel*, a pentalogy of novels written by the medieval French writer François Rabelais. Bakhtin considered this text as the epitome of grotesque realism, and, through Rabelaisian writings, he underscores the importance of medieval culture and its deep-rooted tradition of carnival and folk humor in understanding the essence of the grotesque. Folk humor is associated with a strong sense of degradation, a crucial principle, which according to Bakhtin, constitutes “the lowering of all that is high,

spiritual, ideal, abstract” (19). In Rabelais' writings degradation is most apparent in his depictions of the grotesque body and Bakhtin brings attention to the “material bodily principle” that pervades grotesque realism, as graphic images of the body, and especially bodily functions, play a predominant role (19). In Bakhtin’s view, the corporeal degradation of the grotesque creates a “transfer to the material level, to the sphere of earth and body in their indissoluble unity” (19-20). Hence, through its element of degradation the grotesque body becomes profoundly connected to the earth, and that connection, I argue, is foregrounded in McCarthy’s novel. For instance, when the boy and his father encounter a living man for the first time, they notice his “gray and rotting teeth” (79), an image similar to how the landscape is portrayed, as McCarthy frequently emphasizes grayness to describe the ashen land that is depleted of life and color, indicating the loss of biospheres through imagery. In an earlier passage, for example, the snow appears to be gray, as the narrator describes; “the wet gray flakes twisting and falling out of nothing. Gray slush by the roadside” (15). In this manner, the degradation of the man’s body becomes a reflection of the degraded Earth. Hence, as the grotesque challenges spiritual values by emphasizing the material aspect of the human condition and the degradation of the human body, the novel's use of the grotesque body similarly underscores the physicality of an environmental disaster through its effect on human flesh as well as on other beings. In this way, the story concretises abstract notions of an ecological catastrophe and its detrimental effects on the human and nonhuman realm. Moreover, the grotesque aspect of bodily degradation seems to be in alignment with Alaimo’s argument that trans-corporeal movement “opens up a mobile space that acknowledges the often unpredictable and unwanted actions of human bodies non-human creatures, ecological systems, chemical agents, and other actors” (2). Therefore, a transcorporeal view of the grotesque allows for an ecological acknowledgement of corporeal degradation as a demonstration of the material interconnectedness between the multitudes of beings on Earth.

Another Bakhtinian principle that establishes the relation of the grotesque to the nonhuman world is that the grotesque body entails an element of universality, as it embodies a plethora of nonhuman elements. In Bakhtin’s words,

the grotesque body is cosmic and universal. It stresses elements common to the entire cosmos: earth, water, fire, air; it is directly related to the sun, to the stars. It

contains the signs of the zodiac. It reflects the cosmic hierarchy. This body can merge with various natural phenomena, with mountains, rivers, seas, islands, and continents. It can fill the entire universe. (318)

Similarly, the grotesque body as it is portrayed in *The Road* is deeply connected to every aspect of non-human life and thus it not only mirrors but is itself an embodiment of the ecological devastation inflicted on the Earth. In a way, the grotesque body can be viewed as an image that also reflects what Morton describes in *The Ecological Thought* as the “mesh” meaning the “interconnectedness of all living and nonliving beings” (28). Ecological thinking requires the acknowledgement of the interwoven relationships between all entities, proving that everything is profoundly interdependent. As Morton explains in the same book, “all life forms are the mesh, and so are all dead ones, as are their habitats, which are also made up of living and nonliving beings” (29). Similarly, a transcorporeal view of the grotesque can highlight the interchanges between human and non-human bodies, thus revealing the ecological interconnectedness that repeatedly manifests itself in McCarthy’s novel through its use of grotesque corporeality. McCarthy portrays a desolate landscape, almost completely empty of plants, animals and other nonhuman beings, an image that is reflected in the multitude of lifeless bodies. The grotesque body in the novel is most often a dead and decomposing human body, thus exposing the implications of an environmental catastrophe on humanity while also reflecting the disintegrated state of the earth.

Most importantly, in the novel, grotesque corporeality is not limited to the human body, but is applied to the landscape and nonhuman beings, thus illustrating the interrelationship between humans and the non-human world. An example of this manifests through the narrative parallels that can be drawn between descriptions of the human bodies, the trees and landscape throughout the story. The burnt and barren landscape seems to reflect the dried flesh of the dead human bodies that often appear along the road. In this way, the element of dryness connects the grotesque human bodies to other life forms. Throughout the story, McCarthy repeatedly emphasizes the dried appearance of dead human flesh on the grotesque bodies that the Man and the boy encounter on their journey. At the beginning of the story, they encounter “a corpse in a doorway dried to leather” (11) and when they reach the ruins of a city, instead of finding any sign of life, they come across decomposing human bodies: “[t]he mummied dead everywhere. The flesh cloven along the

bones, the ligaments dried to tug and taut as wires” (23). As the narrative progresses, they once again come across “human bodies. Sprawled in every attitude. Dried and shrunk in their rotted clothes” (48). Echoing these descriptions, the narrator also emphasizes the burnt appearance and dryness of the dead trees in the decimated landscape. The man and the boy walk through “charred and limbless trunks of trees,” traversing endless miles of “cauterized terrain” (6, 13). In a passage where the man observes the dead trees, dryness is once again foregrounded, as the man “took up one of the heavy leaves and crushed it in his hand to powder and let the powder shift through his fingers” (209). The corporeal images in the text thus create a transcorporeal connection between the human bodies and the trees, conflating human and non-human nature through the aesthetics of grotesque materiality.

In contrast to the decaying grotesque body in the novel, however, the Bakhtinian grotesque body is inherently positive in nature and has a regenerative quality that is associated with bodily functions. While in *The Road* the grotesque body is often a dying or a deceased one, in Bakhtin’s account this is not the case; “all that is bodily becomes grandiose, exaggerated, immeasurable. This exaggeration has a positive, assertive character. The leading themes of these images of bodily life are fertility, growth, and a brimming-over abundance” (19). Notably, Bakhtin emphasizes the connection between the regenerative quality of the grotesque body to its inherently transgressive nature. In particular, its sense of renewal is closely related to the comic element of the grotesque body, and its association with the power of carnival laughter and folk humor plays a crucial role in Bakhtin’s writings because of its subversive element.¹

Bakhtin thus views the grotesque body as an important product of counter-culture; a deeply subversive trope that both resists and is juxtaposed to the aesthetics of the dominant Western culture. I contend that, although the grotesque body in *The Road* deviates from Bakhtin’s positive portrayal, it can also be viewed as transgressive in light of the ecological weirdness that Morton evokes in *Dark Ecology*. Weirdness is similar to Bakhtin’s conception of grotesque realism, in the sense that it inhabits a liminal space in

¹ The subversiveness of the grotesque is central to Bakhtin’s thesis, taking into account the repressive political context within which it was written. Although it was published years later, Bakhtin wrote *Rabelais and his World* in 1940, during “a time of extreme ideological orthodoxy in Soviet literary and intellectual circles” (Morris 194). Furthermore, as Lachmann et al. point out, “Bakhtin countered the official image of the body developed by Social Realism with his concept of “grotesque realism,” which he introduced in his description of Rabelais’s corporeal poetics and which also applies part of the avant-garde literature of the 1920s” (119).

the dominant Western ideology. In Morton's words, "in the term weird there flickers a dark pathway between causality and the aesthetic dimension, between doing and appearing, a pathway that dominant Western philosophy has blocked and suppressed" (5). In other words, weirdness is ambivalent, entailing a sense of uncertainty and the uncanny that human societies continuously try to subdue. But the effort to eliminate weirdness has led to a conceptual divide from the environment and consequently, as Morton posits, "human being disturbs Earth and its lifeforms in its desperate and disturbing attempt to rid itself of disturbance" (64). As an essential step towards re-imagining human relationship to the environment, therefore, *Dark Ecology* invites us to embrace weirdness as an ontology that is opposed to agrilogistics, a term used by Morton in order to refer to a logic that he argues is responsible for the conceptual dichotomy between nature and culture. Agrilogistics is an agricultural program that "spawns the concept of Nature definitively outside the human" (56), and thus the nature-culture split, according to Morton, is "a product of agrilogistic subroutines, establishing the necessarily violent and arbitrary difference between itself and what it "conquers" or delimits" (43). Therefore, human cultures have solidified an ideology that views humanity as separate from nature by suppressing the weirdness of ecological entanglements, because of the belief in the promise of agrilogistics to "eliminate fear, anxiety, and contradiction—social, physical, and ontological—by establishing thin rigid boundaries between human and nonhuman worlds and by reducing existence to sheer quantity" (43). Hence, I suggest that the grotesque body in *The Road* is weird in the sense that it subverts agrilogistic order by demonstrating that human bodies are enmeshed with non-human nature.

Deviating from Bakhtin's positive conceptualization, the grotesque body in the novel offers no regenerative qualities. Instead, it mainly appears as a monstrous ruin of a once living being. An example of this appears early in the text, as the man and the boy observe a dying creature: "Crouching there pale and naked and translucent, its alabaster bones cast up in shadow in the rocks behind it. Its bowels, it's beating heart. The brain that pulsed in a dull glass bell" (McCarthy 2). This description presents a deeply grotesque body, emphasizing its organs and bodily functions, yet it lacks the element of regeneration, in contrast to Bakhtin's view. Therefore, my contention is that the regenerating power of the grotesque, as Bakhtin defines it, is not present in the novel as the Earth appears to be

in decay, laden with death. As a direct product of folk culture, the grotesque body exudes a regenerative quality because it reflects the abundance and fertility of the Earth. Human culture itself, being deeply dependent on the existence of the environment, cannot survive without it. Hence, the grotesque body in *The Road* functions not as a politically subversive trope that resists oppression, but as a weird and visceral symbol of our inextricable and vital ties to the non-human world, highlighting the gravity of ecological interconnectedness. It is a reminder that culture and humanity are not separate from the environment, but are an integral part of it. Therefore, whereas Bakhtin's grotesque body is associated with the positive attributes of abundance and excess, the grotesque body in *The Road* appears to be one of dearth and incompleteness, as it is embedded in an empty, dead landscape. It lacks the positive regenerative qualities as it reflects the irreversibly destroyed ecosystems it struggles to live within.

It is through the recurring imagery of the grotesque, therefore, that the novel brings attention to the interconnection between humans and nonhumans. The grotesque demonstrates the transcorporeality of human bodies as they are deeply affected by the destroyed environment and the absence of non-human life, exposing their vital dependence on other beings. As Astrida Neimanis and Rachel Loewen Walker note, transcorporeality "denies the myth that human bodies are discrete in time and space, somehow outside of the natural milieu that sustains them and indeed transits through them" (563). At the same time, by emphasizing the effects of the destruction and absence of non-human life, the novel manages to highlight its importance. The theme of absence dominates the narrative; animal species seem to have all been extinguished, and their absence is revealed in a passage early on in the story. As the man and the boy arrive at a dam, the boy asks whether there could still be any fish left in the lake, to which the man responds: "There's nothing in the lake" (McCarthy 19). With regard to the flora, there are only a few remaining plants and trees among acres of dead ones. Toward the end of the novel, after a long and arduous journey the man and the boy finally reach the ocean, a destination that had sustained their hope, seeking any trace of life. However, they instead encounter a grey and desolate seascape, and the man observes how "the water smelled faintly of iodine. That was all. There was no sea smell to it" (236). Instead of encountering signs of life, the man and his son come across mere remains of what once used to live there. Gazing at the gray seascape, the man observes

the remnants of seamoss, the bones of seabirds, and ribs of fish (236-237). Therefore, while the novel's protagonists are human, this does not necessarily imply a predominant emphasis on human, rather than non-human, life. The human protagonists experience what it means to live in a world devoid of both humans and non-humans, as do the readers of the novel. Hence, the power of McCarthy's storytelling, I argue, lies in the conspicuous absence of living and non-living beings, demonstrating that without non-human life, the earth that once sustained myriads of beings has now become an unlivable place.

The novel's grotesque corporeality does not solely apply to humans, but it is also applied to the landscape and the non-human others, representing ecological interconnectedness. Almost every time the man and the boy encounter non-human entities such as trees, plants, and even the sea, all appear similar to the grotesque bodies scattered in the landscape; lifeless, ashen and gray. Thus, the grotesque corporeal aesthetics in *The Road* are not limited to the human body. They extend to the novel's representation of non-human life spread across the landscape and, in this way, the grotesque body functions as a unifying element demonstrating humanity's inseparable ties to the nonhuman sphere. *The Road*, therefore, is essentially a tragedy of both humanity and the environment, lamenting the loss of human as well as non-human nature: "Rich lands at one time. No sign of life anywhere" (216).

Works Cited

- Alaimo, Stacy. *Bodily Natures*. Indiana UP, 2010.
- Bakhtin, Mikhailovich. *Rabelais and his World*. Translated by Helene Iswolsky, Indiana UP, 1984.
- Hardwig, Bill. "Cormac McCarthy's *The Road* and "a world to come." *Studies in American Literature*, vol. 8, no. 1, 2013, pp. 38-51.
- Harpham, Geoffrey. "The Grotesque: First Principles." *The Journal of Aesthetics and Art Criticism*, vol. 34, no. 4, 1976, pp. 461-468.
- Johns-Putra, Adeline. "'My Job Is to Take Care of You': Climate Change, Humanity, and Cormac McCarthy's *The Road*." *MFS Modern Fiction Studies*, vol. 62, no. 3, 2016, pp. 519-540.
- Kayser, Wolfgang. *The Grotesque in Art and Literature*. Translated by Ulrich Weisstein, Indiana UP, 1963.
- Kuznetski, Julia and Stacy Alaimo. "Transcorporeality: An Interview with Stacy Alaimo" *Ecozon@: European Journal of Literature, Culture and Environment*, vol 11, no. 2, 2020, pp. 137-146.

- Lachmann, Renate, et al. "Bakhtin and Carnival: Culture as Counter-Culture." *Cultural Critique*, no. 11, 1988-1989, pp. 115-152.
- McCarthy, Cormac. *The Road*. Picador, 2022.
- Morris, Pam, editor. *The Bakhtin Reader: Selected Writings of Bakhtin, Medvedev, Voloshinov*. Arnold, 1994.
- Morton, Timothy. *Dark Ecology*. Columbia UP, 2016.
- . *The Ecological Thought*. Harvard UP, 2010.
- Neimanis, Astrida, and Rachel Loewen Walker. "'Weathering': Climate Change and the 'Thick Time' of Transcorporeality." *Hypatia*, vol. 29, no. 3, 2014, pp. 558-575.
- Rabelais, François. *The Complete Works of François Rabelais*. Translated by Donald M. Frame, U of California P, 1999.
- Squire, Louise. "Death and the Anthropocene: Cormac McCarthy's World of Unliving." *Oxford Literary Review*, vol. 34, no. 2, 2012, pp. 211-228.
- Stark, Hannah. "All the Things He Saw and Did Not See: Witnessing the End of the World in Cormac McCarthy's *The Road*." *Critical Survey*, vol. 25, no. 2, 2013, pp. 71-84.
- Stieg, Michael. "Defining the Grotesque: An Attempt at Synthesis." *The Journal of Aesthetics and Art Criticism*, vol. 29, no. 2, 1970, pp. 253-260.
- Wallace-Wells, David. *The Uninhabitable Earth: A Story of the Future*. Penguin Books, 2019.

Part II

No Ground for Indigenous Communities

Re-Membering Disembodied Subjects and Landscapes: Cultural Survival, Indigenous Environ-Mentalities and Ecological Activism in Linda Hogan's Solar Storms (1995)

Foteini Toliou
Aristotle University of Thessaloniki

Abstract

This paper offers an ecofeminist re-reading of Linda Hogan's novel *Solar Storms* (1995) and explores how the disembodiment and abuse of indigenous female subjectivities, cultures and landscapes are perpetuated by colonial and neocolonial agents of power in the US-Canada borderlands. It traces how the initially disoriented Native American protagonist, Angel, reunites with her indigenous great-grandmothers and their ecological cosmologies. Re-connection with indigenous heritage and environmental epistemologies, the mobilities of the female characters across the US-Canada borderlands, and indigenous activism enable Native American communities to resist eco-destruction and socio-political injustice. Indigenous activism for water rights, as enacted in *Solar Storms*, merges socio-political and ecological advocacy claims. The novel signals that the younger generations of Native Americans can revitalize their ancestral "environ-mentalities," a set of ecologically conscious worldviews that attend to the interconnections between humans and the natural world and view nature as embodied and agentic.

In a time when global temperatures are dangerously rising, and multiple ecosystems around the world are being disrupted, the climate crisis raises increasing concern. Researchers in the flourishing fields of ecocriticism and environmental humanities seek to unravel the causes behind extreme environmental degradation and identify action measures to alleviate climate change's ravaging impact on the planet and on humanity. Could it perhaps be that the cultural narratives of the West have disregarded and even tried to erase the epistemologies and cultural mentalities of Native American cultures, which embrace a deeply-shared respect for the natural environment? Val Plumwood, a leading ecofeminist thinker and environmental philosopher of the twentieth century, has suggested that "[w]e need a thorough and open rethink which has the courage to question our most basic cultural narratives" ("Nature in Active Voice"). The reevaluation of Western cultural approaches requires the foregrounding of Native American epistemologies and worldviews as narratives that can amend our understanding of pressing environmental issues. This essay re-reads Linda Hogan's novel *Solar Storms* (1995) through an ecofeminist lens. It suggests that re-connection with indigenous heritage and eco-ethical mentalities, spatial mobilities across the US-Canada borderlands and engagement in local-based environmental activism

enable the Native American female characters in *Solar Storms* to resist disembodiment and bring about socio-political and environmental justice.

Since the 1970s, ecofeminists and environmental thinkers view ecological justice concerns as inextricably related to social justice. As Greta Gaard highlights, “[a]n intersectional ecological-feminist approach” enables us to “recognize common cause across the boundaries of race, class, gender, sexuality, species, age, ability, nation – and affords a basis for engaged theory, education, and activism” (44). Studies by seminal ecofeminist theorists, such as Carolyn Merchant’s *The Death of Nature: Women, Ecology and the Scientific Revolution* (1980) and Plumwood’s *Environmental Culture: The Ecological Crisis of Reason* (2002), critique the inadequacies of Western cultural mentalities, arguing that Western narratives have conceptualized nature as subordinate and disembodied so as to justify practices of exploitation and abuse by a superior humanity. Ecofeminist thought, conversely, regards nature and all its diverse beings—plant and animal species, land, water—as active, living matter, and sheds light to the interconnectedness between human and non-human bodies. Materiality and embodiment are placed center stage in ecofeminist approaches, which view the body as an integral part of lived experience and point out that the material agencies of human and non-human actors participate in intersectional power dynamics concerning gendered, racialized and ecological oppressions. At the same time, contemporary feminist research in the field of cultural politics (Vergès; Ahmed; Grosz; Spivak) demonstrates growing interest in the body and addresses the need to foreground the embodied experiences of women, colonized and indigenous peoples.

Native American literature has come to the forefront of American literary studies since the 1970s, embracing a strong environmental ethic, which is echoed in a number of influential contemporary ecofeminist approaches. Prominent novels of the Native American Renaissance,¹ such as Navarre Scott Momaday’s *House of Made of Dawn* (1968), and Leslie Marmon Silko’s *Ceremony* (1977), view eco-destruction and the subjugation of indigenous tribes as concurrent and interrelated processes. According to

¹ The Native American Renaissance took place in the 1970s in the atmosphere of the civil rights movement. The unprecedented foregrounding of the rights of American Indian communities and the fervent literary production by Native American writers gave voice to the experiences of Amerindian cultures and identities that have historically been marginalized.

Barbara J. Cook, “[t]he rich offering of novels and poetry written by American Indians since that time focused on tribal struggles, culture and traditions, indigenous views of American history, and a search for identity and healing by the narratives’ mixed-blood protagonists” (“Hogan’s Historical Narratives” 35). Native American literature has brought visibility to the experiences and the heritage of indigenous communities, who have been excluded from the mainstream white American culture.

Hogan’s *Solar Storms* tackles the disembodiment and abuse of Native American female subjectivities, cultures and landscapes as processes instigated and perpetuated by colonial and neocolonial agents of power. Hogan, a prominent writer, poet and environmental activist of mixed-blood Chickasaw and Anglo ancestry, comes from an indigenous community which has been uprooted from its native homeland in Oklahoma due to neocolonial practices of oil extraction. Hogan possesses first-hand knowledge of how eco-destruction and histories of colonization are deeply embedded in the experiences of indigenous people. Her novel, *Mean Spirit* (1990), addresses real-life events relating to the murders and land grabs suffered by the Osage people in Oklahoma during the oil burst of the 1920s. A number of Native American authors channel their communities’ historical experiences in their fiction. Louis Owens’s *Wolfsong: A Novel* (1995) is concerned with Native American land rights and opposition to ecocide while Louise Erdrich’s *The Night Watchman* (2021) charts how the author’s community in the Turtle Mountain Reservation was affected by factory building.

Solar Storms dramatizes how the traumatized and alienated mixed-blood female protagonist, Angel, re-connects with her Native American grandmothers upon return to their tribal home in the Boundary Waters area, and comes to embrace the ecologically ethical worldviews embedded in the lifestyle of her indigenous community. Offering a tripartite exploration of the novel, the first subsection of this essay addresses how the intergenerational linkages formed between Angel and her grandmothers enable the young protagonist to retrieve the historical injustices endured by the women in her Native American community, and bring her to realize that the victimization of Native American women and eco-destruction are concurrent and interrelated processes. Angel gradually espouses the ecologically mindful cultural mentalities of her Native American community,

which I refer to as “environ-mentalities.”² As the second subsection argues, the canoe journey that the female characters take across the US-Canada borderlands with the aim to oppose the construction of hydro-electric dams in the Boundary Waters area strengthens Angel’s ecological consciousness. The third subsection delineates Angel’s transformation into an environmental activist who advocates for water rights and for her indigenous community’s cultural survival. *Solar Storms*, then, gestures at how intergenerational communication, spatial mobilities and local activism can encourage young Native American identities to revitalize their ancestral, indigenous environ-mentalities and stand up against socio-political and environmental inequalities.

Re-membering Legacies of Disembodiment and Eco-destruction

In their essay in *The Cambridge Companion to Literature and Climate* (2022), Jenny Kerber and Cheryl Lousley suggest that for indigenous writers and communities in Canada, climate change is far from an abstract threat located in a dystopian future: “Indigenous writers place climate change within a long, ongoing history of colonial resource appropriations, ecological loss, and violent suppression of Indigenous bodies and cultures in Canada” Kerber and Lousley remark,³ noting that “climate change cannot be extricated from decolonization and matters of sovereignty” (269).

Solar Storms portrays the struggles of a fictional Native American community that is located in the US-Canada borderlands. Despite the absence of references to specific tribes and place names, the descriptions of the northern landscapes that are replete with brimming waterfalls and icy lakes, render it clear that the novel is set in the broader area of the Boundary Waters in the US-Canada borderlands between Minnesota and Quebec

² In this essay, I use the term “environ-mentalities” to refer to the ecologically mindful traditional knowledge practices and perspectives that are embedded in the lifestyle of Native American communities, as depicted in *Solar Storms*. The term can also be used more broadly to discuss the eco-ethical cosmologies and ways of life practiced by multiple Native American and other indigenous peoples across contexts.

³ Jenny Kerber and Cheryl Lousley use the term “Indigenous,” capitalizing the “I,” in their text to refer to native peoples who live in Canada and are recognized by the Canadian Constitution as the first peoples inhabiting the geographical space of present-day Canada. The capitalization of the “I” when discussing indigenous history, literature and culture is a scholarly practice which honors the historical experiences of indigenous peoples of the Americas. In this essay, I use the word “indigenous” as an adjective highlighting that the peoples depicted in *Solar Storms* are native to the particular areas of the US-Canada borderlands, regardless of whether they have been recognized as first nations by present-day national governments. I also use the phrase “indigenous people” interchangeably with the terms Native Americans, American Indians, and Amerindians to refer to native peoples that have been inhabiting the Western hemisphere, including both the US and Canada, long before the arrival of the European colonizers in the fifteenth century.

and depicts the experiences of a mixed-blood Cree-Inuit Amerindian community. Cook explores *Solar Storms* as one of Hogan's "historical narratives," in the sense that the novel "draws attention to the historic acts of destruction driven by corporate and government decisions and human greed and indifference to the environment" ("Hogan's Historical Narratives" 39, 36). The novel addresses the real-life events of the construction of the James-Great hydroelectric project in the greater James Bay area during the 1970s. Undertaken by the state-owned hydroelectric company, Hydro-Quebec, the project has met with resistance by local Inuit and Cree inhabitants.⁴

The novel delves into the experiences of this Native American community by zooming in on the lives of four indigenous and/or mixed-blood female characters that belong to different generations. Angel, a disoriented Native American teenager who grew up in foster homes returns to the home of her three great-grandmothers, an icy lake island of the US-Canada borderlands called Adam's Rib. Angel's return to her grandmothers' land is depicted as a transformational journey that will enable the teenage girl to reconnect with the cultural heritage and the ecological worldviews of her indigenous community. Angel, intuitively, notes: "I was at the end of my life in one America and a secret part of me knew this end was also a beginning" (Hogan, *Solar Storms* 26).⁵ Yet, reconnection to her ancestral past requires the young narrator-protagonist to engage in a process of "re-membering." Angel attempts to retrieve all the lost, scattered histories that her indigenous people have experienced against the backdrop of colonization and eco-destruction. This memorial retrieval will, in turn, foster the re-membering, that is, the putting together of all the previously "broken" parts of Angel's disembodied subjectivity.

⁴ In *Solar Storms* Hogan offers a fictional account of how the indigenous Cree and Inuit communities opposed the construction James-Bay hydroelectric project in the Boundary Waters area in the 1970s. It is worth-noting that the James Bay Hydro Project (JBHP) was the largest dam project in the American Northeast and it has had a lasting impact in terms of environmental degradation while significantly influencing the socio-political relations between the US and Canadian nations and the Native American communities of the Boundary Waters area. The first phase of the James-Bay project lasted from the early 1970s to the mid-1980s and "flooded 11,500 km² of wilderness land that was home to the James Bay Cree and Inuit" while "[t]he flooding . . . created mercury contamination in fish, as mercury was released from rotting vegetation in the reservoirs" during the 1980s ("James Bay Project"). Although the second phased of the James-Bay project was suspended due to Cree activist resistance and an agreement was signed between the Crees and the government of Quebec in 2002 positing that both parties can regulate power development in these lands, sadly, another hydro-electric power project materialized in the area from 2006 to 2012, diverting more rivers and effectuating further ecocide.

⁵ Unless otherwise stated, all references will be from this novel.

When Angel returns to the home of her grandmothers in 1972, she discovers that the women in the indigenous community at Adam's Rib carry traumatic histories of racialization, sexualization, disembodiment and abuse that date back to the period of Canada's colonization. She soon learns that "first women at Adam's Rib had called themselves the Abandoned Ones" and they had "traveled down with French fur trappers who were seeking their fortunes from the land" (28). Yet, "[w]hen the land was worn out, the beaver and the wolf gone . . . the men moved onto what hadn't yet been destroyed, leaving their women and children behind, as if they too were used-up animals" (28). These indigenous women have been viewed as disembodied subjectivities by white male European settlers and have, consequently, been reduced to subordinate, disposable bodies, while their cosmologies and cultural bearings have been disregarded.

Contemporary decolonial, feminist scholarship unravels the intricate ideologies in which colonial disembodiment is rooted. Anjana Raghavan highlights that disembodiment, "the exclusion and invisibilisation of the body as a site of legitimate experience and knowledge," is rooted in the Cartesian body/mind distinction (81).⁶ Raghavan notes that in the seventeenth century, Cartesian framework of thought "[k]nowledge, intellect and reason came to be valued traits of human existence, and corporeality and embodied ways of knowing lost their significance," as "[t]he Cartesian body was conceptualized as mechanical, rather than experiential, and the instrumental body was . . . severed from subjective knowledge" (66). This hierarchical devaluation of the body as subordinate to the mind penetrated most domains of Euro-American knowledge production and provided the foundation for a long array of socially constructed dualisms between man/woman, culture/nature, human/non-human, colonizer/colonized (Raghavan 66). Nevertheless, since the late twentieth century feminist, subaltern criticism (Grosz; Butler) has begun "to envision the body as part of lived experience and knowledge" and acknowledge the body as "crucial to both the performance and articulation of exclusion" (Raghavan 74, 61-62). As Raghavan aptly notes, "[t]he logic of exclusion is predicated on difference, and the most

⁶ In her study *Towards Corporeal Cosmopolitanism: Performing Decolonial Solidarities* (2017), Raghavan underlines the need to corporealize cosmopolitan belonging, and focuses on the experiences of southern Indian communities and diasporic Indo-Caribbean communities. Yet, the critic notes that her proposed concept of "corporeal cosmopolitanism" as well as other decolonial feminist frameworks that emphasize corporeality can be valuable tools in many fields of study, such as ethnic, gender and/or subaltern studies.

visceral form of difference is often located on the body” (52). The Euro-American view of Native Americans as “souless savages” and disembodied subjectivities was grounded on the body/mind dualism and legitimized the colonial violence exercised on the indigenous peoples inhabiting Canada.

In *Solar Storms*, the corporealization of the traumas that indigenous female identities have endured takes flesh in the experiences of the main character, Angel. The young, mixed-blood protagonist initially describes herself as “a rootless teenager” with “a curtain of dark red hair falling straight down over the right side of [her] dark face” (Hogan 25). Her face is severely scarred, as “[h]alf of it, from below the eye to the jawline, looked something like a cratered moon” (33). Angel reveals: “While I never knew how I got the scars, I knew they were the reason I’d been taken from my mother so many years ago” (25). The absence of concrete memories regarding Angel’s abusive mother constitutes a dark spot in her personal family history.

Yet, the girl soon understands that her family’s past is inextricably linked with a much larger, collective history of trauma, related to the colonization and disembodiment of the Amerindian people. Through her grandmothers’ narrations, Angel learns that her mother, Hannah, descended from the Amerindian tribe of the Elk Islanders, “the people who became so hungry they ate the poisoned carcasses [of deer] that the settlers left out for the wolves” (38). Having witnessed the harrowing extinction of their tribe, the indigenous women of her mother’s clan have, subsequently, been sexually exploited by white male settlers, becoming themselves irreparably damaged women and abusive mothers. Hogan, then, weaves together a multilayered web of intergenerational and cross-tribal trauma, since both the victimization of the Elk Islanders and the history of the abandoned women at Adam’s Rib illustrate how colonial disembodiment marked the experiences of different Native American tribes in the US-Canada borderlands, and especially those of indigenous women. Nevertheless, the writer suggests that these histories need to be retrieved in order for young Native Americans, like Angel, to achieve embodiment and feel empowered to resist present-day injustices.

Solar Storms also reveals that the victimization of Amerindian women and eco-destruction coincide in most insidious ways against the backdrop of colonization. The novel unearths specific parts of Native American history to illustrate that land and all its

constituent elements—plants, animal species, water—have been viewed as disembodied, subordinate entities by white European settlers and have also been dilapidated and abused. Eco-destruction, in fact, has its roots in a Western, ideology which conceptualizes nature as disembodied and inanimate. In “Nature in Active Voice,” Plumwood elaborates on her concept of “hyperseparation,” an ideological process which refers to “[t]he hyperbolized opposition between humans and the non-human order.” Plumwood argues that the “human/nature dualism is a western-based cultural formation . . . that sees the essentially human as part of a radically separate order of reason, mind, or consciousness, set apart from the lower order that comprises the body, women, the animal and the pre-human.” This dualistic framework, “reduces non-human forms to ‘mere matter,’ emptied of agency, spirit, and intelligence.” Hyperseparation also results in “the denial of our own embodiment” and “damages our ability to see ourselves as part of ecosystems and understand how nature supports our lives.” In line with the material turn recently taken in ecofeminist criticism, Serenella Iovino and Serpil Oppermann’s study *Material Ecocriticism* (2014) argues that “[a]gency . . . is not to be necessarily and exclusively associated with human beings and with human intentionality, but it is a pervasive and inbuilt property of matter” (3). Stacy Alaimo’s concept of “trans-corporeality” outlined in *Material Feminisms* (2008) suggests that “[e]mphasizing the material interconnections of human corporeality with the more-than-human world . . . allows us to forge ethical and political positions” in deciphering present-day environmental, socio-political and gender justice concerns (238-239). Nature’s agency and the interdependencies between human and other-than-human beings, which are prominently underlined in twentieth and twenty-first century ecofeminist theory, have been central notions in Native American epistemologies and worldviews since pre-colonial times.

In *Solar Storms*, Angel’s journey towards embodiment and empowerment requires a re-connection with the environ-mentalities embraced by her indigenous people. The girl realizes that “[t]he people at Adam’s Rib believed everything was alive” and that “[t]he world . . . was a dense soup of love, creation all around us, full and intelligent” (Hogan, *Solar Storms* 81). The remedial, herbal tea that Angel’s great-great-grandmother, Dora-Rouge, uses to treat insomnia and the “animal-calling song” (Hogan 61) she teaches her, illustrate that these Native American women uphold the interdependencies between

humans and the natural world. The transmission of indigenous environmental knowledge and eco-ethical worldviews to the younger generation of Native Americans becomes in *Solar Storms* an essential step towards resisting the ongoing threat of eco-destruction. Angel is, thus, first instructed in the ecologically conscious mentalities of the community in Adam's Rib. Yet, the canoe journey that ensues, facilitates Angel's direct communication with nature and the waterscapes of the US-Canada borderlands, enabling her to closely experience the interdependencies between human and non-human bodies and fostering her engagement in the Native American people's activism.

Transgressing the US-Canada Borderlands: A Canoe Journey Towards Transformation and Resistance

The teenage protagonist's re-connection with indigenous heritage and the earth becomes more full-fledged during the canoe journey across the US-Canada borderlands that she and her three grandmothers embark on. Angel's grandmothers learn that the land of their native tribe up north, the Fat Eaters, is in acute danger due to the construction of hydroelectric dams which "would divert the rivers into reservoirs," affecting the local ecosystem and threatening indigenous inhabitants with displacement (58). The four women travel northwards to join the activist struggle of the Native Americans and defend water rights. To avoid the blockades on the mainland that aim to cut off the Indians' connections with the afflicted tribe of the Fat Eaters, they opt to travel by canoe. Yet, in the Boundary Waters, land and water constantly commingle and change the earth's surface, rendering the area highly unmappable and difficult to navigate. The four women take up the daunting task to travel through this uncharted terrain.

The female characters' openness to communication with nature, their belief in the agency of embodied landscapes, and their indigenous environ-mentalities enable them not only to efficiently reach their destination but to achieve a unique (re)union with nature. Dora-Rouge, a character endowed with indigenous spirituality and ecological knowledge becomes their compass. In fact, "Dora-Rouge . . . read things in the moving waters; she saw what couldn't be seen by [the others]" and led their way by pointing her "bony . . . crooked finger" in the right direction (177). The women pave their way across wilderness relying on their knowledge of the local flora and fauna, and trying to make out "if a clue to [their] location could be fathomed by the shapes of trees or the sounds of birds" (173).

It is the women's collaborative spirit in navigating the vibrant, agentic nature of the US-Canada borderlands that allows Angel to experience the myriad ways in which human and non-human bodies are correlated. The journey requires extreme physical strength and endurance, since the women have to make it across a wild natural landscape, without relying on the technological advancements of modern-day North American civilization. The characters are exposed to the forces of nature, but they also experience its mindful cycles throughout their crossing to the north. Angel exclaims: "Everything merged and united. There were no sharp distinctions left between darkness and light. Water and air became the same thing, as did water and land in the marshy broth of creation . . . It was all one thing. The canoes were out bodies, our skin" (177). Navigating this embodied landscape, Angel realizes that she is part of this ecosystem and comes to see her identity as interconnected with non-human beings, such as water, wind and the earth. The protagonist forms a new, holistic view of nature and achieves an intimate (re)union with its diverse elements.

Nature's agency and the interconnection between human and non-human bodies become evident in the ways that indigenous female characters interact with waterscapes during their canoe journey. In her analysis of *Solar Storms*, Anna M. Brígido-Corachán points out that "Hogan's novel . . . is heavily grounded on water tropes that emphasize water qualities such as dynamism, contact, and transformation" and argues that "the portrayal of water as having animated, human-like features such as a language, communicative abilities . . . is persistent throughout the novel" (43-44). Angel realizes early on that for "the older ones . . . if water wasn't a spirit, if water wasn't a god that ruled their lives, nothing was" (Hogan, *Solar Storms* 62). Later on, when she jumps out of the canoe and swims in the crystal clear waters of the river, she experiences a newly-gained unity with water and exclaims: "I remembered being fish . . . being oxygen and hydrogen . . . I felt it in my heart" (179), pointing to the intrinsic, somatic and spiritual connections between human bodies and bodies of water. In an impactful scene toward the end of their journey, Dora-Rouge converses with the churning Se Nay River and asks it to grant them safe passage, offering her life to the river in return. Dora-Rouge's dialogic bartering with the waters is an instance of interspecies dialogue that puts forward the indigenous, ecological view of waterscapes as embodied and agentic. Angel's grandmothers recognize

the interdependencies between the waterscapes and the human inhabitants of the Boundary Waters area. They respect the waters' right to agency and to existence on this land, and believe in the power of communication and synergy between human and non-human actors. The characters' engagement in the Native American activist struggle for water rights once they reach their destination, surfaces as an attempt to restore ecological balance in the ecosystem of the Boundary Waters, an ecosystem which is being disrupted due to the building of dams.

Indigenous Environmental Activism for Water Rights

Upon arrival to their motherland, the indigenous women characters realize that the construction of hydroelectric dams impacts the natural landscape severely while it also threatens their local community with displacement and cultural erosion. As the characters near their destination, they witness how the building of multiple dams has ravaged the broader area of the Boundary Waters. They discover that "much land was now submerged," and lakes have turned into vast mudflats that "[stink] of decay and rotting fish and vegetation" (205, 211). Their homeland, the land of the Fat Eaters called Two-Town in modern maps,⁷ is now a "place where mud and silt wanted nothing more than a misplaced foot so it could swallow [people]" (212), in the same way they devoured the local wildlife into the mire. The place is "overrun by [drilling] machines," as the white entrepreneurs seek to extract everything they can from the land "before the waters [cover] this little length of earth" (218-219). The local Amerindian people "had been resettled after having lost their own lands to the hydroelectric project, lands they'd lived on since before European time was invented" (225). The people of the protagonist's ancestral tribe have been turned into displaced environmental refugees and have lost their will for life. Angel describes the younger generation of Native American identities as a nullified people with "puffy faces and empty eyes" (226). Most of them are "child-parents" (226) who resort to alcohol and drug abuse, seeking to forget their painful reality. They appear to have lost contact with their ancestral cultural traditions and they are "too broken to fight the building of dams, the

⁷ The re-naming of the ancestral land of the Fat Eaters as "Two-Town" by modern-day cartographers surfaces in *Solar Storms* as a violent colonial practice of cultural erasure, while it also points out that white American and/or white Canadian societies draw rigid socio-cultural, ethno-racial and geo-spatial demarcations so as to perpetuate the marginalization of Native American communities.

moving of waters” (226). Acute marginalization and indifference to the Native American people’s needs and rights has mired this community into passivity.

Nevertheless, the situation in Two-Town is tense and an impending protest is due, since a group of local indigenous people try to band together and stand up against dam construction. Several local Native American families retain contact with their ancestral cultural values and cosmologies and uphold a strong ecological ethic. Tulik, the tribal judge, and his family welcome Angel and her grandmothers into the community and foster the women’s engagement in the activist purpose. The local people venture to collectively protect their mother land and its waterscapes through activism. They hold community meetings, sign petitions and organize protests and railroad blockades in order to prevent more construction machines from reaching their land. This indigenous activist group is constantly growing, as American Indians from various different tribes all across the US-Canada borderlands gradually arrive in Two-Town to join the activist struggle. Angel and her grandmothers actively engage in the activist cause, since they share in the native people’s sorrow but also see the urgency of opposing dam construction and protecting their native land from effacement.

Hogan’s narrative presents indigenous socio-political activism as inextricably linked to environmental activism concerns. The vision of the indigenous activist group is twofold. Their opposition to the hydroelectric project is an attempt to achieve the material and cultural survival of their indigenous community while it also takes up the pressing environmental cause to protect the earth and defend water rights. The Canadian and the US governments and the undertakers of the hydroelectric project treat water as a disembodied material resource that can be diverted, manipulated and exploited in the name of humanity’s progress. Conversely, the indigenous activists hold an entirely different view of water as an agentic being with its own right to life on this earth. They are knowledgeable about the interdependences inherent in the water ecosystem of their land, which, when disputed, affect the human members of the ecosystem too. Brígido-Corachán, argues that Hogan’s novel presents a sustainable view of waterscapes, which echoes “the traditional environmental knowledge held by many Indigenous communities of the Americas” (39). The critic stresses that the innovative conception of waterscapes foregrounded in *Solar Storms* predates the theorizations of contemporary political geographers, who

conceptualize waterscapes as “dynamic, water-based environments where a multiplicity of human and other-than-human forces interact with each other producing diverse forms of experience and signification” (39). Indeed, the abused waters in the land of the Fat Eaters resist manipulation and strike back when “a flood of unplanned proportions . . . suddenly [rises] up as high as the steering wheels of [the] machines” (Hogan, *Solar Storms* 224). As Angel exclaims: “[w]ater . . . had its own needs, its own speaking and desires”, yet “[n]o one had asked the water what it wanted” (279). The activism of the native people, then, emerges as an act of resistance which seeks to give voice to the will of the abused waters and that of the ravaged land.

Angel’s participation in the indigenous people’s ecological and socio-political activism fosters her personal transformation. Through intergenerational communication with her grandmothers and the canoe journey across the Boundary Waters, the protagonist re-connects with her ancestral cultural heritage and dynamically embraces the eco-ethical view of life that her indigenous people share. Hence, Angel not only resists disembodiment and moves towards empowerment but, having acquired renewed insight, she now views water and all of nature’s beings as agentic and she joins her people’s attempts to protect water rights. The fervor and the peaceful determination of Amerindian activists, especially the spirited energy and the bravery of the elder members of the community, is truly inspiring. Dora-Rouge emerges as a determined elder environmental activist: she confronts the disrespectful police soldiers without fear and refuses to move her wheelchair from the railroad tracks, preventing a construction machine from entering further into the area. Along similar lines, Angel also transforms into an environmental and political activist who actively defends the encroached rights of her indigenous community. She provides the young generation with the hope that they will not only achieve cultural survival but also enact a more ecological and humanistic way of being-in-the world.

The preservation of the tribe’s environmental epistemologies and worldviews is further sealed when Angel takes up the task to bring up her mother’s new baby. Angel discovers that her mother is “a damaged woman” (247), possessed by traumatic memories. Nevertheless, the protagonist manages to recuperate from her own trauma because she comes to understand her painful family story as interlinked with the collective experiences of abuse that her indigenous people have endured and need to stand up against. Her

mother's newborn baby embodies the hope of new life and a new future. Angel symbolically names the baby Aurora, alluding to the beauty of the Northern Lights that can occasionally be seen from the place of the Fat Eaters, and she instructs it in the Native American lifestyle and traditions, making sure that Aurora "would know her world and not be severed from it" (258). *Solar Storms*, then, gestures that indigenous cultural and environmental knowledge will be effectively passed on to the future generation of Native Americans.

Conclusion

Solar Storms emerges as a testament and an ode to the indigenous environmental activists who have resisted the James-Bay hydroelectric project in the Boundary Waters area in the 1970s. The writer astutely communicates that Native American communities continue to disproportionately face the detrimental effects of eco-destruction to this day. Hogan's narrative points to the value of peaceful, indigenous activism and presents it as a strand of activist vision whereby socio-political and ecological advocacy claims powerfully merge. Yet, in *Solar Storms* the urgency to continuously practice ecological activism is palpably channeled through the story of young Angel. Hogan creates a personalized, fictional account of the indigenous people's struggle for water rights and, in this way, her poignant, ecological novel speaks directly to the readers' hearts and enables them to truly listen to the problems of Native American peoples and to come to grips with the pressing ecological issues that affect us all.

In her interview with Barbara J. Cook, Hogan discusses her commitment to channeling historical events relating to American Indian experience in her works and states: "I pick these events and make them stories because only then will people listen" (Cook, "From the Centre of Tradition" 12). The writer views literature as a powerful means through which Native American histories, environmental epistemologies and eco-ethical cultural mentalities can effectively be foregrounded. And although Hogan acknowledges that "American Indian knowledge systems have been ignored until recently" (12), she also recognizes a recent shift, an attempt on the part of Western thinkers and scientists to meaningfully engage with indigenous epistemologies, so as to alleviate the ravaging effects of ecological degradation. Plumwood also points out that the ecological project of "reanimating the world," in fact, "converges with much poetry and literature" and that

“[w]riters are amongst the foremost of those who can help us think differently” (“Nature in Active Voice”). Both activism and literature, then, especially as practiced by indigenous people and writers, can make invaluable contributions to the urgent restructuring of a new, more ecological and more humanistic way of being-in-the world that we are all invited to embrace—a way of life grounded on the primordial, indigenous belief that this world is alive.

Works Cited

- Ahmed, Sara. *The Cultural Politics of Emotion*, edited by Sara Ahmed. 2004. Edinburgh UP, 2014.
- Alaimo, Stacy. “Trans-Corporeal Feminisms and the Ethical Space of Nature.” *Material Feminisms*, edited by Stacy Alaimo and Susan Hekman, Indiana UP, 2008, pp. 237-264.
- Brígido-Corachán, Anna M. “Native Waterscapes in the Northern Borderlands: Restoring Traditional Environmental Knowledge in Linda Hogan’s *Solar Storms*.” *Revista de Estudios Norteamericanos*, vol. 22, 2018, pp. 37-57, <http://dx.doi.org/10.12795/REN.2018.i22.02>. Accessed 23 July 2025.
- Butler, Judith. *Bodies That Matter On the Discursive Limits of Sex*. 1993. Routledge, 2011.
- Cook, Barbara J. “From the Centre of Tradition: An Interview with Linda Hogan.” *From The Centre of Tradition: Critical Perspectives on Linda Hogan*, edited by Barbara J. Cook, UP of Colorado, 2003, pp. 35-51.
- . “Hogan’s Historical Narratives: Bringing to Visibility the Interrelationship of Humanity and the Natural World.” *From The Centre of Tradition: Critical Perspectives on Linda Hogan*, edited by Barbara J. Cook, UP of Colorado, 2003, pp. 35-51.
- Erdrich, Louise. *The Night Watchman: A Novel*. Harper Perennial, 2021.
- Gaard, Greta. “Ecofeminism Revisited: Rejecting Essentialism and Re-Placing Species in a Material Feminist Environmentalism.” *Feminist Formations*, vol. 23, no. 2, 2001, pp. 26–53. *Project MUSE*, <https://doi.org/10.1353/ff.2011.0017>. Accessed 23 July 2025.
- Grosz, Elizabeth. *Volatile Bodies: Toward a Corporeal Feminism*. Indiana UP, 1994.
- Hogan, Linda. *Mean Spirit: A Novel*. Atheneum. 1990.
- . *Solar Storms*. 1995. Scribner, 1997.
- Iovino, Serenella, and Serpil Oppermann. “Introduction: Stories Come to Matter.” *Material Ecocriticism*, edited by Serenella Iovino and Serpil Oppermann, Indiana UP, 2014, pp. 1-17.
- “James Bay Project.” *The Canadian Encyclopedia*. 7 Feb. 2011, updated 23 May 2023, <https://thecanadianencyclopedia.ca/en/article/james-bay-project>. Accessed 24 Aug. 2025.

- Kerber, Jenny and Lousley, Cheryl. "Literary Responses to Indigenous Climate Justice and the Canadian Settler-State." *The Cambridge Companion to Literature and Climate*, edited by Adeline Johns-Putra and Kelly Sultzbach, Cambridge UP, 2022, pp. 269-279.
- Merchant, Carolyn. *The Death of Nature: Women, Ecology and the Scientific Revolution*. 1980. Harper & Row, 1990.
- Momaday, Scott N. *House Made of Dawn*. Harper & Row, 1968.
- Owens, Louis. *Wolfsong: A Novel*. U of Oklahoma P. 1995.
- Plumwood, Val. *Environmental Culture: The Ecological Crisis of Reason*. Routledge, 2002.
- . "Nature in Active Voice." *Australian Humanities Review*, no. 46, 2009, <https://australianhumanitiesreview.org/2009/05/01/nature-in-the-active-voice/>. Accessed 23 July 2025.
- Raghavan, Anjana. *Towards Corporeal Cosmopolitanism: Performing Decolonial Solidarities*. Rowman & Littlefield International, 2017.
- Silko, Leslie Marmon. *Ceremony*. 1977. Penguin Books, 2006.
- Spivak, Gayatri C. "Can the Subaltern Speak?" *Marxism and the Interpretation of Culture*, edited by Cary Nelson and Lawrence Grossber, UP of Illinois, 1988, pp. 271-313.
- Vergès, Françoise. *A Decolonial Feminism*. Pluto Press, 2021.

“Girl Who Comes Out Fighting”: Indigenous Girlhood in Eco-Crisis in Rebecca Roanhorse’s *Sixth World*

**Yıldız Aşar
University of Bamberg**

Abstract

This essay explores representations of Indigenous girlhood and ecological crisis in Rebecca Roanhorse’s *Sixth World* novel series, consisting of *Trail of Lightning* (2018) and *Storm of Locusts* (2019). Focusing on the work of an Ohkay Owingeh and African American writer of speculative fiction, I argue that *Sixth World* portrays its young female protagonist Maggie’s coming-of-age in direct relation to her post-apocalyptic environment, both as a trauma-survivor and an agent of hope, or “Chíníbaá, . . . girl who comes out fighting” (*Trail* 110). By examining Maggie’s liminal and ambiguous subject position as a self-isolated young female “monsterslayer”—which complicates the categories among gods, monsters, and humans after the climate apocalypse—I argue that the series explores the continuing presence of settler colonialism, extractive capitalism, and heteropatriarchal structures that have defined and disrupted both girl identities and the nonhuman environment. Through Maggie’s journey of reclaiming connection and self-awareness, the narrative also navigates possibilities of decoloniality, kinship, and healing within an agentic nonhuman environment. This discussion employs a decolonial and ecofeminist lens and situates the novel series within the broader contexts of Native Apocalypse and Indigenous futurisms, while highlighting its contributions to contemporary environmental and girlhood scholarship. Ultimately, by examining how two crisis configurations, namely of disrupted girlhoods and environments, intersect with the Indigenous apocalyptic in-between in the series, this essay explores Indigenous futuristic and decolonial ethnospeculative aesthetics in addressing interconnected issues of girlhood and the nonhuman environment in contemporary American speculative literature.¹

“The first time I met my birth mother,” recounts Rebecca Roanhorse, an Ohkay Owingeh and African American author of speculative fiction, “she gave me two things: a VHS tape of *Surviving Columbus: The Story of the Pueblo People* and a CD of the Cree singer-songwriter Buffy Sainte-Marie” (“Postcards from the Apocalypse” 131)². Describing these recordings as documentations of Indigenous peoples’ resilience and survivance³—“of what it means to face the end of the world and survive. And then to keep surviving, even thriving,

¹ I would like to thank Fritz Bommas and Markus Schwarz, whose friendship and encouragement have made this work possible.

² This fragmented essay was published several months before the release of Roanhorse’s debut novel *Trail of Lightning* (2018).

³ In *Manifest Manners: Narratives on Postindian Survivance* (1994), Gerald Vizenor defines “survivance” as “an active sense of presence, the continuance of native stories, not a mere reaction, or a survivable name. Native survivance stories are renunciations of dominance, tragedy, and victimry. Survivance means the right of succession or reversion of an estate, and in that sense, the estate of native survivancy” (vii).

Copyright © 2025 Hellenic Association for American Studies Digital Publications (Helaasdp). This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution ShareAlike 4.0 International License (CC-BY-SA 4.0). ISBN: 978-618-85422-2-8 (e-book, pdf).

when the world keeps trying to kill you” (131)—Roanhorse draws attention to a particular liminal consciousness that the gifts communicate:

In a way, my birth mother’s gifts were symbolic of Indigenous existence. To be a Native of North America is to exist in a space where the past and the future mix in a delicate swirl of the here-and-now. We stand with one foot always in the darkness that ended our world, and the other in a hope for our future as Indigenous people. It is from this apocalyptic in-between that the Indigenous voices in speculative fiction speak. (131)

Weaving an autobiographical account of her recovering of estranged mother-daughter and ancestral bonds with broader histories and “truth-tellings” (131) of settler-colonial dispossession and Indigenous resurgence, Roanhorse argues that the Indigenous present exists in a complex intertwining with the past and the future, where genocide and sovereignty, destruction and repair, trauma and healing, apocalypse and post-apocalypse exist alongside each other.

Roanhorse’s observation of an “apocalyptic in-between” (131), or an ambiguous Indigenous existence across multiple overlapping temporalities, as well as its figurations in contemporary speculative fiction narratives, points to the broader artistic, literary, and intellectual movement referred to as Indigenous futurisms.⁴ The past two decades have seen a proliferation of speculative texts that extrapolate on apocalyptic world endings,⁵ particularly in the contexts of the Anthropocene and the climate crisis, alongside a significant growing body of Native American writing, both fictional and non-fictional, that articulates Indigenous perspectives on past-future and space-time thinking. According to Grace L. Dillon, authors of Indigenous futurisms interrogate whether science fiction⁶ holds “the capacity to envision Native futures, Indigenous hopes, and dreams recovered by

⁴ Grace L. Dillon coined the term “Indigenous futurisms” in the early 2000s, in reference to science fiction and inspired by Afrofuturisms. Dillon elaborates on it in *Walking the Clouds* (2012), the first anthology of Indigenous science fiction.

⁵ Oxford English Dictionary defines apocalypse as “the end of the current world and associated events” (3.a.) in a theological context, and as “an event resulting in catastrophic damage or irreversible change to human society or the environment, esp. on a global scale; a cataclysm” (3.b.) in a general context. In this essay, I simultaneously engage with both definitions, understanding apocalypse as a large-scale cataclysmic event that disrupts existing world formations.

⁶ Definitions among futurist genres are fuzzy and difficult to pin down. Dillon aims to “distinguish science fiction from other speculative writing typically associated with Native thinking, . . . to return the ‘science’ to sf, which should be recognized as the signature feature of the genre” (7). Throughout this essay, however, I will employ “speculative fiction” as an umbrella term to include all sorts of futuristic writing that asks “what if” and imagines alternate realities that resemble ours.

rethinking the past in a new framework” (2). In an experimental manner and opposing “what ‘serious’ Native authors are *supposed* to write, they have room to play with setting, character, and dialogue; to stretch boundaries; and, perhaps most significantly, to reenlist the science of indigeneity . . . [as] integral to a refined twenty-first-century sensibility” (3). Indigenous futurisms contest western notions of *linear* time, history, knowledge, place, and progress, by reconfiguring space, “both outer and inner,” and time, where “the past . . . is folded into the present, which is folded into the future—a philosophical wormhole that renders the very definitions of time and space fluid in the imagination” (Roanhorse, “Postcards” 132). Thus, these space-time contestations are deeply entangled with Roanhorse’s “apocalyptic in-between” as it emerges in Indigenous speculative fiction. As Dillon writes:

All forms of Indigenous futurisms are narratives of *biskaabiiyang*, . . . the process of “returning to ourselves,” which involves discovering how personally one is affected by colonization, discarding the emotional and psychological baggage carried from its impact, and recovering ancestral traditions in order to adapt in our post-Native Apocalypse world. This process is often called “decolonization” . . . it requires *changing* rather than *imitating* Eurowestern concepts. (10)

Indigenous futurisms reframe the lived histories of settler-colonial violence and trauma while imagining alternative possibilities and futures outside the dominant narratives. In doing so, they engage critical approaches—including decolonial, ecocritical, and feminist frameworks—and employ aesthetics of survivance to enable wide-ranging possibilities for decolonization, kinship, and healing in the present moment. In this light, Roanhorse acknowledges Dillon’s influence on her writing and positions herself among authors of Indigenous futurisms, asserting that “we are rising from the apocalypse, folding the past into our present and writing a future that is decidedly Indigenous” (“Postcards” 136).

Roanhorse’s debut novel series, *Sixth World*, consisting of *Trail of Lightning* (2018) and *Storm of Locusts* (2019),⁷ can be read as a narrative of “returning to ourselves” in a post-Native Apocalypse world, through which a distinct Indigenous present and

⁷ From this point forward, I will refer to these two novels as *Trail* and *Storm*.

presence⁸ emerges. As the rising waters of a planetary climate apocalypse called the “Big Water” leaves “two-thirds of the continent underwater” in a fictional North America, the Navajo cosmology is rebirthed (Roanhorse, *Trail* 70). In this essay, I will argue that *Sixth World* engages in a decolonial reconfiguring of Roanhorse’s “apocalyptic in-between,” stemming from the particularly complex, ambiguous, liminal, and marginalized temporal space of girlhood, as embodied by the series’ young female narrator protagonist. Magdalena “Maggie” Hoskie is an apprentice “monsterslayer . . . [t]rained by Naayéé’ Neizghání himself” (40).⁹ Maggie is caught between the apocalyptic destruction of her past and the vengeful violence of her present—between a disrupted girlhood and a trauma-ridden young adulthood. In envisioning life after a climate apocalypse from Maggie’s perspective, *Sixth World* explores two distinct crisis configurations alongside and in direct connection with each other, namely of the nonhuman environment and of Indigenous girlhoods. Maggie’s disrupted girlhood—and later Ben’s, a younger girl for whom Maggie acts as a guardian in the second installment—not only occurs in the direct aftermath of the ecological crisis of the Big Water but is also deeply entangled with the settler-colonial oppressions that contribute significantly to this crisis itself.

In other words, the multifaceted nature of the Big Water—encompassing historical, cultural, societal, political, economic, and environmental oppressions and devastations—is mirrored in equally complex experiences of (post-)apocalyptic female coming-of-age, intertwining the unfolding ecological crisis with girlhood becomings. While alluding to a broader planetary collapse, the distinctly North American setting further emphasizes how the Big Water poses disproportionate dangers for Indigenous girls, by weaving together histories of the Native Apocalypse with a speculative future that raises new risks for their survival. Throughout *Sixth World*, Maggie is seen confronting the tragic death of her

⁸ Vizenor discusses “survivance” together with “presence” in *Survivance: Narratives of Native Presence* (2008): “The theories of survivance are elusive . . . but survivance is invariably true and just in native *practice and company*. The nature of survivance is unmistakable in native stories, natural reason, remembrance, traditions, and customs, and it is clearly observable in *narrative resistance* and personal attributes, such as the native humanistic tease, vital irony, spirit, cast of mind, and moral courage. The character of survivance creates a sense of native *presence* over absence, nihility, and victimry” (6; my emphasis).

⁹ In *Trail*, “monsterslayer” refers to a powerful hunter with supernatural abilities to eliminate monsters. It is particularly associated with Naayéé’ Neizghání, a legendary hero figure in Navajo mythology: “the Monsterslayer of legend, an immortal who is the son of two Holy People” (6). As his “apprentice,” however, Maggie is “not like Neizghání . . . I’m human, a five-fingered girl” (4, 6).

grandmother and the consequent awakening of her “clan powers”¹⁰ during the Big Water—both of which lead her to believe she has become a danger to her community. As Maggie navigates life after catastrophe as a socially isolated young woman in a devastated environment, struggling to come to terms with her traumatic experiences and newfound supernatural abilities, possibilities for connection, growth, and healing begin to emerge through kinship. Gradually, Maggie becomes a protector for those around her, ultimately reconnecting with her community. Her ultimate decision to “come home” with her chosen family, rather than pursuing further revenge and violence through her clan powers, offers hope for girl futures in the Big Water. In this way, *Sixth World* engages with decolonial ethnospeculative praxis by rewriting Indigenous girlhoods beyond settler-colonial and heteropatriarchal frameworks, offering possibilities for decoloniality, healing, and alternative forms of existence.

Although I am aware that the series has received mixed reviews,¹¹ which both celebrate and criticize its representation of Navajo culture and cosmology, I choose to work with these texts as works of Indigenous futurisms, focusing on their representations of

¹⁰ In *Trail*, clan powers refer to various supernatural abilities that are bestowed upon individuals and passed down through bloodlines within the Diné clan system: “they are gifts from the Diyin Dine’é. That they come from your first two clans only, mother’s first and then father’s. That they manifest in times of great need, but not to everyone, and not everyone is blessed equally” (57).

¹¹ Saad Bee Hózhó, a Navajo writers’ collective of poets and academics, issued an open letter titled “*Trail of Lightning* is an appropriation of Diné cultural beliefs,” criticizing the novel for appropriating and inaccurately depicting Navajo/Diné beliefs and rituals. The collective states that “Roanhorse’s appropriation, especially as an in-law who married into and lived on the Navajo Nation homeland and as an Indigenous relative, is a betrayal of trust and kinship” (par. 11). They highlight several general issues, such as deities being “turned into ‘superheroes,’” and specific violent scenes, including Maggie’s use of “sacred corn pollen as weaponry to do violence, which is completely contrary to our belief system” (par. 7). As a non-Indigenous emerging scholar, I acknowledge that it is not my place to comment on these allegations or on Roanhorse’s identity. Madelyn Marie Schoonover suggests a constructive approach: reading these concerns “in conversation with Gerald Vizenor’s concept of survivance and Indigenous Futurism, as well as genre convention and its merits or drawbacks. This is certainly an area in which Indigenous voices must be prioritised above others” (303). In this context, Roanhorse’s own perspective is illuminating: “I dislike how marginalized authors are so rarely allowed to be fantastical, to have limitless imaginations and to break boundaries. I recently saw a review complaining that [my novel] *Black Sun* did not meet the reader’s understanding of one of the historical cultures it draws from, and I wanted to shake that reviewer and point to the giant corvids and mermaids in the story and ask if they failed to notice the book was fantasy. I don’t think white writers have to deal with that expectation” (Sorg par. 13).

Indigenous *ecogirlhoods*.¹² Accordingly, the following sections first unpack the conceptual frameworks guiding my analysis of Roanhorse’s *Sixth World* series—namely Indigenous futurisms, decolonial ethnospeculative fiction, and Native Apocalypse, alongside discussions of the Anthropocene through an ecocritical perspective, as well as girlhood through intersectional ecofeminist and girlhood studies lenses. Then, the subsequent sections offer a reading of the two novels’ explorations of the apocalyptic in-between, as experienced by the series’ protagonist Maggie, and later Ben. My analysis primarily focuses on the distinct ways the series intertwines the ecological crisis of the Big Water with the disrupted girlhoods of Maggie and Ben, while exploring their emerging and empowering possibilities for connection, growth, and healing through building kinship within an agentic nonhuman environment.

Navigating the Native Girl Apocalypse: Decolonial and Ecofeminist Possibilities of Indigenous Futurisms and Ethnospeculative Fiction

In “The Decolonial Virtues of Ethnospeculative Fiction,” Paula M. L. Moya and Lesley Larkin argue that authors of Indigenous futurisms engage in ethnospeculative storytelling by juxtaposing the continual presence of the settler-colonial past with alternative past, present or future configurations—a practice that holds crucial decolonial merits (233-234). Moya and Larkin define ethnospeculative fiction broadly as “genre fiction (science fiction, fantasy, gothic, horror) written by and/or about people of color that seeks to create alternative worlds—‘elsewheres’ and ‘elsewhens’—that enable new perceptions and facilitate the development of more racially just and life-affirming selves and ways of living” (228). Thus, aligning with Indigenous futurisms, decolonial ethnospeculative fiction pushes the limits of speculative genre conventions and offers alternative retellings of the past and revisions of the future as subversive counter-narratives. According to Dillon, one Indigenous futuristic strategy to challenge both sci-fi tropes and

¹² “Ecogirlhood(s),” or “ecological girlhood(s),” is my own concept through which I analyze, among other things, the intertwining of ecological crisis and girlhood experiences as portrayed in contemporary speculative fiction. I build on this idea alongside my parallel concept of “*ecolescence*,” or “ecological adolescence,” to argue for thinking differently about childhood, adolescence, young adulthood, and both boyhood and girlhood in the context of ongoing ecological crises in the twenty-first century. I have been developing this framework since 2021, and it will be explored and elaborated upon in my upcoming monograph, as its full development exceeds the scope of this essay.

western notions of time and space is a re-envisioning of apocalypse: “It is almost commonplace to think that the Native Apocalypse, if contemplated seriously, has already taken place. Many forms of Indigenous futurisms posit the possibility of an optimistic future by imagining a reversal of circumstances, where Natives win or at least are centered in the narrative” (8-9). A radical reversal of apocalypse is what Adam Spry describes as “a counterapocalypse, a visitation of the same kind of cataclysmic death and suffering on the nation that had brought it to them” (57). For Spry, this portrayal of apocalypse is not solely “a world made scattered, diffuse, and fragmentary,” but rather “an opportunity for the (Native) world to be made whole” (56). Such visions of renewed Native worlds through apocalypse are important, because, as Sandra Cox reminds, “imaginative work of world-building through Indigenous lenses . . . operates as corrective discourses to more widely proliferated colonialist histories about the myth of a ‘vanishing Indian,’ locked in a distant past with no future” (65). Thus, even the “very act of imagining First Nations and Peoples as the survivors of an apocalypse works to situate settler culture as a temporary state to be weathered” (65). Finally, Dillon argues that “Native apocalyptic storytelling, then, shows the ruptures, the scars, and the trauma in its effort ultimately to provide healing and a return to bimaadiziwin.¹³ This is the path to a sovereignty embedded in self-determination” (9). In other words, decolonial ethnospeculative and Indigenous futuristic narratives that engage survival and life during or after an apocalypse, confront settler-colonial violence on racialized lands and peoples, while imagining present and future possibilities for resurgence and repair. They also raise critical questions about accountability: “apocalypse for whom—whose world ends?” (Ashton 86).

Contemporary speculative narratives that employ an apocalyptic framework often situate large-scale destruction within the context of an anthropogenic ecological crisis, characterized by interconnected factors such as environmental degradation, climate change, and their socio-political consequences. Similar to the concept of the Native Apocalypse, Indigenous futurisms’ rhetoric on the Anthropocene and ecological crisis also frames this as a longstanding and ongoing condition—rather than a new phenomenon—deeply rooted in lived histories of settler-colonial violence. Kyle Powys Whyte critiques widespread contemporary portrayals of the Anthropocene in the proliferation of “dystopian

¹³ Anishinaabemowin word for “the state of balance” (Dillon 9).

or post-apocalyptic narratives of climate crises that *will* leave humans in horrific science-fiction scenarios” (“Indigenous Science (Fiction) for the Anthropocene” 225; my emphasis). According to Whyte, such narratives of impending crises “can erase Indigenous peoples’ perspectives on the connections between climate change and colonial violence” (225). In other words, Indigenous perspectives on the climate change confront this as “having already passed through environmental and climate crises arising from the impacts of colonialism,” rather than focusing on anticipating and preventing “a dreaded future movement from stability to crisis” (226-227). “In the Anthropocene, then,” as Whyte contends, “some indigenous peoples already inhabit what our ancestors would have likely characterized as a dystopian future” (“Our Ancestors’ Dystopia Now” 207). Again, Indigenous futuristic and decolonial ethnospeculative narratives can challenge such notions of ecological linearity and stability by re-conceptualizing time and space as spiraling. By drawing attention to the longstanding and ongoing ecological traumas while imagining futures still shaped by ecological crises, these narratives engage in a decolonial reconfiguring that foregrounds healing through ethical relations with the land and its more-than-human inhabitants. In doing so, they also approach the Anthropocene as a complex spiral. Emily Ashton argues that the Anthropocene as a “watchword . . . condenses immensely complex happenings under a single word. It blurs geologic time with human lifespan; it mixes planetary capacity with individualized responsibility” (6). These narratives interrogate and unpack the universalizing condensity of the Anthropocene; they address eco-anxieties, emphasize a fair redistribution of responsibility, and encourage collective action.

Along with this understanding of the apocalypse and the Anthropocene as enduring processes, Indigenous perspectives that emphasize the connections between settler-colonial and heteropatriarchal oppression of women and the nonhuman environment have been central to intersectional ecofeminist¹⁴ scholarship. As Maile Arvin et al. observe, “the

¹⁴ See Karen Warren’s “Introduction” to ecofeminism in *Environmental Philosophy: From Animal Rights to Radical Ecology* (1993): “there are important connections between the domination of women and the domination of nature, an understanding of which is crucial to feminism, environmentalism, and environmental philosophy (Warren). A main project of ecofeminism is to make visible these ‘woman-nature connections’ and, where harmful to women and nature, to dismantle them” (256). Within settler-colonial contexts, the gendering of land as female becomes a strategy of extractive exploitation, framing both women and the nonhuman environment as commodities.

United States is a settler colonial nation-state and that settler colonialism has been and continues to be a gendered process” (8). Consequently, the effects of this gendered oppression on the nonhuman environment and Indigenous peoples, as Lucía López-Serrano points out, “cannot be detangled without an Indigenous feminist perspective” (85). Building on this, López-Serrano argues that “ecocritical readings of Indigenous texts will help displace anthropocentric thinking and re-imagine new systems of relations with the natural world” (88)—a critical practice that foregrounds “intersections between feminism, decolonization, and nonhuman ecological thinking that might develop into a potential Indigenous ecofeminism that truly recognizes Indigenous epistemologies in their full context” (85). Indigenous ecofeminist thought is crucial for understanding the traumas inflicted upon Indigenous lands and peoples, as Sandrina de Finney highlights that settler-colonialism has particularly designated “women and girls as prime targets” (19) of its systemic violence:

Indigenous girls and women have been treated very differently than boys and men by colonial institutions, in part because they were essential to the intergenerational transmission of culture and thus to First Peoples’ sovereignty and continuity. . . . Indigenous girls and women have been seen as property while being degraded and sexualized to justify colonial violence. (27)

As a result, alongside these intersecting perspectives of gender, ethnicity, and the nonhuman environment, age emerges as another complex and challenging category. Young women, or girls,¹⁵ occupying an ambiguous liminal space that resists clear age categorizations between childhood and adult womanhood, are positioned as guarantors of the future—both through cultural associations linking childhood with futurity and through their impending reproductive capacity. Owing to this liminality, they have historically been

¹⁵ For a definition of “girls,” see Anita Harris’ *Future Girl: Young Women in the Twenty-First Century* (2003): “[T]he category of girl is constantly shifting and cannot be linked to a fixed age or developmental stage in life. However, there are some parameters to our shared understandings of the period of contemporary Western young womanhood. . . . Although there is tremendous fluidity in the application of the title ‘girl,’ normative ideas about appropriate female adolescence that serve a wider social purpose have been simultaneously imposed on young women in an homogenizing fashion” (185). For “girlhood studies,” see Allen and Green-Barteet’s “Girls Who Persist and Resist”: “Girlhood studies, then, accounts for the experiences and circumstances of young women, while taking care to acknowledge that there is no universal experience of girlhood. . . . [T]he field increasingly considers girls and girlhood through an intersectional lens, accounting for (or trying to account for) diversity among girls and their experiences of being in the world. Current scholars are also more invested in considering an expanded notion of ‘girl’ as a cultural construct rather than as a biological- or necessarily age-determined identity” (615-616).

relegated to the margins, with their lives, experiences, and needs rendered invisible. In the last decades, girls have not only gained increasing cultural and scholarly visibility through “what emerged in the 1990s as the assertion of ‘girl power’ and the notion of a new, active, powerful and agentic femininity” (Gonick 306) and the concurrent rise of girlhood studies as an academic field, but have also take on leading and front-line roles in contemporary climate activism, exemplified by figures such as Greta Thunberg. However, Claudia Mitchell and Carrie Rentschler argue that “indigenous and racialized girls . . . are still routinely portrayed as ‘exploitable and expendable’ (Downe 2005: 3), appearing far less frequently in media and policy discourse as significant girl citizens than do girls identified with and within white settler colonialism” (5). An Indigenous ecofeminist approach to make visible these intersecting histories of girlhood and settler-colonial violence can be through an attentiveness to “how girlhood is produced and lived in the context of a colonial state” as well as to “Indigenous girls’ everyday processes of resurgence and presencing” (de Finney 19-20). Therefore, I argue that Indigenous futuristic and decolonial ethnospeculative narratives featuring girl protagonists and major characters can similarly provide a meaningful avenue to explore textual representations of girls’ presence and kinship. A narrative attentiveness to how these girls reassert themselves and form meaningful connections is crucial for understanding their embodied girlhoods, because, as de Finney observes, “girlhood is a situated, collective, relational event, intimately connected to place, to other forces, and to beyond-human relations; it involves intensities of place, affect, spirit, healing, embodied contestation, political struggle for sovereignty, and community building” (29-30).

All things considered, I read Roanhorse’s *Sixth World* series as a narrative of Indigenous futurisms imbued with a decolonial and ecofeminist ethnospeculative ethos. The series envisions a post-apocalyptic Native future where the experiences of Indigenous girls amidst the ecological crisis are foregrounded. *Sixth World* offers an imaginative exploration of how Diné girls reclaim agency, connection, presence, and healing through building kinship after a climate apocalypse that dismantles settler colonial states and recovers Indigenous sovereignty. However, neither for the girls nor for the environment is decoloniality an automatic or natural outcome of the mere absence of settler-colonial hegemony. Neither the environment nor Maggie’s disrupted girlhood can be instantly

“fixed.” For Maggie, the path to healing seems as challenging as surviving in the Big Water and hunting monsters, if not more. It is only through her building connections with herself, her community, and the nonhuman environment, that the possibility of healing begins to take shape.

“This wasn’t our end. This was our rebirth”: Apocalypse and Ecological Crisis in Roanhorse’s *Trail of Lightning* and *Storm of Locusts*

Roanhorse’s *Sixth World* envisions a near-future North America, geologically and politically reshaped by the Big Water: “It had been a combination of fire, earth, and ultimately water that had taken the West Coast. . . . By then, the East coast had been suffering through a record hurricane season and there was no help to be had” (Roanhorse, *Storm* 209). The massive scale and simultaneity of these climate disasters—ranging from droughts, wildfires, and earthquakes to hurricanes and floods—collapse the U.S. government, leaving much of the North American land mass uninhabitable. However, the ancestral land of Dinétah, “the land within the embrace of the Four Sacred Mountains,” survives due to its high altitude, and rises as a fully sovereign nation (Roanhorse, *Trail* 22). Although the apocalyptic mode already sets the stage for Maggie’s post-catastrophe life and monsterslayer adventures within, and later beyond, Dinétah’s borders, her first-person narration immediately revisits the Big Water’s causes and the profound transformations that follow. Notably, she emphasizes the “Energy Wars”—a series of conflicts between global powers and multinational corporations over the Earth’s dwindling energy resources—and the resulting extractive devastation as the decisive factors that trigger the great flooding. The Big Water is thus profoundly anthropogenic, echoing the Anthropocene itself. As Andrew Revkin observes, “Anthropocene has become the closest thing there is to common shorthand for this turbulent, momentous, unpredictable, hopeless, hopeful time—duration and scope still unknown” (par. 5). Similarly, the Big Water emerges in the series as an equally ambiguous, complex, and enduring turbulence, marking humanity’s transformative impact on Earth’s geology, ecology, and societies.

However, contrary to the Anthropocene, the Big Water pulls the focus away from the Anthropos in the ecological crisis, by figuring as an independent character in the narrative. While the Anthropocene is often engaged to imply a “complementary pan-

humanity, of the we-are-all-in-this-together sort, that does not always acknowledge differential distributions of safety and harm that accompany climate crisis” (Ashton 6), the Big Water, in contrast, centers the nonhuman environment to emphasize the hegemonic violence that has marginalized, displaced, and isolated its human and other-than-human inhabitants. The very invocation of “the Big Water,” that describes the vast body of flood waters as an agentic being in capital letters, demands accountability from settler-colonial and extractive-capitalist systems that instigated and perpetuated this fragmentation even prior to the flooding. The United States, however, fails to provide any reparations to its citizens under risk. As Maggie recalls, in the period leading to the Big Water, “[t]he federal government had long given up on helping anyone, the message clear that we were all on our own. And on our own, we would die” (Roanhorse, *Storm* 209).

Yet, the Diné reclaim this abandonment and forced isolation as a subversive tool of resurgence by building “the Wall,” a protective barrier ensuring their survival during the Big Water. This event concludes the “Fifth World” and instigates the “Sixth World,”¹⁶ where Navajo gods, witches, and monsters¹⁷ return to co-inhabit the land alongside humans, all within the Wall’s protection:

The Tribal Council approved it back when the Energy Wars first started. Most Diné supported the Wall. We all grew up with stories that taught us that our place was on our ancestral land. . . . Others call the Wall absurd, saying it’s some paranoid attempt at border control that’s destined to fail, just like the wall the doomed American government tried to build along its southern border a few years before the Big Water. (Roanhorse, *Trail* 22)

Maggie’s account not only weaves the Diné’s fictional future with the reader’s present by situating the Wall within broader U.S. histories of westward expansion and immigration, but it also shows the Diné’s interrogation of the Wall’s purpose. Rather than readily accepting disconnection from the “outside” world, the Diné first question if this

¹⁶ According to Navajo mythology, and in *Trail*, multiple worlds have existed since before humanity, as explained by Ma’ii, or Coyote the trickster, “and in them all the worlds have come to an end in a great flood. . . . This last flood, the one you call the Big Water, ended the Fifth World and began the Sixth World. It opened the passage for those like myself to return to the world” (101).

¹⁷ In *Trail*, witches refer to “powerful, men and women who trade their souls for dark magic, who take the shape of night creatures to travel under the cover of darkness, who dress in jewelry raided from freshly dug graves” (34), whereas monsters designate creatures of supernatural and evil origin, whether born or created. Neizghání distinguishes between “monsters” and evil humans, or “Bad Men”, asserting that the latter “are still five-fingereds. To call them monsters is to misname them” (75). Maggie disagrees, claiming “there are plenty of human monsters too, just as twisted and evil as anything supernatural” (75).

isolationism imitates settler-colonial exclusion tactics. In Lorena Bickert's words, however, "as a memorial of failed communication and trust in the face of ecological threats, the Wall is also the physical representation of the boundaries created by colonialist narratives locking Native American perspectives away" (12). Seen this way, the Wall prompts a decolonial critique of imperialistic, anti-immigration, and isolationist politics.

The necessity of the Wall becomes even clearer as Maggie recounts the environmental threats Dinétah faced during the Energy Wars:

The Slaughter had ushered in a heyday of energy grabs, the oil companies ripping up sacred grounds for their pipelines, the natural gas companies buying up fee land for fracking when they could get it, literally shaking the bedrock with their greed. Plus the Feds had outlined some plan to dissolve reservation trust land that would open up Indian Country to prospectors just like they had during Termination. This time the prospectors were multinationals with private armies a thousand times more powerful than the original bilagáana settlers. (Roanhorse, *Trail* 22-23)

These events leading to the construction of the Wall reveal a complex web of associations that spiral time and place, intertwining the Diné's past to lived histories of settler-colonial dispossession. Fictionalized references to the Slaughter on the Plains¹⁸ and the Termination Era¹⁹ not only echo the cataclysmic histories of U.S. extractive capitalist policies across centuries but also extend these as ongoing oppressions into a fictional future shaped by the Energy Wars, foregrounding the continuity of the ecological violence against Indigenous lands and existence. Maggie recalls: "if we wanted to remain Diné, if we wanted to protect our homes, we had to build that wall" (23). The Wall reasserts Dinétah's ancestral and ecological borders, protecting Indigenous life and land from further colonial violence and dispossession; it seeks connection rather than disconnection. Like the Big Water, the Wall also figures as an agentic character, "[taking] on a life of its own" (23). Its foundations consist of "rock from each sacred mountain" and are accompanied by healing ceremonies: "for every brick that was laid, a song was sung. Every lath, a blessing given" (23). Embodying a storied life, the Wall emerges as a nonhuman agent. Rather than confining or excluding those on either side, it merges with the environment as a natural border to protect

¹⁸ Slaughter on the Plains refers to a series of violent events during Westward Expansion and Indian Removal, including the Sand Creek (1864) and Wounded Knee (1890) massacres and the slaughter of millions of bison.

¹⁹ The Termination Era of the 1950s–1960s refers to a period of federal policy aimed at assimilating Indigenous peoples by terminating tribal sovereignty, dismantling tribal governments, and redistributing communal lands.

the land and its relatives from further ecological violence, or a new Native Apocalypse: “I had expected something dull and featureless. A fifty-foot-high mountain of gray concrete, barbed wire lining the top like in some apocalyptic movie. But I had forgotten that the Diné had already suffered their apocalypse over a century before. This wasn’t our end. This was our rebirth” (23). Contrary to Maggie’s expectations, the Wall is vibrant and magical—a living manifestation of the Diné’s reunion with their cosmology.

This seemingly utopian restart that *Trail*’s apocalyptic mode initiates, also invites critical examination. As Spry notes, the cultural restoration enabled by the Big Water might suggest that “decolonization is a natural outcome of imbalances (ecological, technical or otherwise) inherent in settler-colonialism itself” while reproducing the settler-colonial notion that “the essence constituting indigenous identity lies outside of secular, modern time” (62). Spry warns against the oversimplification of the immense labor required for decolonization, arguing that “the idea that traditional Diné culture simply needs the right apocalyptic circumstance to reassert itself disregards the hard work of real Diné fighting to preserve it. . . . Centuries of colonial violence have left a mark on indigenous people so indelible that it may take more than a cataclysmic flood to wash it away” (63). While I agree with Spry’s concerns, *Trail* demonstrates a potential for decoloniality beyond its apocalypse. Maggie cynically observes that the climate apocalypse has not changed much in day-to-day life, asserting, “generally Dinétah is just as isolated and insular as it was before the Big Water, and most locals don’t seem to notice either way” (Roanhorse, *Trail* 22). This is further reinforced in *Storm*: “Strange that our isolation made the transition to a post Big Water world easier when before I’d only ever seen it as a punishment” (210). Thus, while the narrative reclaims forced isolation as a subversive power, it also shows its lingering effects on the people. The Diné also continue to struggle with the destruction caused by the global climate catastrophe: “I mean, climate change was Florida flooding and California drought. Not two-thirds of the continent underwater” (Roanhorse, *Trail* 70). Moreover, the Big Water introduces paradoxical and extreme climate realities for the Diné, as Maggie teases, “the great joke of the Big Water. The rest of the world may have drowned, but Dinétah withers under a record-breaking drought” (37). Resources are scarce too, with monthly water rations, limited trade, and rare luxuries like coffee or sugar: “I can’t remember what coffee with sugar tastes like” (28). Therefore, the speculative

apocalyptic history Maggie recounts echoes lived experiences, challenges the Western sci-fi trope of an ecological apocalypse emerging without context, and rejects it as a mere narrative reset while calling for accountability.

Although the Wall shields Dinétah from external threats, Maggie warns that “sometimes the worst monsters are the ones within,” pointing to the continuing fragility of life in the Sixth World (23). Indeed, even though Dinétah survives and thrives after the apocalypse, life within the Wall is far from utopian, as Maggie grapples with newly emerging internal conflicts. The reawakening of Diné cosmology brings back gods, witches, and monsters as well as clan powers in humans—all of which carry inherent dangers. Maggie’s supernatural speed and aptitude for killing, triggered by the Big Water, make her both a powerful monsterslayer and a social outcast. She fights supernatural threats both within and beyond the Wall to earn a living and restore balance in the Sixth World, all while grappling with these powers and the trauma that led to their emergence. Consequently, even a magical re-birth of Dinétah does not automatically heal the land nor undo the generational traumatic history of settler-colonial occupation. On the contrary, for Maggie, the Big Water intensifies the need to reconcile her disrupted girlhood and clan powers—two facets of her identity she believes align her with the monsters she hunts. Like Dinétah, “isolated from the rest of the world,” Maggie also seeks connection, healing, and balance within the Wall (22).

“Chíníbaá’, . . . girl who comes out fighting”: Girlhood, (Eco-)Disrupted

Against the backdrop of the ecological crisis of the Big Water, it is the crisis of girlhood that comes to the foreground in the series. Although Dinétah is shielded from outer threats, inside its borders are various monsters, militant gangs, and people with clan powers at large. Young Diné women, in particular, seem to be the most precarious subjects to these threats within the Wall. Throughout *Trail* and *Storm*, Maggie is seen dealing with her disrupted girlhood in flashbacks, while progressively becoming a protector for other girls that she encounters. On a more immediate level, these first-person flashbacks serve as a common speculative strategy, teleporting the reader back to the Big Water, gradually revealing its history and effects. Perhaps more importantly, they symbolize Maggie’s fragmented identity, and highlight her struggles with her transforming personality, grief, and post-traumatic stress. Maggie’s self-imposed isolation from her community after the

Big Water thus closely parallel Dinétah’s isolation and internal issues. It is only by learning to trust and building kinship that Maggie recovers her sense of belonging. In this section, I will argue that while *Trail* explores Maggie’s shift from patriarchal isolation and disruption of girlhood toward building healthier connections with the male figures around her, in *Storm* this focus shifts to female kinship and healing through chosen sisterhoods.

At the beginning of *Trail*, Maggie is unsure of her place within her community, having lost her grandmother to a violent death during the Big Water several years earlier and recently being abruptly deserted by her mentor and celebrated Diné hero, Neizghání the Monsterslayer. As a young woman in her early twenties and now a solo monsterslayer, Maggie inhabits an ambiguous space on the verge of adulthood—caught between girlhood and womanhood, humans and monsters, trauma and healing, being an insider and an outsider. Her life is irreversibly altered by the Big Water, not only in an ecological sense as the previous subsection argues, but also via loss of family and childhood—a shift that figures as an apocalypse of a personal scale. Thus, her interactions with people from her community are characterized by guarded caution and lack of trust, as well as emotional and physical distance. When commissioned by a family to rescue their young daughter who has been kidnapped by a monster, Maggie feels uncomfortable and defensive as she enters their house: “I’m no hero. I’m more of a last resort, a scorched-earth policy. I’m the person you hire when the heroes have already come home in body bags. . . . My reputation obviously precedes me, and not all of the looks are friendly” (2). She quickly distances herself from the idea of being people’s champion, arguing that summoning her is more of a desperate measure. Maggie is convinced that others perceive her monsterslayer services negatively, interpreting her own presence as an unsettling sight. Although she uses her powers inherited from her clans, “Honágháanii, born for K’aahanáanii,”²⁰ to eliminate supernatural threats against humans, she views herself more as a killer than a protector. When the mother asks if Maggie can save her daughter, Maggie reflects, “Can I? That’s the real question, isn’t it. What good are my skills, my clan powers, if I can’t save her? ‘I can find her,’ I say. And I can, no doubt. But saving and finding are two different things” (2). Despite her confidence, it is clear that Maggie deeply struggles with the purpose and responsibility of her clan powers, partly because they were triggered by her witnessing the death of her

²⁰ In *Trail*, Honágháanii translates to “Walks-Around” and K’aahanáanii to “Living Arrow” (58).

grandmother, whom she was unable to save. The resulting guilt creates a tension between her talent in tracking and killing monsters and her failure to help loved ones, ultimately alienating Maggie from her community in a “self-imposed isolation” (4).

Aside from guilt, Maggie’s emerging adult womanhood, combined with her mentor’s mysterious departure, significantly contribute to her feelings of loneliness and shame. Observing the family’s skepticism regarding her clan powers and their reluctance to pay for her services, Maggie wonders if they hoped to reach Neizghání through her, reflecting, “Maybe they don’t want to pay because I’m a woman. Maybe because I’m not Him” (4). Without her teacher, Maggie is also uncertain about the significance of her powers and her identity as an apprentice monsterslayer, feeling like an impostor. Her trauma-induced guilt and self-doubt drive her to seek Neizghání’s approval and affection—romantically as well—with whom she finds a new sense of purpose in hunting monsters, saying, “Neizghání was the only thing that I had that makes me worth anything at all” (234). These feelings are further complicated by the confusion and rejection surrounding his announced departure, which surface when a young boy tells Maggie that she is famous: “I snort. ‘Famous, huh?’ ‘The girlfriend of the Monsterslayer.’ My mouth turns down in a hard frown. ‘I am not his girlfriend.’ He looks at me, disappointed. *You and me both*” (18). Implicitly, both Maggie and her community believe that it is her proximity to the Monsterslayer himself, as an older male hero figure, that legitimizes her ambiguous standing as a young female monsterslayer. Thus, without any connection to Neizghání, Maggie identifies less as a hero and more as a social outcast. According to Siepak, this mythological framework of the novel—where a strong female protagonist is apprenticed by a deity to fight supernatural monsters—does not offer a utopian vision for women; on the contrary, she asserts, “being a woman is precarious” (69). Siepak argues that Maggie’s memories of abandonment and abuse illustrate how “[v]iolence is then strongly identified with masculinity, which creates a sense of a brutal affirmation of patriarchal structures” (70). In turn, the narrative “attempts to restore the position of women in Indigenous communities, as well as emphasize the importance of including women’s issues in the decolonial struggle” (69). Given the emphasis on youth, femininity, and similarity of experiences with patriarchal violence throughout the narrative, I would add to Siepak’s observation that being a “girl” in the Big Water is even more precarious.

In other words, the Indigenous apocalyptic in-between in *Sixth World*—caught between dystopian and utopian impulses, destruction and survival, oppression and sovereignty, trauma and healing—is particularly explored through the marginalized figure of the girl. Through Maggie’s in-betweenness, the narrative foregrounds issues of Indigenous girlhood and girl voices in the ecological crisis from a decolonial lens. Maggie encounters several girls throughout her journey, both her age and younger than she is, and in all of these encounters, she recognizes the parallels between her own memories of violence and loss and those of the girls. In *Trail*, Maggie is skeptical about a future in which girls, like herself and the family’s kidnapped daughter, can survive violence inflicted by monsters. When she eventually locates the girl, who “can’t be more than twelve years old” (14), her youth and vulnerability are immediately juxtaposed with patriarchal oppression that erases girl bodies: “The monster looks like a man. . . . The bulk of his body hides the girl from view, but I can hear her. A low whimpering mewing as his mouth works at her neck and she begs him to stop” (9). Witnessing this cannibalistic act, Maggie is reminded of the traumatic memory from her sixteenth birthday during the Big Water, when “a witch who led the pack of monsters” (34) broke into her grandmother’s house: “The remembered feel of a man’s weight holding my own body down, blood thick and choking in my mouth as powerful fingers grip my skull and slam my head into the floor. A strong smell of wrongness in my nose” (9). Even in a rebirthed Dinétah, Indigenous girls, marginalized across age and gender, remain vulnerable to patriarchal violence that assumes a monstrous form.

When Maggie approaches the girl—“the same dark hair, the same brown skin and broad angular face” (14)—it is almost as if she talks to her younger self: “‘Even if you survive, the infection is only going to get worse. You’ll have to fight it all your life. It will dig into you, take you over. . . . It’ll make you . . .’ *Something monstrous*, I want to say” (15-16). Maggie speaks from experience, implying that she has been fighting her “infection” ever since that encounter with the witch’s evil: “Neizghání once told me that evil was a sickness. . . . It was real, *physical*, more like an infectious disease. And you could catch evil if something evil got *inside* you. . . . And if that happened, you ran the *risk* of becoming just another monster” (14; my emphasis). Here, evil as body-penetrating and corrupting monstrosity is juxtaposed with the vulnerability of the adolescent female body,

and emerges as a gendered process. The girl body holds an ambiguous space between childhood and emerging womanhood, and being touched by monsters and witches, who resemble men, both Maggie and the girl step into an added liminal existence between humanity and monstrosity. According to Neizghání, Maggie never survived her encounter with the witch: “He told me I had some of that evil in me, that I’d been touched by what happened the night he had found me” (14). Her mentor’s underlying lesson is that girls cannot physically or spiritually survive violence at the hands of monsters, and they pose a threat to others.

Consequently, both Maggie and the girl are “[s]imultaneously pathologized and criminalized for colonial violence” (de Finney 28). Their trauma is represented as ungrievable, which “engenders Indigenous girl bodies as ‘ruined for life’” (27). Maggie feels shame for surviving the attack without saving her grandmother and the following changes in her body, both due to her clan powers. Her avoidance of company is directly related to this process of marginalization, leading to her inability to separate herself from her trauma: “A braver girl, a smarter girl, would fight. . . . Find a way to kill them all and save her grandmother. Be a hero. But I’m not that girl” (Roanhorse, *Trail* 108). Neizghání’s unsympathetic and detached attitude toward Maggie also further isolates her from her community and humanity, informing most of her opinions on herself, the primary one being that her clan powers pose a danger to others as they manifested through evil: “He tells me . . . he is honored to have been there at my rebirth. He calls me ‘Chíníbaá,’ a traditional Diné name that means ‘girl who comes out fighting.’ . . . He explains to me that I am touched by death now and that it’s changed me” (110). In this sense, although Dinétah has survived the apocalypse, survival might not be an option for Diné girls, as their monsters lurk within. Maggie neither believes that she can control her powers nor that she can use them to help others. Maggie perceives Neizghání’s departure as a direct confirmation of her growing monstrosity, reflecting “your mentor turn[s] from you in disgust, your bloodlust so terrible that even he, a warrior of legend, cannot fathom what drives you” (59).

The ecological backdrop of the Big Water is always present in these violent encounters; it is the extractive violence of the Energy Wars that triggers the Big Water, awakening gods, witches, monsters, and clan powers in humans. Similar to the restart that the Big Water enables, Maggie’s personal apocalypse also becomes a rebirth, marked by

the emergence of a new girlhood, “Chíníbaá”—one that is “born out of violence and blood” (110). Maggie refuses to return home for healing ceremonies, thinking she has no home left, instead, she chooses to fight monsters to suppress her trauma: “as long as I don’t pick at the memories, as long as I use them to fuel my savagery and lock them away in the dark places inside me when I am done, I am okay” (110). Although cutting all contact with the outside world initially seems like the safer option, Maggie truly faces her trauma and isolation after her mentor leaves: “I am left alone to hunt the monsters by myself, both the visible kind that steal away little girls to eat their flesh, and the invisible kind that live under the skin, eating at the little girl from inside” (111). Monster then stands in for the various forms of lingering settler-colonial violence that Indigenous girls continue to face: “epistemic and ontological violence; territorial, geographic, and spatial violence; embodied/material, affective, cognitive, and spiritual violence; and political, economic, and sociocultural violence” (de Finney 20).

In a way, isolation itself becomes Maggie’s monster, whose power she can overcome by recovering kinship with human and more-than-human others. As Maggie’s only friend, Grandpa Tah, counsels her, “‘Diné way is to find the connections—between yourself and your relatives, yourself and the world. Diné way of life is k’é, kinship, like this’—he weaves his fingers in and out, bringing his hands together, . . . ‘but you, your life is all separate’” (Roanhorse *Trail* 30). After Neizghání’s departure, Maggie starts noticing other possibilities for connection, both with herself and with those around her. These moments arise even as she hunts monsters and navigates various environments, but Maggie’s perspective begins to shift toward her relationship with these surroundings. When on the hunt, Maggie even notes, “I forget I am here to kill something”:

Pine trees scent the air, their fallen needles crunching softly under my feet. Insects drone happily in the cooling evening, buzzing near my ears, attracted to my sweat. There is a beauty here, a calmness that I savor. I will savor the bloodshed, too, no doubt, but this balance between earth and animals and self feels right. Feels true.
(8)

Maggie grounds a balanced “self” in the connections between the forest, its smaller inhabitants, and her presence, while recognizing that her appreciation of this moment does not have to conflict with her clan powers. Similarly, in her growing friendships with Grandpa Tah, and later with his grandson, Kai, she begins to see an alternative self beyond

evil—a self who can be a daughter, friend, sister, and hero: “[Tah]’s the closest thing I have to a living relative. We aren’t even related, aren’t even the same clan, but he calls me daughter. That means something” (25). These relationships are initially marked by fear of rejection and being seen as monster: “Trauma, scars. That’s what I know, what I’m good at. . . . I feel ridiculous for even thinking Kai and I could be friends, more than friends” (124). As she learns to trust and accept help from Kai, however, putting aside her fears, Maggie begins to revise her self-as-monster narrative: “Whatever happened to you may have been evil, but you aren’t evil. And out of that evil deed came a blessing, not a curse. . . . Tah thought that . . . you would save our people. He believed you were a hero” (233). Such moments of confrontation with Kai and later with her growing circle of friends enable Maggie to start re-evaluating her “Chíníbaá” origin story, and offer a different path to viewing her clan powers through kinship, “one that can be used to protect just as much as destroy” (234).

The second book, *Storm*, further explores Maggie’s process of emotional growth, self-awareness, and healing, shifting the focus to female kinship. The narrative follows several months after the events of *Trail*, when Maggie confronts and ultimately defeats Neizghání. As Maggie tracks Kai’s mysterious disappearance, rumored to kidnapped by a powerful cult leader who can control locust swarms, her path crosses with Ben, a teenage girl with clan powers. Maggie learns that Ben’s powers, which give her a supernatural ability to track people by smelling their blood, have also been triggered through a traumatic and violent event. Like Maggie, Ben feels guilty for surviving: “I used to wonder why I survived the Little Keystone Massacre when my parents and everyone I knew at the camp died. It never felt right” (110). Maggie immediately notices the environmental context of Ben’s trauma as well as its connection to the Big Water, remembering how families “sitting in protest at the site of a proposed pipeline through Osage territory” were attacked by supporters of oil companies during the Energy Wars (110). As Ben navigates the grief of losing her family, Maggie finds herself wanting to offer consolation and compassion, while noticing her inability to do the same for herself: “I know that shame. It’s all too familiar. And even though I don’t believe it about myself and my nali’s death, I try to offer her something. ‘You were a child.’ She’s still a child but I don’t tell her. She’s lived through the kind of thing that strips one’s childhood away” (111). Maggie and Ben both share

disrupted girlhoods, marked by memories of violence and feelings of guilt, and Maggie notices the similarities in their experiences. Like Maggie, Ben also decides that her new purpose will be to seek revenge through further violence, by killing the cult leader responsible for the death of her last remaining relative. Maggie agrees to help her search for the cult, partly to protect Ben, and she even accepts helps from others, sharing her new caregiving responsibilities. When both girls grow close to Rissa, another girl whose brother has also been kidnapped by the cult, Maggie wonders at being surrounded by so many people for the first time: “When did I become part of a team? Hell, when did I become its leader?” (96). Indeed, while taking on the role of caregiver for Ben and the responsibility of leading their expanding team with Rissa’s addition, Maggie chooses to build connections over isolation and uses her clan powers to protect these. She learns to trust others and form new relationships: “Besides Kai, I haven’t had friends since I met Neizghání. Definitely not family. And I’m not sure what that means, what’s expected of me to be Rissa’s friend. But I’m willing to try” (203). By the end of *Storm*, Maggie and Ben have already re-evaluated their reasons for using their clan powers to seek revenge:

[Ben:] “I think I’d rather just get out of here and go home. With you and Rissa alive. So if it means you could get hurt... Your life means more to me than his death. Does that make sense?”

A warmth spreads through my chest, that same feeling I got back at Twin Arrows when Rissa offered me her friendship. “It makes a lot of sense.”

“Okay, then.” She presses both hands over her heart . . . “It means come home safe. It means we are family.” (297)

By choosing to depend on one another rather than isolation and violence to fuel their clan powers, both Maggie and Ben find belonging in their kinship, ultimately forming a chosen family. Maggie holds on to these growing feelings of belonging in moments of crisis, even jokingly intimidating an opponent, “Didn’t anyone tell you . . . I’m the crazy one in the girl gang” (252).

Maggie and Ben’s “coming out” in their apocalyptic in-between is marked by an initial state of imbalance and disconnection from their communities. Their disrupted girlhoods parallel the ecological crisis of the Big Water; the patriarchal violence, loss of self-worth, and fractured familial ties they experience are deeply entangled with settler-

colonial structures that lead to ecological disaster and generational trauma in Dinétah. They both internalize the violence they endured, perceiving their clan powers as manifestations of their disrupted girlhoods evolving into monstrosity. Through her commitment to her friends and her compassion for Ben, Maggie distances her identity from her encounter with evil, realizing that her clan powers can also be used to help her community, and, in doing so, rediscovers her connection to her land and people. This shift is evident even as she ventures beyond Dinétah's borders, affirming, "we Diné are part of this land as much as any mountain or valley or stream. We are it, and it is in us" (126). Maggie no longer sees herself as isolated or monstrous but as a "simple five-fingered girl," embracing a relational identity (126).

Conclusion

Trail of Lightning and *Storm of Locusts* in Roanhorse's *Sixth World* series imagine disrupted Indigenous girlhoods in relation to devastated nonhuman environments. "Chíníbaá'," or "girl who comes out fighting," initially portrays Maggie as an isolated figure in eco-crisis, suffering from trauma in the Big Water. However, she recovers agency and empowering possibilities of resisting the settler-colonial and heteropatriarchal structures that have disrupted and defined Indigenous girl identities—a transformation only made possible through the kinships she builds along the way. By presenting Maggie and Ben as ambiguous figures and agents of hope—caught between disrupted girlhoods and emerging adulthoods, as well as between humans and monsters—*Sixth World* creates a counterapocalyptic narrative that celebrates Diné girlhood as an embodied subjectivity, while emphasizing its diversity, resilience, and survivance.

As a work of Indigenous futurisms, *Sixth World* bends narrative time on itself, weaving together the settler-colonial past and a speculative future grounded in Diné sovereignty. It offers a decolonial ethnospeculative and ecofeminist commentary on the intertwined oppressions of Indigenous girls and of the nonhuman environment, and envisions possibilities for healing for both. Maggie's journey reflects, to remember Dillon's words, "the process of 'returning to ourselves,'" through confronting trauma and adapting in the post-Native Apocalypse (10). Importantly, Maggie neither tries to "save the world" nor reverse the Big Water's effects to a previous settler-colonial way of life. Instead, she acts as a protector for her chosen family and community, defending those vulnerable

to the Big Water’s lingering effects. Healing, then, is a communal and relational process, aptly captured in the series’ closing scene: Maggie sits outside her trailer next to Kai, the joyful voices of Ben, Tah, and Rissa drifting from inside, and quietly reflects, “For once, I think I’m okay” (Roanhorse, *Storm* 309). This moment encapsulates the series’ broader visions—making visible ongoing processes of resilience, survivance, and kinship that resist erasure, and opening space for Indigenous girl futures.

Works Cited

- Allen, Amanda K. and Miranda A. Green-Barteet. “Girls Who Persist and Resist: Resistance in Girlhood Studies and Girls’ Literature.” *Women’s Studies*, vol. 52, no. 6, 2023, pp. 611–626.
- “Apocalypse, N., Sense 3.a. and Sense 3.b.” Oxford English Dictionary, Oxford UP, June 2025, <https://doi.org/10.1093/OED/1200073148>. Accessed 23 July 2025.
- Arvin, Maile, et al. “Decolonizing Feminism: Challenging Connections between Settler Colonialism and Heteropatriarchy.” *Feminist Formations*, vol. 25, no. 1, 2013, pp. 8-34.
- Ashton, Emily. *Anthropocene Childhoods: Speculative Fiction, Racialization, and Climate Crisis*. Bloomsbury Academic, 2023.
- Bickert, Lorena. “Heroes in Body Bags: Renegotiating Heroism in Rebecca Roanhorse’s *Trail of Lightning*.” *Current Objectives of Postgraduate American Studies*, vol. 21, no. 1, 2020, pp. 7-24.
- Cox, Sandra. “Decolonial Speculative Fiction: Indigenous Resistance in *The Marrow Thieves*, *Trail of Lightning* and *Storm of Locusts*.” *MOSF Journal of Science Fiction*, vol. 5, no. 1, 2021, pp. 65-79.
- de Finney, Sandrina. “Under The Shadow Of Empire: Indigenous Girls’ Presencing as Decolonizing Force.” *Girlhood and the Politics of Place*, edited by Claudia Mitchell and Carrie Rentschler, Berghahn, 2016, pp. 19-37.
- Dillon, Grace L. “Imagining Indigenous Futurisms.” *Walking the Clouds: An Anthology of Indigenous Science Fiction*. The U of Arizona P, 2012, pp. 1-12.
- Gonick, Marnina. “Indigenizing Girl Power: The *Whale Rider*, Decolonization, and the Project of Remembering.” *Feminist Media Studies*, vol. 10, no. 3, 2010, pp. 305-319.
- Harris, Anita. *Future Girl: Young Women in the Twenty-First Century*. Routledge, 2003.
- López-Serrano, Lucía. “Indigenous Ecofeminism? Decolonial Practices and Indigenous Resurgence in Lee Maracle’s Works.” *Canada & Beyond*, vol. 12, 2023, pp. 85-101.
- Mitchell, Claudia and Carrie Rentschler. “Introduction: The Significance of Place in Girlhood Studies.” *Girlhood and the Politics of Place*, edited by Claudia Mitchell and Carrie Rentschler, Berghahn, 2016, pp. 1-18.

- Moya, Paula M. L., and Lesley Larkin, "The Decolonial Virtues of Ethnospeculative Fiction." *Cultivating Virtue in the University*, edited by Jonathan Brant et al., Oxford UP, 2022, pp. 226-250.
- Revkin, Andrew C. "An Anthropocene Journey." *Anthropocene Magazine*, Oct. 2016, <https://www.anthropocenemagazine.org/anthropocenejourney/>. Accessed 23 July 2025.
- Roanhorse, Rebecca. "Postcards from the Apocalypse." *Uncanny Magazine*, no. 20, Jan. 2018, pp. 131-136. <https://www.uncannymagazine.com/article/postcards-from-the-apocalypse/>. Accessed 12 Sep. 2025.
- . *Trail of Lightning*. The Sixth World Series. Hodder, 2018.
- . *Storm of Locusts*. The Sixth World Series. Hodder, 2019.
- Saad Bee Hózhó. "Trail of Lightning is an Appropriation of Diné Cultural Beliefs." *Indian Country Today*, 5 Nov. 2018. <https://web.archive.org/web/20210221054512/https://indiancountrytoday.com/opinion/trail-of-lightning-is-an-appropriation-of-din%C3%A9-cultural-beliefs-4tvSMvEfNE-i7AE10W7nQg>. Accessed 23 July 2025.
- Schoonover, Madelyn Marie. "Indigenous Futurisms and Decolonial Horror: An Interview with Rebecca Roanhorse." *Gothic Studies*, vol. 24, no. 3, 2022, pp. 295-303.
- Siepak, Julia. "Dimensions of Decolonial Future in Contemporary Indigenous Speculative Fiction: Louise Erdrich's *Future Home of the Living God* and Rebecca Roanhorse's *Trail of Lightning*." *Anglica: An International Journal of English Studies*, vol. 29, no. 1, 2020, pp. 57-74.
- Sorg, Arley. "Living Raw and Out Loud: A Conversation with Rebecca Roanhorse." *Clarkesworld*, no. 169, Oct. 2020. https://clarkesworldmagazine.com/roanhorse_interview/. Accessed 23 July 2025.
- Spry, Adam. "Decolonial Eschatologies of Native American Literatures." *Apocalypse in American Literature and Culture*, edited by John Hay, Cambridge UP, 2020, pp. 55-68.
- Vizenor, Gerald. *Manifest Manners: Narratives on Postindian Survivance*. Nebraska UP, 1994.
- . *Survivance: Narratives of Native Presence*. Nebraska UP, 2008.
- Whyte, Kyle Powys. "Indigenous Science (Fiction) for the Anthropocene: Ancestral Dystopias and Fantasies of Climate Change Crises." *Environment and Planning E: Nature and Space*, vol. 1, no. 1-2, 2018, pp. 224-242.
- . "Our Ancestors' Dystopia Now: Indigenous Conservation and the Anthropocene." *The Routledge Companion to the Environmental Humanities*, edited by Ursula Heise et al., Routledge, 2017, pp. 206-215.

***After the Ruin: Narrating Ecological Disaster and Envisioning Communal Restoration in Thomas King's *The Back of the Turtle* (2014)*¹**

Niki Grigoria Karamanidou
Aristotle University of Thessaloniki

Abstract

The present research project offers a fresh perspective in regard to the representation of Native land, environmental destruction and environmental rights, contributing to the rich body of works addressing these issues. It aims at providing an ecocritical analysis of the novel *The Back of the Turtle* (2014), written by Native Canadian author Thomas King. Emphasis is placed on what Rob Nixon has defined as “slow violence” and the complex interrelation between identity, environmental destruction, and the active struggle against capitalist appropriations of Native land. Through Nixon’s theory I examine King’s critique against the capitalist appropriation and pollution of Native land which represents a form of slow violence. More specifically, the current paper investigates how the novel addresses the repercussions of a disastrous toxic spill, “The Ruin,” which has impacted significantly on the members of the Native community by destroying the local ecosystem. Furthermore, the paper explores the move from dislocation and alienation to a proactive cultural reclamation of space through storytelling, traditional singing and dance. Finally, this paper demonstrates that in *The Back of the Turtle*, King promotes the importance of human agency and responsibility against neo-imperial schemes that intend to appropriate Native land.

Written in 2014, Thomas King’s novel *The Back of the Turtle*, comes to join a number of acclaimed literary productions that introduces, examines and analyzes through the literary medium and conventions the ever-growing concern of climatic change, environmental destruction and their effect on Native communities as well as the communities’ well-being and cultural traditions. This body of literature, such as Linda Hogan’s *Solar Storms* (1995) and Leslie Marmon Silko’s *Gardens in the Dunes* (1999) recognizes the need for more land-based and culturally-based practices which can support and restore afflicted communities. Through the employment of a compelling narrative that introduces an almost apocalyptic environmental destruction in a Native Canadian community, the creation of complex, dynamic characters that address this predicament and the critique of powerful, white-held corporations that are responsible for the destruction of Native land, King provides a literary work that promotes social awareness on the environmental

¹ Though original in conception and thematically distinct, this essay derives, in part, from my MA thesis titled “Negotiating Native Canadian Identity on the Brink of Environmental Destruction: Exploring Thomas King’s *Green Grass, Running Water* (1993) and *The Back of the Turtle* (2014)” at Aristotle University, 2023. My thesis is available at <http://ikee.lib.auth.gr/record/348634/files/?ln=el>. Copyright © 2025 Hellenic Association for American Studies Digital Publications (Helaasdp). This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution ShareAlike 4.0 International License (CC-BY-SA 4.0). ISBN: 978-618-85422-2-8 (e-book, pdf).

disaster inflicted on Native land and encourages active resistance against this form of violence, as this paper argues.

Thomas King's *The Back of the Turtle* connects environmental damage to the destruction of Native communities. In *Slow Violence and the Environmentalism of the Poor* (2013), Rob Nixon argues that "stories of toxic build up — and accelerated species loss due to ravaged habitats and scientifically convoluted cataclysms in which casualties are postponed" (3). The destruction of the Native Smoke River reserve and the settler Samaritan Bay area, are discussed early in the novel by King, in order to exemplify how the potential destruction of habitats and species will not always be a far-fetched scenario. This is achieved through the introduction of the main character Gabriel Quinn who is presented wandering around the deserted beach. Jace Weaver has argued that indigenous cultures "suffer from anthropogenic climate change in three significant ways: (1) loss of territory and habitat; (2) damage to sacred sites; and (3) diminution or loss of culturally salient plant and animal resources" (326). Weaver's argument on the loss of habitat and consequently the loss of fauna and flora is best reflected in Gabriel's observation that "all that remained of that community were the bleached bodies of barnacles still bound to the rock. As they had been in life" (King 5), which underlines the stillness and death that have consumed the community after "The Ruin." The incident referred to as "The Ruin" is presented in the novel as a toxic spill that has polluted the local habitat and wiped out its flora and fauna.

Additionally, Weaver's comment on the impact of climate change and environmental destruction is also vocalized by the character of Mara Reid, the second main character in King's novel. Mara, who is one of the survivors of the toxic spill which afflicted the Smoke River Reserve, confirms this account of destruction offered by Gabriel and further enhances its impact as she recalls "the days when tourists flocked to the Bay for the season — how the town swelled with activity and noise" (49). Mara's pursuit of a career as a painter, is the reason she has survived the toxic spill, as the character had to move to Toronto and wasn't in the reserve during its devastation. However, Mara has lost her entire family in the toxic spill that wiped out most of the local population and she has been battling with depression ever since. Indeed, through her confession that "when her mother and grandmother died her world had taken a tumble,

cracked apart” (73), Mara underlines the importance her family and community held for her personal growth and well-being. Simon Ortiz stresses the importance of communal ties in Native communities explaining that “[o]ur community holds us like our family; our family is our community” (289). Indeed, as Mara provides an accurate and realistic account of the repercussions of environmental destruction on both a personal and a communal level, she embraces the argument presented by Ortiz that individual prosperity goes hand in hand with communal prosperity.

Furthermore, the purposeful juxtaposition of Mara’s memory of the bustling town, which used to be full of life and potential, to Gabriel’s account of devastation, further stresses the gravity of the situation. More specifically, her admission that her nostalgic memory of the city’s liveliness belongs to the past and that at present “[a]ll [is] gone” (49), denotes a sense of futility and despair that later shifts throughout the novel towards a more optimistic one. The destruction of Native land with the physical collapse or decimation of Native bodies has been linked in the seminal work of Jobb Arnold (103). In *The Back of the Turtle*, there appears to be a direct connection between the environmental pollution in the Smoke River reserve and the death of its community members. This connection becomes visible through Gabriel’s description of the reserve as a desolate area, whose entrance “was blocked by a derelict school bus” (King 97). It is interesting to observe that the authorities have forbidden any attempts to revive this desolated space of apocalyptic destruction, and this is evident in the presence of “a large wooden sign bolted to post sets in the ground [which read] ‘Restricted Access Area’” (97). Furthermore, as Mara recounts that “the government had forced the surviving families off the reserve — [they] had been relocated — as far away from Samaritan Bay as possible” (156), the narrative further addresses the systematic effort of the authorities and in extent of the settler nation state to disrupt and prevent the empowerment of Native communities. To be more specific, non-Native authorities exploit the destruction of the land in order to take advantage of the desolated land and disempower the Native community’s sovereignty. Moreover, the settler nation state appears to disavow through the aforementioned actions the community’s rightful claims to the land, which is already threatened by the toxic spill.

In *The Back of the Turtle*, King explores the ethics of science and its relation to the growing number of polluted and desolated landscapes of terror. After Gabriel’s

multiple efforts to kill himself on the beach of the Samaritan Bay, the reader suspects that he is partially responsible for the destruction of the Smoke River Reserve. Towards the end of the novel, this community is revealed to be the one where his mother grew up. Gabriel's involvement in the toxic spill and the consequent devastation can be traced to his development of a bacterium, whose "genetically modified version, SDF 20, turned out to be an environmental nightmare" (42). In particular, Gabriel's employment in Domidion as "the *official* head of Biological Oversight," comes to haunt him after the event of the Ruin, which leads him to abandon his position in the corporation and disappear (89). In her essay on King's novel, Irene Morrison argues that "Gabriel's obsessions provide the primary vehicle for King's condemnation of nuclear and chemical sciences" (47) and particularly for King's criticism against the financial exploitation of those scientific fields. Indeed, the authorial choice to include a Native Canadian main character, whose blind trust in corporate organizations leads his community to decay is rather meaningful.

Through a variety of flashbacks in the novel, Gabriel acknowledges his growing alienation from his Native family and his gradual move towards science. Ortiz highlights the predicament that "No matter what we do to practice our Indigenous traditions and customs and no matter how hard we try to live according to the cultural philosophies of our tribal elders, we still feel Americanized" (286). Gabriel's disavowal of his ancestral and communal traditions and his Western approach to science is a sign that he has been deeply Americanized. Ortiz points out the difficulty to battle assimilation in relation to Native people who actually try to resist this assimilation. In Gabriel's case, his selfish actions which lead to the destruction of his community, the battle seems at first to have been already lost as he in fact embraces assimilation. More specifically, the main character reveals that "during his second year at Stanford — [he] found himself in a required class on the ethics of science" (King 166). He further describes that when he was asked by his professor if he believed in science he immediately responded positively (169). Gabriel's confession that "his world was a world of facts, of equations of numbers [whereas h]is family's world was made up of connections and emotions" dramatizes his lack of emotional ties with his family and accounts for his blind trust in the supposed security of science (184). Paula Gun Allen has influentially argued that "[o]ne of the

major features of modern American Indian writing is a preoccupation with the process of alienation” (3). In this novel, King employs the concept of alienation and its repercussions on Native communities and their members, focusing on the alienation process and the move from this alienation to active agency, as the paper later discusses. Gabriel’s individualistic, selfish mode of life, which is the outcome of his alienation from his maternal community, is presented as being responsible for his careless actions which have resulted in the desolation of his maternal community.

In his work *Postcolonial Environments* (2010), Pablo Mukherjee appears to criticize “the financial interests of the ruling elites of the global superpowers [which] are protected by blatant military and non-military measures” (144). This critique of the actions of powerful, white-held, capitalist corporations which in the name of science, ignore the impact of this “progress” on the environment is also evident in King’s *The Back of the Turtle*. Significantly, many chapters in the novel are narrated by Dorian Asher, the CEO of Domidion. This choice reflects King’s aim to deeply explore the causes of environmental damage, by offering the reader access to multiple narratorial points of view, among which that of the powerful and capitalist antagonist who employs his power for financial benefit. This point of view enables the reader to enter a complex reading experience, as the reader has to consider and evaluate the antagonist’s actions and motives. Domidion is an international biotech corporation and the novel comments elaborately on Domidion’s illicit disposal of toxic waste. Dorian’s dismissal of Domidion’s responsibility for the destruction that it has caused is best dramatized through Dorian’s claim that “there was really no way Domidion could keep track of every virus — that the corporation shipped around the world” (King 18). The corporation’s interest in securing profit rather than in acknowledging its complicity in environmental pollution, is heavily criticized in King’s narrative.

Moreover, Morrison stresses that Domidion is “a Monsanto/ Exxon-like company that epitomizes environmental racism and wanton destruction in the name of capital” (45). Morrison’s commentary on environmental racism refers to Domidion’s involvement in ecological scandals which have affected predominantly Native land and that of developing countries, which Domidion has polluted with its waste. Dorian’s acknowledgment that in “the past, the corporation had always been able to find poor

countries and desperate governments who needed money” (King 19) in order to dispose of the unwanted toxic substances, confirms Morrison’s argument that Domidion’s prioritization of profit leaves no space for ethical concerns. Dorian’s conduct throughout the novel further enhances the conviction the reader has formed from the beginning, that Dorian is intentionally a flat character representing the ethics of a profit-driven corporation that exploits scientific knowledge with the aim of securing power. Arguably, Domidion owes its expansion and wealth to its wide scientific base, part of which is Gabriel’s development of the hazardous variant named GreenSweep. The repercussions of GreenSweep’s spill on the Native reserve are passively recounted by Dorian, as he recalls that GreenSweep “had destroyed all life in the bay and pushed the kill zone out to the ocean some twenty kilo-metres” (King 324). Dorian’s lack of concern about the countless deaths of humans and animals after the environmental pollution is summed up in his laconic admission, which reveals his intention to carry on the march of destruction: “[s]hit happens. It would happen again” (303). His indifference towards the destruction he has been causing through Domidion, epitomizes perhaps the general indifference observed in the majority of powerful corporations, which have systematically refused to acknowledge the repercussions their actions have had on Native communities and the environment.

Mita Banerjee argues that in “order to address and to redress the wrongs of the colonial past, the colonial subject has to bear witness to cultural, economic and environmental destruction: yet, to the extent that colonialism also ‘killed off’ the witnesses to its violence, the land remains as the sole spectator of the past” (196). In the present novel, the land and the few survivors are truly the only spectators that have witnessed the slow violence taking place in Native land. As Gabriel and Mara observe the remains of what was once a vibrant community, they have the power to address and redress the wrong inflicted to their community, through their own voice and their consequent actions at the aftermath of the devastation. This section has examined the ways in which King represents the destruction of Native land by powerful white-held corporations in the name of profit. It has also analyzed the settler state’s efforts to disrupt and prevent communal empowerment and communal well-being through the dislocation of the local population. Furthermore, it has underlined the employment of alienation in

King's narrative and the repercussions of this alienation on a communal and individual level.

Storytelling, Dance and Salvage as Healing Rituals

King emphasizes throughout the narrative the importance of moving away from dislocation and alienation toward restorative practices that can heal both the individual and the community. While traumatic experiences scar the characters, King's novel suggests that there is always room for healing, offering a highly optimistic approach on the predicament of ecological destruction, with a view to encourage the reader and empower communities to take action, in order to reverse the disastrous effects of human activity. Lionel's alienation from his cultural heritage as well as Mara's depression after the loss of her family lead the characters to practices that ultimately empower them to heal their trauma. The novel's multivocal structure, featuring different narrators, familiarizes the reader with the different ways the Ruin has affected these people's lives and enables the reader to critically reflect on the different factors that bring about environmental damage, habitat loss and communal loss, as the different narrators explore and embody trauma in different ways. More specifically, Mara experiences the trauma of habitat loss differently than Gabriel, as she has grown up in the afflicted area, whereas Gabriel has to face the trauma of being partially responsible for the destruction of his maternal community. Both points of view are crucial to the narrative as they vocalize different aspects of their common problem of environmental destruction.

However, the novel offers a series of restorative practices that aim to counter this aforementioned trauma. The first instance of a potential restorative practice takes place in the location of the Apostles, with Gabriel trying to drown himself due to his remorse for the destruction he has caused. Before jumping into the water, he takes up singing a traditional Native memorial song, "picking up the beat, and raising the pitch so that his voice carried above the slicing surf" (5). The ritual comes to a halt when he suddenly notices a young girl drowning. He puts aside his suicidal plan and takes hold of the arm of the girl, pulling hard until she is safe in his arms and he then struggles to pull her out of the water "forc[ing] her arms around the rock" (8). As soon as he saves the girl, he realizes that the "sea [is] alive with people" all of which are "naked and cold — their mouths filled with water" (9). Gabriel bravely undertakes to pull all of them out of the

water. Toward the end of the novel, the drowning people are revealed to be, the shipwrecked Taiwanese immigrants that tried to reach Samaritan Bay. Gabriel's act of rescuing these people constitutes an exemplary case of active agency and a move away from individualism. More specifically, it constitutes an effort to redeem himself for the lives he has carelessly ended, by offering help to the displaced people who have risked their life to create a new life for themselves.

Robin Ridington suggests that "[h]aving destroyed turtles and Indians, Quinn now has an obligation to help create a new world from the one Domidion destroyed" (2). However, Gabriel's course of action is not driven by obligation, but rather, by selflessness, as he puts his individualist plans aside to help people unknown to him. More importantly, after the rescue Gabriel begins to sing again "a grass dance this time. A fierce song. A song for warriors — And then very slowly, one voice at a time — the people began to sing with him, their voices higher and sharper than his" (King 9). In this powerful scene the protagonist's empowerment by the traditional song and especially by the effort of the survivors to participate in the ceremony as a joined community, is quite significant as it reveals a shift in the tone of the novel, moving from destruction and futility towards an optimistic conviction that the community can be revived and restored in different ways. More precisely, this group of rescued people, which turns gradually in the novel into a unified body, a sort of community, will take drastic measures to aid and support the afflicted habitat. Gabriel's practice of traditional singing constitutes a healing ritual as he initiates this cultural practice himself, in an effort to honor and celebrate the lives that have been saved. The people's participation in this ritual further enhances the significance and impact of the ceremony, as this ritual is meant to be performed by the community as a whole and not by a single member. Therefore, the Taiwanese immigrants' contribution to the ritual enables Gabriel to experience a sense of community that he has been denied all this time, as he has abandoned his maternal community.

Another major event that brings the community members closer to one another and further away from their trauma, is brought about by Crisp, one of the main characters in the novel. Crisp is an old but exceptionally active, white man that resides in Samaritan Bay even after "The Ruin." Crisp is central in the novel as he befriends Gabriel and Mara and provides them with subtle guidance throughout the novel, trying to bring Gabriel

closer to his Native cultural heritage and Mara closer to other people after her isolation due to her depression. Crisp's initiative to invite Gabriel and Mara, a survivor of "The Ruin," to the hot springs near his house under the pretext of his birthday celebration is significant in that it marks an effort to revive the community by creating new, strong bonds among the surviving members. In the hot springs Gabriel and Mara get to experience the sense of community they both long for. In particular, community is experienced and revived through the communal narration of the story of the "Woman Who Fell from the Sky." This traditional story of Native creation, accounts for the creation of Earth after a woman falls from the sky on the back of a turtle. Ortiz stresses the importance of storytelling for Native communities arguing that "[t]he language of culture in our Indigenous tribal communities is usually in story, song, advice or counsel, and instruction. As we know, it's called the oral tradition" (289). Ortiz's explanation that the oral tradition of storytelling is the backbone of cultural continuity and tradition is best reflected in the communal storytelling taking place in the hot springs area close to the abandoned reserve. This enactment of the oral tradition can be viewed as a practice that allows the survivors to connect with the afflicted land. Arnold defines land affect as "nontechnologically mediated experiences of affective energy that cause people to feel with the land" (97). Crisp's acknowledgement that "we tell that story here each year as a reminder" (King 222), is more than a reminder of the persisting rich cultural heritage that can be rejuvenized near the abandoned reserve, even after the disastrous Ruin; it is a source of hope that the damage can be reversed through communal cooperation and strong communal ties.

The narration of the creation story assumes a dialogical form whereby Crisp starts narrating the creation story by making prompts and asking questions to his guests: "it could have been night — a woman was digging for tubers. And where do we find the best of the tubers?" (223). Following Crisp's prompt Mara readily provides the answer "[u]nder old trees" (223). When Gabriel starts participating in the storytelling practice, answering Crisp's question regarding the woman's whereabouts, both he and Mara narrate that the woman falls from the cloud she's peering from (224). Jennifer Sergi points out that "the storyteller relies on memory (his or hers and his or her listener's) and creates a chain of tradition that passes on a happening from generation to generation"

(279). Crisp indeed relies on his memory and the memory of the other participants in order to carry out the storytelling ritual and he encourages the younger generation represented by Mara and Gabriel, to become active participants in the enactment of their cultural tradition. In this way, Crisp's goal to refamiliarize Gabriel with his cultural background and to make Mara come out of her shell once again, is achieved as the alienated Gabriel and Mara participate in the communal storytelling event. The importance of the strong ties formed between marginalized people is evident in the interaction between Mara and Gabriel, whose shared storytelling is a case in point of the ways in which storytelling can bring communal members together in order to empower and heal them from their trauma. As Gabriel takes up singing and the rest of the small fellowship follows his lead, it can be argued that the characters are making great effort in tackling their trauma and looking far ahead into the future. Gabriel's admission that "it had been a while since he had sung like that. In front of people. For a purpose — [and that] it felt good" (King 235), acknowledges the healing properties of communal cultural practices such as storytelling against marginalization and trauma.

One more crucial practice that King underlines in the novel is what young Sonny, one of the main narrators, refers to as "Salvage." Sonny is currently the sole resident of the abandoned Ocean Star Motel in Samaritan Bay, following the death of his father. His salvaging of lost items takes place on the deserted beach where "he rakes the hammer through the sand — and sometimes he finds things people have lost" (51). Brittany Barker et. al showcase that many Indigenous communities are engaging in "cultural revitalization as a holistic, community-driven response to suicide prevention" (208). Although Sonny has not attempted suicide, he is a young boy found in a difficult position after the death of his father and the destruction of the local community and habitat. As he battles to cope with these difficult circumstances, considering that he is no longer part of a community after the land's transformation into a wasteland, the young character appears to attach great value to the practice of salvaging. This daily ritual gives his monotonous life a purpose since the tourism, that helped the Ocean Star Motel thrive, is now gone. Most importantly, it enables him to deal with the alienation and loneliness he has been experiencing due to the death of his father.

Sonny initiates this salvaging practice with an aim to restore Samaritan Bay back to its old glory as he undertakes to build a lighthouse made of the salvage he collects. The creation of a communal building, made out of retrieved and consequently recycled material further enhances the novel's message that destruction can be reversed and action is necessary for the preservation and restoration of afflicted lands and communities. Remnants of an old society can gradually turn into something wholesome and useful to the restored community, such as Sonny's lighthouse. Even the smallest piece of rubbish can contribute to the transformation of wasteland into a small paradise. In order to carry out this task, Sonny spends every morning collecting the items he needs from the beach and "begins stacking the gathered items – shells, bones driftwood, ocean miscellany" (291). This beachcombing offers Sonny a purpose and a worthy cause which can distract him from the apocalyptic destruction that surrounds him as well as from the alienation that he is experiencing. Through Sonny's creative plan the salvaged items can assume a sense of agency and indicate how life can change in Samaritan Bay. More specifically, the salvaged materials symbolize the community's remnants as a result of environmental pollution after the toxic spill. After Sonny uses them to create a new communal monument of hope, the salvaged materials come to represent the gradual transformation of the Non-native community in the Samaritan Bay.

In his work *From Material to Posthuman Ecocriticism: Hybridity, Stories, Natures* (2016), Serpil Opperman argues that "objects may not be metabolically active, but they possess creative agency, and represent different episodes of life's alterity" (288). Indeed, as Sonny "selects a turtle shell and hooks a bone through one of the openings [and] he attaches a piece of steel mesh to the bone," the dead turtle's bone is transformed from a symbol of death to a symbol of restoration and creation (King 292). Sonny reflects that he has to build "a tower beacon. A lighthouse – a symbol of hope. A guiding light. A monument to perseverance – A bright tower that will stand against the dark sky and bring the turtles home" (268). Turtles are vital for the local tourism and constitute a meaningful symbol of creation in Native Canadian mythology.

Although it remains unclear whether the turtles will return or not what Sonny acknowledges is the importance of human mobilization and perseverance against destruction and stagnation, which empowers him to cope with his trauma. This highly

optimistic shift in King's narrative emphasizes the restorative practices of storytelling, traditional singing, dancing, and salvaging, while it prepares the reader for the climactic events of the novel which signal the change and restoration of Samaritan Bay.

Human Agency and New Ways of Belonging

The possibility for transformation in the Samaritan Bay begins to emerge through the different forms of agency that the characters assume. Mara's decision to return permanently to the abandoned Smoke River Reserve is primarily an initiative and form of agency that also encourages Gabriel to become more active. Mara's optimism for the revival of the community is reflected in her thought that "the families would return. Over time they would find their way home" and is rather determined to safeguard that the reserve will not be ransacked again (156). This thought is followed by the bold declaration that "their homes weren't going to be occupied by a bunch of cowboys trying to rustle free real estate. Not if Mara could stop it" (157). Her bitterness over the immediate threat posed by capitalist non-Native schemes eager to exploit the land is what encourages her to return to her old home. Therefore, King's effort to create powerful and dynamic female characters such as Mara, who assume authority and claim sovereignty over the Native land that has been branded as off-limits by the Canadian authorities, is quite symbolic. Its significance lies in the fact that Native women traditionally hold an important place in their Native communities as carriers and preservers of culture and order. Mara's bold conduct comes instrumental as she demands to learn the truth about Gabriel's true purpose in Samaritan Bay, which inevitably leads to the moment of catharsis. Gabriel has no choice but to reveal his involvement in the scandal to Mara admitting: "I'm the reason your mother died, the reason your grandmother died, the reason my sister and her son died, the reason the reserve is a graveyard" (454). As soon as Mara blames Gabriel for the destruction, the protagonist attempts once more to take his life only to be prevented ultimately from her. Mara concludes that as Gabriel "had wanted confirmation of his transgressions. He had sought out condemnation. . . . [and she further concludes that] it wasn't going to be as easy as all that" (465). As a result of this confession, she strongly advocates that Gabriel should help restore the community he has afflicted (465). Through this incident, King showcases the necessity of moving from alienation and selfishness, as embodied in Gabriel's self-destructive individualism, to a

collective reconsideration of one's power to address and ultimately redress the harm done.

Sonny's ambitious plan to create a beacon that will bring the turtles back to the deserted coast is ultimately a success. As soon as Sonny decides to light the beacon, the young boy watches "a sea turtle, just like the turtles who used to arrive on Sonny's beach during tourist season. A ragged turtle with worn flippers and a wide indentation on its shell, as though it has been carrying a heavy weight for a long time" (429). The determining return of the turtle can indeed be perceived as a significant sign of upcoming change. Considering that the description of the turtle's ragged appearance functions as a simile for the worn-out, afflicted community which is struggling to stand back on its feet, the turtle's return to Samaritan Bay is deeply meaningful. The arrival of the turtle provides Sonny with the necessary motivation to carry on with his task and as he "watches the turtle disappear into the waves — in the weakening light at the edge of the world, Sonny lights the beacon fire" (431). The community's transition from decay and destruction to revival and restoration is symbolically signaled by the lighting of the beacon, which will be ready to welcome the turtles back to their ravished home. Moreover, the return of the turtles will gradually contribute to the transformation of the polluted, abandoned ecosystem into that of a restored and balanced habitat, as it was before the repercussions of human interventions, rich in flora and fauna.

After the successful lighting of the lighthouse by the young, ambitious boy, the turtle proceeds to lay its eggs. When Mara and Gabriel approach the turtle, its red mark on the shell makes Gabriel consider in bewilderment that "this can't be the same turtle from the tank in the lobby at Domidion, the turtle with whom he had shared his lunch all those years — [t]he turtle had disappeared in Toronto. The turtle had appeared on a beach in Samaritan Bay" (492). The importance of this symbolic arrival does not escape Gabriel's attention as the protagonist follows Mara back to the beach. It is there that he eventually makes the decision to stay permanently in the Smoke River reserve with Mara. While the two main characters are at the beach, Gabriel takes the initiative to share a story with her, a story from his childhood revolving around his deceased sister Lilly. He begins his story as such "there was a woman who lived in the sky world. And she was curious," whereby it becomes evident that he follows the conventions of the story of the

“Woman Who Fell from the Sky” (510). This second storytelling scene, similar to the one enacted in the hot springs area after Crisp’s invitation, marks Gabriel’s additional effort to create a bond with Mara who is one of the few survivors of his maternal community. Helen May Dennis argues that “Ritual can pre-enact, in order to give shape to future events and possibly even affect their outcome, and re-enact in order to celebrate and commemorate events that have occurred” (46). In this particular scene of the storytelling ritual, Gabriel and Mara do indeed pre-enact and foreshadow the future changes which are to take place in the afflicted community through the contribution of the Taiwanese immigrants. Although, they do not celebrate the disaster that has taken place, they symbolically mourn the afflicted land and the people they have lost, getting ready to move on from the painful past and to turn it into a productive future. Gabriel’s final decision to stay in his maternal ancestral land is driven by the strong ties he has started forming with the remaining members of his community and by the realization that the community needs him to restore what he has helped destroy. Consequently, his choice to share a story with Mara with an opening similar to that of the local Native creation story is what seals his exact decision to reconnect with his cultural heritage and his maternal land in his attempt to create this world anew.

The appearance of the shipwrecked Taiwanese immigrants who take refuge in the Smoke River reserve, further foreshadows the transformation of the community. As Crisp and Gabriel move Mara’s things to her abandoned house, they notice smoke coming out from Lilly’s house, who is Gabriel’s deceased sister. As soon as the characters open the door of Lilly’s house, they discover Mara inside Lily’s house and “sitting around the room on the floor and on makeshift beds [there are] a dozen other people” (King 420-421). Among this group Gabriel recognizes “the young girl he had pulled out of the water” (421). This climactic scene becomes even more significant as the girl begins “to sing the song that Gabriel had sung on the rocks that foggy morning . . . And one by one, the other people stood and sang with her” (421). The scene of the joint singing foreshadows the gradual incorporation of the immigrant families in the Samaritan Bay community. The gradual transformation of the community, consisting of new and diverse members points out King’s effort to embrace the notion of a dynamic and complex community, which is open to change.

After the joined singing takes place, Mei-ling starts narrating in broken English their agonized efforts to survive after Gabriel brings them on shore. Interestingly, a cultural exchange takes place as the shipwrecked immigrants share traditional Taiwanese food such as *yu wang* and *tsa bi hoon*, with the main characters. In this scene, King's choice not to render the Taiwanese words in translated form, is impactful in that it familiarizes the reader with the cultural background of the immigrants who are soon to become members of the local community. Bill Ashcroft terms this practice as the "metonymic gap — the cultural gap formed when writers transform English according to the needs of their source culture; by inserting unglossed words" (130). Although King's source culture is not Taiwanese, his writing exemplifies an invitation to flexibly negotiate cultural difference and positions of belonging. Mei-ling proceeds to explain that they are two families the Chins and the Huangs who "work on ship . . . But the ship is old. Nothing works well — the storm was very bad — and when it passed the ship was broken — we get into a small boat — the waves put the boat upon rocks" (King 433-435). She further explains that the two surviving families owe their lives to Gabriel considering that they were "dying, until the singing man pull[ed]us out of the sea, until the singing man saves us" (435). The girl's elaborate, vivid narration of Gabriel's great struggle to rescue them, despite existing thoughts about taking his own life at that time, successfully offers a positive portrayal of Gabriel's character to the reader. Indeed, Gabriel has proved in this incident that he can still contribute to the community as an active agent, putting aside his own personal internal conflicts.

After Mei-ling admits that the two families "lived in the woods and out of sight, fearful that might be arrested . . . they had found the reserve and the empty homes" (435) and she apologizes for trespassing the locals' property, Crisp symbolically goes on to warmly welcome the families. Hereby, King seems to acknowledge the great value and potential of cultural exchange and to be in favor of cultural mobility that can revive and restore an afflicted community. This is highlighted by Crisp's invitation towards the immigrants to take shelter in the hot springs where they "can throw off the trials of [their] old life and warm [themselves] in the new" (436). In her study *Native Writers Resisting Colonizing Practices in Canadian Historiography and Literature* (1999), Native writer Emma Larocque stresses that "we must reinvent ourselves. By — reinvention I do not

mean re/fabrication or myth-making — I mean, throwing off the 'weight of antiquity,' and by so doing, offering new possibilities for reconstruction” (282). Truly, King’s portrayal of a transforming Native community enables the envisioning of a potential reconstruction. More specifically, Crisp’s initiative proves crucial for the future of the community as the two Taiwanese families are determined to help the community that has welcomed them. King’s narrative conveys a powerful message, namely that immigration and nomadic groups of people should not be regarded as intruders, rather than an opportunity for fruitful community-building and cultural enrichment. Especially, during the catastrophic aftermath of climate change, the active collaboration of communities and diverse cultural groups from the four corners of the world should be further encouraged. This can result in the formation of powerful communities which will be capable of successfully guarding the environment and combatting the interests of greedy capitalist corporations.

Domidion is still free to continue its perpetuation of slow violence as Dorian’s secretary informs him that all references to environmental destruction are gone. More specifically, Dorian’s strategy to manipulate public sympathy is successful as he instructs his team to “find a celebrity who can go on camera and talk about our efforts to preserve wilderness habitat. Somebody sympathetic. Someone the public likes” (King 129). The Athabasca incident, as second spill which takes place shortly afterwards the destruction of Samaritan Bay soon becomes forgotten. King becomes especially cynical of the way Domidion addresses the fact that the populations afflicted are Native communities. In particular, Domidion’s executives admit that “[f]ortunately — most of these [dying people] are Native communities where the mortality rate is already higher than the norm” (437). However, the renewed Samaritan Bay community as well as Mara and Gabriel who now reside in the Smoke River reserve, will be better prepared to contradict Domidion. As Crisp confirms to Mara, the deserted motel will return to function. More specifically, “The Chins have experience on cruise ships — they’re going to help the lad with the motel, and it’s expected that the business will support the lot — [and] two of the cousins are mechanics and have plans to fix the old bus and offer tours of the environs” (495). As a result, the deserted motel turns from a symbol of decay into a locus of hope and prosperity that is bound to put the community back on its feet. Similarly, the bus that

used to block the entrance of the abandoned reserve and keep the local people away, is transformed into a symbol of mobility and life as it is bound to support the upcoming tourism now that the turtles have returned. Therefore, the new members of the community are going to use their individual expertise to support the professions that have been afflicted after the numerous deaths and dislocation that the Ruin has caused.

This meaningful contribution to the native community opens up the possibilities for the creation of a more empowered community, which will be able to recover from the physical and emotional trauma that climate crisis has brought about. Furthermore, it will enable the transnational cooperation of communities and especially tribal communities, in the fight against ecological destruction and against forced tribal dislocation. King has thus exemplified how even small cases of agency, such as mobility, creation and construction after the disaster, cultural exchanges and potential transcultural interactions such as the aforementioned ones in this section, can drastically impact and benefit an afflicted Native community.

Conclusion

This paper has focused on the repercussions of slow violence on the cultural, economic and communal prosperity of the settler Samaritan Bay community and the Native Smoke River Reserve, as presented in Thomas King's novel *The Back of the Turtle*. More specifically, the systematic effort of the international corporation Domidion to disavow any responsibility for the destruction it has caused to this community, has been at the centre of this paper's interest. Furthermore, attention has been drawn to the corporation's strategic manipulation of the information the media disseminates regarding the numerous toxic spills. Moreover, the paper has illustrated the significance of communal cultural practices for the reclamation of the land and the healing of the trauma experienced by the community's surviving members. More precisely, the analysis has examined the importance of communal storytelling undertaken by Mara, Crisp and Gabriel.

Additionally, Sonny's practice of salvaging the remnants of the community's old life and his decision to build a lighthouse out of this salvage has also been indicated as a central instance of agency. Gabriel's gradual transformation from an alienated and individualistic scientist to an active agent in his maternal community, has been presented

as the outcome of his participation in communal cultural practices, such as singing, dancing and storytelling. Furthermore, this analysis has stressed the significance of human-led agency in relation to the preservation and restoration of the afflicted Native land. In particular, it has been argued that Mara's return to the abandoned reserve and Sonny's lighting of the beacon constitute predominant instances of human agency. Finally, the paper has argued that the presence and initiative of the Taiwanese immigrants in relation to their gradual incorporation in the local community, constitutes a refreshing element in the negotiation of Native Canadian cultural identities.

The investigation of the different ways in which Native communities can claim responsibility through active resistance against strategic slow violence constitutes a timely concern in the time of climate change. There has been growing interest in the era of the anthropocene—among Native communal representatives, political activists and ecocritics alike—in raising awareness regarding the methods employed by Domidion-like corporations to exploit Native land and communities for the sake of profit. Indeed, the literature of the late twentieth and early twenty-first century, by Native North American writers is invested in unmasking practices of epistemic and slow violence that deliberately conceal exploitative actions against Native land rights. The present paper engages with these questions and articulates concerns for further research pertaining to the exploration of slow violence, its literary representations, and its impact on Native Canadian modes of resistance and identity negotiation.

Works Cited

- Arnold, Jobb. "Feeling the Fires of Climate Change: Land Affect in Canada's Tar Sands." *Affective Ecocriticism: Emotion, Embodiment, Environment*, edited by Kyle Bladow and Jennifer Ladino, U of Nebraska P, 2018, pp. 95-115.
- Ashcroft, Bill. "Transcultural, Presence." *Presence: Philosophy, History, and Cultural Theory for the Twenty-First Century*, edited by Ranjan Ghosh and Ethan Kleinberg, Cornell UP, 2013, 122-143. *JSTOR*, <https://www.jstor.org/stable/10.7591/j.ctt32b58z>. Accessed 24 July 2025.
- Barker, Brittany et. al. "Reclaiming Indigenous Identities." *Canadian Journal of Public Health*, vol. 108, no. 2, 2017, pp. 208-210. *JSTOR*, <https://www.jstor.org/stable/10.2307/90010682>. Accessed 25 August 2025.
- Dennis, Helen May. *Native American Literature: Towards a Spatialized Reading*. Routledge, 2007.

- Gunn Allen, Paula. "A Stranger in My Own Life: Alienation in American Indian Prose and Poetry." *MELUS*, vol. 7, no. 2, 1980, pp. 3-19. *JSTOR*, <https://www.jstor.org/stable/467081>. Accessed 25 August 2025.
- Hogan, Linda. *Solar Storms*. Scribner, 1997.
- King, Thomas. *The Back of the Turtle*. Harper Perennial, 2014.
- Larocque, Emma. *Native Writers Resisting Colonizing Practices in Canadian Historiography and Literature*. 1999. U of Manitoba, PhD dissertation. *ProQuest*, <https://www.proquest.com/dissertations-theses/native-writers-resisting-colonizing-practices/docview/304545745/se-2>. Accessed 24 July 2025.
- Morrison, Irene M. "Stories to Stop the Apocalypse: Indigenous Mythmaking as Solidarity-Building Practice in Thomas King's *The Back of the Turtle*." *South Atlantic Review*, vol. 83, no. 3, 2018, pp. 44-62. *JSTOR*, <https://www.jstor.org/stable/10.2307/90024981>. Accessed 24 July 2025.
- Mukherjee, Upamanyu Pablo. *Postcolonial Environments: Nature, Culture and the Contemporary Indian Novel in English*. Palgrave Macmillan, 2010.
- Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Harvard UP, 2013.
- Oppermann, Serpil. "From Material to Posthuman Ecocriticism: Hybridity, Stories, Natures." *Handbook of Ecocriticism and Cultural Ecology*, edited by Hubert Zapf, Walter de Gruyter GmbH, 2016, pp. 273-294.
- Ortiz, Simon. "Indigenous Continuance: Collaboration and Syncretism." *The American Indian Quarterly*, vol. 35, no. 3, 2011, pp. 285-293. *Project Muse*, <https://doi.org/10.1353/aiq.2011.a447046>. Accessed 25 August 2025.
- Ridington, Robin. "Got Any Grapes? Reading Thomas King's *The Back of the Turtle*." *Canadian Literature: A Quarterly of Criticism and Review*, vol. 224, 2016, pp. 163-168.
- Sergi, Jennifer. "Storytelling: Tradition and Preservation in Louise Erdrich's *Tracks*." *World Literature Today*, vol. 66, no. 2, 1992, pp. 279-282. *JSTOR*, <https://www.jstor.org/stable/40148133>. Accessed 25 August 2025.
- Silko, Leslie Marmon. *Gardens in the Dunes*. Simon & Schuster, 2013.
- Weaver, Jace. "Misfit Messengers: Indigenous Religious Traditions and Climate Change." *Journal of the American Academy of Religion*, vol. 83, no. 2, 2015, pp. 320-335. *JSTOR*, <https://www.jstor.org/stable/24488048>. Accessed 25 August 2025.

Part III
In Deeper Oceans

What's in a Name?
An Exercise in Pacing an "AI"'s Story Differently

Judith Campagne
Vrije Universiteit Brussel

Abstract

Computer Gefion's namesake is the mythical Norse Gefion, whose story connotes images of well-being, fertility, and abundance. Gefion the computer is marketed as an AI supercomputer and its branding narratives are paced quickly, filled with promises of accelerated solutions to global urgencies, such as climate change. Meanwhile, there is an increasing body of literature detailing the various materials, technologies, infrastructures, peoples, practices, forms of power, ideologies, and imaginaries that are clustered under the heading "Artificial Intelligence." These sources highlight the multiplicity in a seemingly singular concept "AI" and the costs with which these imaginaries, technologies, and practices come. This essay starts from such a critical understanding of "AI" and challenges a specific "AI"'s story to let this multiplicity come through. The exercise I present here is in slowing down a branding narrative by taking the given name of a computer seriously. Hereby, I show that the name provides a different pace and thematic to the computer that highlight the relations between fabrication and force. Lingering on the computer's name occasions a moment of politicizing the branding narrative. Amidst ecological crises, such a politicization is urgent.

Algorithms, code, computers, computer cooling systems, computer chips and the resources necessary to make these (such as various metals), data, data extraction, data hubs, the network of internet cables on the oceans' floors to transmit said data, labour used to assemble and train data sets, paradigms of patterns and prediction, machine learning, water, web hostings, and wires; these are some of the technologies, infrastructures, and practices alongside forms of power such as labour exploitation (implicitly) referred to when speaking of "Artificial Intelligence" ("AI") (See, for instance: Lindgren; Verdegem; D'Ignazio and Klein; Pasquinelli; Aradau and Bunz; Crawford; Dixon-Román and Parisi; Benjamin; Couldry and Mejias; Crawford and Joler; Goldberg; O'Neil; Starosielski). In other words, an increasing body of literature is highlighting that, although the term "AI" may seem singular, it is in fact an umbrella covering a web of relations between people, technologies, infrastructures, materials, and practices.¹

In this essay, I wish to contribute to this literature by pacing a specific "AI"'s story differently. The example at hand is Gefion, a new "AI supercomputer" located in Denmark.

¹ It is for this reason that I place quotation marks around the words artificial intelligence, to indicate that it is an umbrella term that houses many different technologies, infrastructures, and practices; what is being signified by the term has in fact changed over time.

The computer's namesake is the mythical Gefion, whose story connotes well-being and abundance. In a similar vein, Gefion the computer is promised to accelerate solutions to global urgencies, especially ecological crises. These urgencies concern us all. However, the stories about Gefion presented to a wider public are paced quickly and focus mainly on all the good the computer will bring. Through such a fast pace, the branding story seems to obstruct space critical reflections on the costs (not only financial, but also ecological) with which this computer is bound to come. Or, in other words, such fast-paced narratives hinder public discussions about the world(s) presupposed, produced, and (re)enforced by the growing creation, presence, and use of all grouped under the label "AI." How then can Gefion's story be paced differently to encourage, rather than obstruct politicized reflections?

This essay's structure consists of three main sections. The first presents a brief overview of critical literature from the humanities and social sciences on "AI." This literature overview is nowhere near exhaustive, but it functions to hint at the multiplicity of the term "AI." The second section takes this material multiplicity as a starting point and uses it to turn to the example at hand: Gefion's branding narrative. This narrative is fast-paced, as it focuses on a horizon of promises of prosperity and well-being. In the computer's public story, its existing material multiplicities are given little to no attention. What does it mean to pace Gefion's branding story differently? I will demonstrate that one response lies in focusing on otherwise overlooked details. Subsequently, in the third section, I conduct an exercise in pacing Gefion differently by elaborating on the mythical origins of its name. I conclude by arguing that taking Gefion's mythical name seriously occasions opportunities to politicize the public conversations around the computer by raising the question: What are the costs of this computer and its horizon of promises?

Multiplicity

I adopt in this essay the term "AI" because the branding narrative surrounding computer Gefion presents it explicitly as an *AI* supercomputer (Novo Nordisk Foundation, "Denmark to Build One of the World's Most Powerful AI Supercomputers, Accelerating Solutions to Societal Challenges"). Nevertheless, while "artificial intelligence" seemingly denotes a singular technology, it in fact encompasses a myriad of techniques, materials, ideas, peoples, places, forms of power, and resources. Therefore, using a singular term such

as “AI” obscures the actual object of study.² This vagueness is also present in the branding narrative of Gefion the computer. While the computer is continuously referred to as an AI supercomputer, it remains unclear what this “AI” actually denotes (e.g., is it the code or the types of computer chips used or machine learning as a technique). Yet, since the branding narrative of Gefion the computer forms the analytical starting point of this essay, and since this branding narrative speaks of Gefion consistently as an AI supercomputer, I will adopt the term here too.

Much has been written about the problematics of the term “artificial intelligence.” I will focus here on a very brief selection of this literature. In his book *Artificial Whiteness: Politics and Ideology in Artificial Intelligence* (2020), Yarden Katz starts from an understanding of “AI” as being constituted of various materials, technologies, power, and ideology. To Katz, “AI” is a hollow concept, serving dominant forms of power. In fact, so Katz argues, rather than “AI” having a single definition, it is an incoherent concept that is capable of adaption and that comes in different iterations. With each iteration “we find the practice of situating AI within capitalist and imperialist agendas” (165). Because of the term’s hollowness, adaptability, and incoherence, and the use of these characteristics to further capitalist and imperialist agendas, Katz understands the concept “AI” as a technique of whiteness.

Sociologist Simon Lindgren stresses a similar adaptability of the term “AI.” In fact, he describes “AI” as an empty signifier, filled with a collection of materials, people, ideas, technologies, subjectivities and ideologies. Lindgren names this the “sociopolitical reality” (4) of “AI,” which means one can read it as an assemblage. By underscoring this sociopolitical rather than technical reality, Lindgren makes a case for the importance of researching all that falls under the umbrella term “AI” through its current social existence. To Lindgren, this does not mean that any singular constitution of all elements making up “AI” must be identified. On the contrary, he rather argues that “AI” should be researched through “a *logic* of assemblage, by which we must not see elements in isolation if we want to realize anything close to a critical analysis” (39).

² Critiques of the name “artificial intelligence” are as old as the term. It goes beyond the scope of this chapter to present an overview of these.

To emphasize that the reality of “AI” consists of many materials, peoples, resources, and ideas, Kate Crawford and Vladan Joler have built an anatomy of a specific “AI” system. What becomes visible through this representation is the extractive processes (of resources, labor, and data) involved in the design and functioning of the “AI” system, which make it, according to the authors, “necessary to move beyond a simple analysis of the relationship between an individual human, their data, and a technology company to contend with the truly planetary scale of extraction” (3).

It exceeds the scope of this article to construct an in-depth analysis and comparison of the aforementioned and comparative sources. Rather, the aim of this brief (and purposefully quickly paced) literature overview is to stress that, while these references approach the concept “AI” through different lenses (such as critiques of whiteness and imperialism, sociology and critical theory, or extractivism), they share the assumption that the concept houses a myriad of relations, materials, and ideas. It is from this critical understanding that I now turn to Gefion the computer.

Gefion the computer

In March 2024, Novo Nordisk Foundation, a philanthropic organization linked to the company Novo Nordisk providing grants “to promote human health and the sustainability of society and the planet” (“What Do We Support?”), and NVIDIA, a software company that produces, among other things, the chips necessary to enable forms of computing such as machine learning, announce that they have entered a collaboration to build a new AI-supercomputer, named Gefion. A mere few months later, in October 2024, they pronounce the computer operational.

To the audience not involved in the creation of this new Gefion, the story of the computer is told with a fast pace. In June 2024 at a stakeholder meeting, when describing the creation of this new computer, Morten Bødskov (the Danish Minister for Industry, Business and Financial Affairs) proclaims that “tempo, timing, is and was the issue here” (“Gefion AI Supercomputer Meetup (Online)”). Later, in that same conversation, Kimberly Powell (vice president of NVIDIA) states that there could not have been a better moment for Denmark to invest in a supercomputer like Gefion: “if you’ve waited even six months longer you might have been left ten years behind.” These statements are focused on time, speed, and urgency (Danish Centre for AI Innovation). And this sentiment occurs all

throughout the recording of that same meeting, as the following selection of phrases demonstrates: Gefion will “put all of that on turbo, on steroids”; using Gefion will only allow people “to get more productive”; and it is “the world’s most powerful scientific instrument.” Gefion is presented as a scientific instrument that will accelerate the coming into being of solutions to problems in healthcare, but especially also to global urgencies such as ecological crises. I name this the horizon of promises that is pushed forward through Gefion’s branding narrative.

To me, someone not involved in the creation of Gefion, the computer is only accessible through its branding narrative. This story appeared suddenly and the promises at the core of its branding are presented with a similar speed. Additionally, the desire for acceleration of pace and increase in scope is embedded throughout this narrative. Precisely because of these proclamations of speed, I am reminded of the cautious deconstructions of the umbrella term “AI” in the literature referred to earlier. I am reading in that literature calls for slowness and thoughtfulness, for properly understanding what the material compositions, relations, and consequences of all that is grouped under the heading “AI” are. This also reminds me of the project *SlowAI*, at the transdisciplinary research platform ARIAS.³ *SlowAI* is a project that “will focus on laying the ground for developing strategies to address colonial and extractive histories embedded in current AI systems by introducing the concept of slowness to a fast technology” (“Slow AI – Arias”). Slowness is understood here as a method to move *beyond* questions of temporality and speed. Since logics of extractivism and coloniality, so the project states, are also rooted in temporalities of efficacy, moving beyond these calls for designs and uses of technology that go against trends of immediacy and efficiency that have characterised so much of the current development and use of “AI.”

SlowAI seems to mainly focus on how the material realities of “AI” can resist temporalities of efficiency and speed to make less extractivist technologies. And the narratives surrounding Gefion hint at the fact that not only the technologies themselves, but also their story and branding, require a slowing down. Since I am encountering this specific example through its constructed branding story, it is precisely this branding story I now turn to. Additionally, it is this branding story that provides the analytic necessity for

³ ARIAS is the Amsterdam Research Institute for Arts and Sciences: <https://ariatest.humanities.uva.nl>.

an exercise in pacing. After all, the fast-paced narrative of the branding jumps to a horizon of promises of what the new Gefion will do, set about, and accomplish. Such a pace introduces Gefion to a wider public in a manner that hinders, weighs down, and obstructs, within public conversations, critical reflection regarding the computer's costs (not only financial ones, but especially also ecological, planetary, and human). Pacing Gefion's narrative differently gives space to questions otherwise quickly overshadowed. Thereby, a different telling of the story can encourage a more thorough political and public conversation around the technology's impact. But, where might a different narrative start?

What's in a Name?

The starting point of the journal *Medical Anthropology's* special issue *Balancing the Quotidian: Precarity, Care, and Pace in Anthropology's Storytelling* is a plea for new narrational practices in the academy. The editors mention to be "aiming for a mode of storytelling that is itself paced to detect the shell game that creates precarity: delay, forgetfulness, inattention, and misuse" (Hyde and Denyer Willis 297). By slowing the narrative and narration down, the stories become "richer, fuller, and ultimately, more honest" (298). In the journal, pace is not taken as a noun, but rather as a verb, as something that can be *done* to arrive at a fuller picture of a story.

This reminds me of the introduction to Rob Nixon's book *Slow Violence*, which responds to the precarity and environmental catastrophes caused by capitalism. Slow violence refers to the ways in which destructive systems often unfold gradually and under the radar: "We need, I believe, to engage a different kind of violence, a violence that is neither spectacular nor instantaneous, but rather incremental and accretive, its calamitous repercussions playing out across a range of temporal scales" (2). Nixon wants to make visible what, by skipping to the end of the story, usually remains hidden. He summarizes the political and simultaneous methodological project underpinning such research with the question:

how can we convert into image and narrative the disasters that are slow moving and long in the making, disasters that are anonymous and that star nobody, disasters that are attritional and of indifferent interest to the sensation-driven technologies of our image-world? (3)

For me as an outsider (and thereby as a member of the public addressed by Gefion's branding narrative), the computer's story starts with its name. However, rather than focusing on *who* Gefion is, the narratives surrounding this new technology immediately jump to a list of projections of what Gefion might be able to do. Perhaps, and here I am inspired the journal issue *Balancing the Quotidian* and also Nixon's introductory methodological reflections, pacing Gefion slowly might mean to linger on that which is presented as a detail, as something seemingly insignificant. After all, at times, it is precisely in the details that occasions for reflections are hidden. Or, said differently perhaps, one way of pacing this so-called "AI"'s story slower is by taking Gefion's name seriously, by lingering on it, turning it from a brand name into the beginning of a tale and a critique.

Gefion the Myth

Computer Gefion is named after the mythical Norse Gefion. As with any myth, the story has many versions. What I distill from these is the following. One day, Gefion is gifted a piece of land, as a sign of support or perhaps of pity, by the king of what is now called Sweden. This piece of land is small but can be worked to turn fertile to sustain a single person. Yet, unknown to the king, Gefion has four children with a giant. Consequently, one night, after she is gifted the piece of land, Gefion summons her giant-children, she turns them into four giant oxers, and with their combined power, ploughs the land with so much force that it breaks off Sweden and drifts westwards into the sea.

Gefion names this new island Sjælland (Zealand). And on this new island, Roskilde and Copenhagen are founded. Roskilde once was the capital of Denmark. Copenhagen is the country's current capital. The new island thus allowed for new political communities to emerge. However, one can read in this creation story also a tale of force, rupture, and destruction. After all, the mythical Gefion used the giants' forces to break off land. Therefore, when highlighting Gefion's name, next to the Goddess's relation to well-being and fertility, it is also these notions of force and destruction that stand out to me.

Drawing on the works of political thinker Hannah Arendt, I read this relation between force and fabrication (such as space for new political communities) in Gefion's myth as unsurprising. In her book *The Human Condition* (1958), Arendt distinguishes between three core activities of the active life of humans: labour, work, and action. Labour is the activity of staying alive (for instance through cooking and consuming a meal) and

action is the activity of appearing in a public realm through speech and deed to work with others on a shared world. Work is the activity of fabrication. The subject of work is the *homo faber*, the one who makes. The things *homo faber* makes are different from the meals the laborer makes to sustain herself. A meal is consumed and consequently disappears. Each night, a new one must be cooked. In a way, this makes labour an inherently cyclical but also destructive activity: the aim of labour is to stay alive, for this we need to consume nutrients, food.

The objects of work, on the other hand, are more durable. As Arendt explains, the works of *homo faber* are artificial in the sense of being made by humans, and the works are intended to be used. A table can outlast generations. Work thus seems productive rather than destructive. However, this is not so clear-cut and Arendt writes: “[f]rom the viewpoint of nature, it is work rather than labor that is destructive, since the work process takes matter out of nature’s hands without giving it back to her in the swift course of the natural metabolism of the living body” (100). To make a wooden table, a tree needs to be cut, shaved, assembled into a table-shape, and polished. A tree is destroyed to make a table.

However, to link fabrication to force, Arendt needs to add the words “from nature’s perspective.” Hereby, Arendt makes an implicit distinction between the perspective of humans and that of nature. While I find the linking between fabrication and force convincing (after all, to make a table, a resource is extracted and broken), I wish to problematize this sharp distinction between humans/culture and nature by raising two concerns.⁴ First, hinting at a human and a nature perspective in the singular, erases a myriad of ways in which people have, are, and always will be interacting with each other and their environments. There simply is no such thing as a single human perspective on life. By asserting the nature of work from *the* viewpoint of nature, Arendt reduces nature to something singular, instead of acknowledging how we are always already entangled and multiple.

Second, speaking from *the* perspective of nature as if it is radically separated from that of humans, can risk overlooking the manner in which this dichotomy (nature/human)

⁴ There are many more concerns to be raised. After all, this distinction has been challenged by many from various perspectives already, see for instance: Achille Mbembe, *The Earthly Community: Reflections on the Last Utopia* (2022); Cecilia Åsberg & Rosi Braidotti, “Feminist Posthumanities: Redefining and Expanding Humanities’ Foundations.”

is mobilised to function as a prescriptive concept, as something which especially gains importance in how it lets people do things *to* nature (Tănăsescu). Subsequently, I argue that it is important to avoid this dichotomous language, especially when mobilizing Arendt's writings for the purpose of better approaching problems unfolding in relation to planetary catastrophes. I am inspired by Arendt to write that fabrication comes with some form of destruction. The mythical Gefion demonstrates this interrelation between fabrication, force, and destruction (after all, a piece of land was broken off to create a new island). And since we can assume that Gefion the computer is named after the mythical Gefion, I wonder: When developing, fabricating, using or marketing Gefion the computer, what is being destroyed? Given that this question concerns all, it only seems right that it is posed and explored in public settings too.⁵

Politicizing Gefion through Gefion

According to the branding narrative, Gefion the computer will not only accelerate the coming into being of solutions towards ecological crises, but it will use renewable energy in doing so. However, it is well-documented that the relation between Information and Communication Technology (ICT) and environmental resources is an ambivalent and potentially deeply unsustainable one: “[h]igh data volume requires extensive facilities for storage using natural resources such as water and non-renewable energy that require maintenance and accessibility. Furthermore, the manufacturing and disposal of devices to collect and process data emits polluting substances” (Lucivero 1013).⁶ In other words, knowledge about the material functioning of ICT, especially when promises about sustainability are being made, is of high relevance, and not only to those involved in the creation of this new ICT.

However, as stated earlier, in the branding communication regarding Gefion, the question of energy use is only briefly mentioned and quickly brushed over, because it is only hinted at via the words “renewable energy.” Yet, the equating of Greenhouse Gas

⁵ It exceeds the scope of this essay, but those familiar with Arendt's writings will be reminded precisely of her worry regarding technological and scientific developments and the possibility of public conversation about these. After all, it is with these worries that Arendt opens her seminal work on political theory, *The Human Condition*.

⁶ See also for instance: Renee Obringer et. al., “The Overlooked Environmental Footprint of Increasing Internet Use.”

Emissions (GGE) with sustainability is also aptly referred to as “carbon tunnel vision” (Berthelot et al. 707). Carbon tunnel vision requires caution because “[b]y neglecting the conditions and resources required for deploying AI applications, such approaches miss out on a significant part of the environmental impact” (707). Additionally, it “does not take into account impact categories, such as metal scarcity, which may be prevalent in ICT” (707). In other words, the environmental impacts of computers such as Gefion are more than just energy use and greenhouse gas emissions. Furthermore, as the literature at the beginning of this essay stressed, in addition to environmental impacts and costs, the socio-material realities of “AI” that come with their own impacts and costs, ought to be considered.

Yet, the computer’s branding narrative does not encourage an elaboration on these impacts and jumps straight to that horizon of promises. In doing so, the branding narratives skip over some crucial details of the impacts computers such as Gefion can have. What forms of extraction might be involved in the development and use of this computer? Which communities might bear the brunt when building and using the computer? Who is given access to the details necessary to have critical conversations about these questions? And who is included in the participation of those very same conversations? Perhaps it is precisely (and often mainly) through subtext and (overlooked) details that better accounts of the actual impacts of technologies can be given. In sum, Gefion’s branding narrative presents the computer’s sustainability as a given, deploys this in a hastily paced way, all the while exemplifying a carbon tunnel vision. Consequently, I wonder: To whom belongs the interpretative and evaluative process of Gefion’s impacts? And what might it mean turning this into a public conversation?

One could object that Gefion’s narrative is merely a *branding* narrative and that it therefore does not matter so much that the computer’s various impacts are not elaborated upon. After all, so this objection might continue, what ultimately matters is whether the engineers made sustainable choices when developing the computer. Naturally, to the insiders who know the material composition and functioning of this computer, the repercussions on ecologies and communities around the world are perhaps known in more detail. However, Gefion’s footprint will precisely not be limited to these insiders and therefore, as I have been stressing, the details about Gefion’s functioning concern all.

Addressing the computer through the name's mythical story pushes this point through again and again by raising the question: With what ruptures and forces does this new computer come? Regardless of how it is answered, the mere posing of such a question occasions a moment for politicizing the narratives surrounding the computer. It encourages public conversations about the ways in which the computer affects the worlds we share and it requires continuous reflection on who is given access to these conversations and to the information necessary to even have these moments of reflection and who is left out. In that way, pacing Gefion's narrative differently means taking time to engage with details of its story, such as its name. Disciplines often grouped under the heading of the humanities are precisely suitable for exercises of linking myths and stories to concrete political conversations.

In a Moment of Conclusion

There is an increasing body of literature, especially from the social sciences and humanities, detailing the various materials, technologies, infrastructures, peoples, practices of extraction, forms of power, ideologies, and imaginaries that are clustered under the heading "Artificial Intelligence." Rather than focusing on horizons filled with promises of salvation (or demise, for that matter), this literature demonstrates how "AI" is a concept that houses a myriad of relations, materials, and ideas. In this essay, I have contributed to such literature by demonstrating what it can look like to intervene in the pace of a branding narrative surrounding a specific "AI" to open space for the posing of critical questions about the sustainability of the technology.

After all, any form of ICT, especially computers depending on and working with large amounts of data, comes with ecological costs, and with consequences to many in the communities implicated in its functioning and creation. However, the branding narrative of Gefion the computer does not seem to encourage a public debate on whether or not these costs are worthy. Since the earth is shared by all, and since the effects of big data computing take place on a planetary scale, the consequences of a new supercomputer must be part of a political, and thus public, conversation. In light of this, Gefion is a particularly interesting example.

This, because of the computer's namesake's mythical story. In its branding narrative, this name is merely presented as a quick detail. Nevertheless, in my reading,

force, rupture, creation and destruction lie at the core of this myth. Therefore, in this essay, I have staged the possibility of reading Gefion's branding narrative differently by giving more space to the computer's name and its relation to its mythical origins. In other words, I have demonstrated how this myth can occasion a moment to politicize the public conversation by focusing on themes of force, rupture, and destruction. Amidst the ecological crises that have happened, are currently happening, and the ones that are bound to happen still, such occasions of public questioning and reflection are urgent.

Works Cited

- Åsberg, Cecilia & Braidotti, Rosi. "Feminist Posthumanities: Redefining and Expanding Humanities' Foundations." *The Edinburgh Companion to the New European Humanities*, edited by Rosi Braidotti et al., Edinburgh UP, 2024, pp. 328-348. <https://doi.org/10.1515/9781399505208-021>. Accessed 24 July 2025.
- Aradau, Claudia, and Mercedes Bunz. "Dismantling the Apparatus of Domination? Left Critiques of AI." *Radical Philosophy*, vol. 2, no. 12, 2022, pp. 10-18.
- Arendt, Hannah. *The Human Condition*. 2nd ed. The U of Chicago P, 1958.
- Benjamin, Ruha. *Race After Technology: Abolitionist Tools for the New Jim Code*. Polity, 2019.
- Berthelot, Adrien, et al. "Estimating the Environmental Impact of Generative-AI Services Using an LCA-Based Methodology." *Procedia CIRP*, vol. 122, 2024, pp. 707-712. <https://doi.org/10.1016/j.procir.2024.01.098>. Accessed 24 July 2025.
- Couldry, Nick, and Ulises A. Mejias. "Data Colonialism: Rethinking Big Data's Relation to the Contemporary Subject." *Television & New Media*, vol. 20, no. 4, 2019, pp. 336-349. <https://doi.org/10.1177/1527476418796632>. Accessed 24 July 2025.
- Crawford, Kate. *Atlas of AI*. Yale UP, 2021.
- Crawford, Kate, and Vladan Joler. "Anatomy of an AI System." *Virtual Creativity*, vol. 9, no. 1, 2019, pp. 117-120. https://doi.org/10.1386/vcr_00008_7. Accessed 24 July 2025.
- Danish Centre for AI Innovation. "Denmark's New AI Supercomputer Gefion Ranked as 7th Fastest Storage Systems in the World." *Danish Centre for AI Innovation*, 17 Dec. 2024, <https://dcai.dk/news/denmark-s-new-ai-supercomputer-gefion-ranked-as-7th-fastest-storage-systems-in-the-world>. Accessed 24 July 2025.
- D' Ignazio, Catherine, and Lauren F. Klein. *Data Feminism*. The MIT P, 2023.
- Dixon-Román, Ezekiel, and Luciana Parisi. "Data Capitalism and the Counter Futures of Ethics in Artificial Intelligence." *Communication and the Public*, vol. 5, no. 3-4, 2020, pp. 116-121. <https://doi.org/10.1177/2057047320972029>. Accessed 24 July 2025.

- Obringer, Renee, et al.. “The Overlooked Environmental Footprint of Increasing Internet Use.” *Resources, Conservation & Recycling*, vol. 167, 2021. <https://doi.org/10.1016/j.resconrec.2020.105389>. Accessed 24 July 2025.
- “Gefion AI Supercomputer Meetup (Online).” *Vimeo*, uploaded by Novo Nordisk Fonden, 27 June 2024, <https://vimeo.com/954712353>. Accessed 24 July 2025.
- Goldberg, David Theo. “Coding Time.” *Critical Times*, vol. 2, no. 3, 2019, pp. 353–369. <https://doi.org/10.1215/26410478-7862517>. Accessed 24 July 2025.
- Hyde, Sandra Teresa, and Laurie Denyer Willis. “Balancing the Quotidian: Precarity, Care and Pace in Anthropology’s Storytelling.” *Medical Anthropology*, vol. 39, no. 4, 2020, pp. 297–304. <https://doi.org/10.1080/01459740.2020.1739673>. Accessed 24 July 2025.
- Katz, Yarden. *Artificial Whiteness: Politics and Ideology in Artificial Intelligence*. Columbia UP, 2020.
- Lindgren, Simon. *Critical Theory of AI*. Polity, 2024.
- Lucivero, Federica. ““Big Data, Big Waste?” A Reflection on the Environmental Sustainability of Big Data Initiatives.” *Science and Engineering Ethics*, vol. 26, no. 2, 2020, pp. 1009–1030. <https://doi.org/10.1007/s11948-019-00171-7>. Accessed 24 July 2025.
- Mbembe, Achille. *The Earthly Community: Reflections on the Last Utopia*. Translated by Steven Corcoran, V2_Publishing, 2022.
- Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Harvard UP, 2011.
- Novo Nordisk Foundation. “Denmark to Build One of the World’s Most Powerful AI Supercomputers, Accelerating Solutions to Societal Challenges.” *Novo Nordisk Fonden*, 18 Mar. 2024, <https://novonordiskfonden.dk/en/news/denmark-to-build-one-of-the-worlds-most-powerful-ai-supercomputers-accelerating-solutions-to-societal-challenges/>. Accessed 24 July 2025.
- . “Denmark’s First AI Supercomputer Is Now Operational.” *Novo Nordisk Fonden*, 23 Oct. 2024, <https://novonordiskfonden.dk/en/news/denmarks-first-ai-supercomputer-is-now-operational/>. Accessed 24 July 2025.
- . “What Do We Support?” *Novo Nordisk Fonden*, <https://novonordiskfonden.dk/en/what-we-support/>. Accessed 24 July 2025.
- O’Neil, Cathy. *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*. Penguin Books, 2016.
- Pasquinelli, Matteo. *The Eye of the Master: A Social History of Artificial Intelligence*. Verso, 2023.
- “Slow AI – Arias.” *Slow AI*, 26 June 2024, <https://www.arias.amsterdam/projects/slow-ai>.
- Starosielski, Nicole. *The Undersea Network*. Duke UP, 2015.
- Tănăsescu, Mihnea. *Ecocene Politics*. Open Book Publishers, 2022.

Verdegem, Pieter. "Dismantling AI Capitalism: The Commons as an Alternative to the Power Concentration of Big Tech." *AI & SOCIETY*, vol. 39, no. 2, 2024, pp. 727–737. <https://doi.org/10.1007/s00146-022-01437-8>. Accessed 24 July 2025.

“I Invoke Cunt”: Ecofeminist Manifestos and the Pains and Pleasures of the Femme Earth

Laura Handl
Dresden University of Technology

Abstract

The polycrisis of Global Warming has established ecocriticism as a major research field for the humanities and simultaneously founded many avenues of literary expressions. However, even as their formalization of an aesthetic-political critique offers alternatives to techno-optimist escapism and the omnipresent narratives of succumbing into despair, manifestos as literary forms have not been centered in ecocritical discourses. Drawing from Indigenous thinkers, Jane Caputi states that the earth, rendered femme as ‘Mutha’” is thoroughly fucked by technologies, ideologies, norms and values rooted in oppressive systems of exploitation. In a comparative close reading of the femme understanding of Caputi and the ecolesbian text “The Anthroponussy” by Isabella Blea Nuñez, Beverley Choo, Yasmin and Eqtaffaq Saddam Hussain, this paper argues that ecofeminist manifestos present new strategies of theorizing the femme, non-human Earth. Their calls for environmental justice diversify ecocritical scholarship and cultural production in their radically dirty-minded, loving-nourishing, polemical and engaging feminist practice, linking environmental and social justice irrevocably together. By manifesting a “witchy” break from heteronormativity and patriarchy, they answer calls for more nuanced approaches in the Environmental Humanities. As this paper models, this also requires new reading strategies that honor the manifesto’s positions between academic and public communication in times of exacerbated future uncertainty.¹

Manifesting critique in the Polycrisis of Global Warming

The “Anthropocene” as a term emerged from geology, but having seeped into public consciousness and cultural and political critique, is described by feminist scholar Jane Caputi as the “Age of the Motherfucker” (*Call Your “Mutha”* 5). In this paper, I am interested in discussing the value I perceive in an ecofeminist manifestary critique of Anthropos-centered Anthropocene-thinking, through simultaneously shifting paradigmatic readings of the polycrisis of Global Warming towards marginalized perspectives of femmes, BIPOC² people and BIPOC femmes. Thereby, these manifestos “refuse to

¹ The concept of this paper was conceived in collaboration with Svenja Engelmann-Kewitz, who had to step back from writing our idea up due to time conflicts with another project. Nevertheless, this text would not have been possible without her, so in this way, I want to sincerely thank her here for writing the first abstract, giving tips on ecocritical literature, and not the least for her friendship and brilliant mind!

² The acronym BIPOC (Black, Indigenous and People of Color) is an umbrella term for historically and presently marginalized social groups due to being racialized as non-white, mostly used in the US American discourse landscape.

reproduce the Anthropocene and to create something new” (4), while also engaging with the affective complexities of this work of disentanglement.

I exemplify the potentiality of ecofeminist critique for enriching political imagining in climate discourses with two academic manifestos, both of which create a metaphorical concept of a (motherly) femme earth that centers on transformation. Through the employment of the common manifesto convention of one strong, central (visual) metaphor (Caws xxiii), these texts explicitly counter hegemonic discourses of despair as well as techno-optimism—if you will, transforming the hyperobject of the Anthropocene (Morton)—into a femme hypersubject. Firstly, American studies scholar Caputi’s *Call Your “Mutha”’: A Deliberately Dirty-minded Manifesto for the Earth Mother in the Anthropocene* (2020) argues for an invocation of the concept of the earth as ‘Mutha’; thereby, the manifesto “[attends] to the spiritual-energetic relationship of the earthbound” based on (eco)feminist scholarship—the use of ‘earthbound’ as a term, for example, is inspired by bell hooks—and even more fundamentally by Indigenous epistemologies (Caputi, *Call Your “Mutha”* 26, 25). Secondly, I am looking at the reformatted zine titled “The Anthro pussy: an Ecolesbian Manifesto” by Isabella Blea Nuñez, Beverley Choo Jia Ying, Yasmin Binte Mohd Sani, and Eqtaffaq Saddam Hussain, published in the *Journal of Lesbian Studies* in 2024. Therein, the authors position themselves as part of the “political lesbianism movement . . . [proposing] it as an answer to climate and nature crises” (Nuñez et al. 2). The knowledge and practices of political ecolesbianism are put forth as a basis for an activism of multispecies collaboration in solidarity with the earth: “we have birthed the Anthro pussy in an effort to bring the vulva energy into our worldwide contentions with the more-than-human” (3). In both manifestos, the political imagination of hope in times of the climate crisis is rooted in addressing as well as condemning the injustice of the discursive and material marginalization of people and entities through matrices of structural violence; namely classism, racism, speciesism, and sexism. Often these matrices are obscured in mainstream discourses of the cultural West about climate futurities by a rhetoric of techno-optimism, which in the end only serves to conserve the global oppressive structures of capitalism.

In 2023, Mark Andreessen, for example, published “The Techno-Optimist Manifesto” on the website of his venture capital firm Andreessen Horowitz, also known as

a16z, pointing at growth of technology as the safest way to ensure a prosperous future for humanity. His philosophy is probably most aptly expressed in the following statement: “Techno-Optimists believe that societies, like sharks, grow or die” (Andreessen). This is an example of progressivist anthropocentric thinking, which vaguely postpones solutions, for the actual reality of social problems in general and the climate crisis in particular, often by not even outright acknowledging it (as Andreessen’s manifesto does): “We believe that there is no material problem – whether created by nature or by technology – that cannot be solved with more technology” (Andreessen). This escapist approach of techno-optimism invokes as its first “Patron Saint” Jeff Bezos (others are tellingly Filippo Tommaso Marinetti and Friedrich Nietzsche), CEO of Amazon and investor in space colonialization through the involvement of his company, Blue Origin, in NASA’s Artemis program (Sheetz).

In his manifesto, Andreessen claims to be invested in the future of humanity. But how can it be interpreted that he simultaneously proudly aligns himself with and valorizes Bezos, one of the super-rich, who is actively and openly investing in plans to leave planet earth, supposedly, with all its climate problems behind, for the greener pastures of a space colony? The conclusionary tribute to Jeff Bezos specifically should undercut any optimism for technology saving humanity from the climate crisis that might have arisen while reading the text. Bezos culturally and materially represents entrepreneurs who justify on-going ecological destruction for the *fata morgana* of a more prosperous future for all, when they actually mean a more prosperous future for themselves and their investors. For the majority of climate discourse participants, and humanity at large, not only is it impossible to self-insert themselves into the public imagination of the future of humanity by funding space travel, but also the only alternative to techno-optimist escapism often seems to be a fall into the despair of climate depression. There are, however, also notable alternative narratives of stoic acceptance of the end of humanity (as atonement) presented in

contemporary discourses (MacCormack; Scranton).³ I argue the affective work of hope and political imagination in the climate crisis, without stepping into the ideological snare of techno-optimism, is fostered and theorized by ecofeminist manifestary writing, such as Caputi's and that of Nuñez et al., who center on the need to transform our relationship with our environment by way of pursuing ecological and social justice for the more-than-human, femme earth.

Firstly, however, an attempt is made here to contextualize these two manifestos within the contemporary writing practice of the genre as well as scholarly discourse on the Anthropocene as relevant to the political imagination in the climate crisis. The manifesto form has experienced a public upsurge, a manifesto moment (Hanna), as the US landscape of political opportunity experienced a reactionary shift towards anti-feminist policies, neoliberal acceleration, and acceptability of violence against non-normative gender identities, incited by the 2016 election of Donald Trump as the 45th US president.⁴ These texts focus on topoi of marginalization, categories of difference, need for urgent social

³ In *Learning to Die in the Anthropocene: Reflections on the End of a Civilization* (2015), Roy Scranton presents a candid analysis of the Anthropocene—"We're fucked. The only questions are how soon and how badly" (16)—and concludes that "[the] greatest challenge we face is a philosophical one: understanding that this civilization is already dead. The sooner we confront our situation and realize that there is nothing we can do to save ourselves, the sooner we can get down to the difficult task of adapting, with mortal humility, to our new reality" (23). Patricia MacCormack, on the other hand, has put forth ahumanism as a social movement, which advocates for human's embrace of the end of humanity in form of a conscious end to its reproduction for the sake and benefit of the non-human other: "Activism has long affirmed that forsaking power within the system which constitutes it is the way to change it, and forsaking our human privilege is a way to forsake the anthropocene in order to affirm the world" (2). While both include proposals of pragmatic action in the present, the issue that incites their arguments is the need to accept the inevitability of (humanities) death and both suggest to accept this gracefully.

⁴ At the time of writing (Spring 2025), the everyday lives of BIPOC, genderqueer, and femme peoples were immediately worsened with the second inauguration of Donald Trump. For example, one of the first executive orders targets what is termed "gender ideology," defines "man" and "woman" as the only two genders, walking back the option of a third gender marker on US passports (The White House). The current political landscape in the US can only be described as hostile and unjust to trans people specifically:

'As a transgender person in this country . . . this fight for our freedom, our recognition, our ability to just live our lives, this isn't new,' says Westley Ebling, who identifies as a transmasculine nonbinary person who faced issues getting a new passport recently. 'But this scale of attacks is just horrid. It has been a really hard time, to just feel that a country is so against you just for trying to live.' (Diaz)

While the manifesto moment in US discourses seems to slowly have receded since the election of Joe Biden in 2020, it remains to be seen what forms of critique can be established in the political discourse during the second presidency of Trump. Specifically academic manifestos will most probably not be prevalent, since universities have been targeted by the presidency as well. There the current lawsuit of Harvard University against the unconstitutional freeze on research funds (Powell) might be a precedent for more legal action against the unlawful governance of Donald Trump.

change; however, are still often platformed by the publishing industry, which sustains this trend wave of manifesto writing for reasons of commercialization. Within this manifesto moment,⁵ the ecological crisis is often evoked, either as one aspect of many, or as the inciting incident for the manifestary call to action: “Born out of modernity, manifestos have always been both a reflection of and a shaping force on the future and therefore they are essential to any attempt we make to deal with climate futures, whether psychologically or actually” (Hanna 146).⁶ In “The Field of Cultural Production,” Pierre Bourdieu mentions the form of the manifesto in connection to the field of restricted production and the “newcomers” to this sphere, who want to position themselves in difference to elders, amassing symbolic capital (58-59, 67). The manifesto form, as inherited from the European avantgarde art movements of the early twentieth century, aims to establish a different approach, in scholarship often said to be representing a modernist impulse to make “anew” (Puchner xvii). Although, as the proto-advertisements of Avantgarde manifestos have shown, sometimes there are no other aspirations to content, or more precisely no explicit political ones. For social movements of the mid-twentieth century protest cycle (Staggenborg), spearheaded by the Civil Rights Movement, manifestos have become a

⁵ This paper comes out of a research project funded by the German Research Foundation (DFG), which started in 2022 (No. 501505288). Therein the project’s main investigator, Prof. Dr. Carsten Junker at the chair of American Studies with a Focus on Diversity Studies, and myself, have considered the contemporary manifesto moment to be spatially centered in English-speaking cultural context. While there have been some influential manifestos written in the earlier years of the millennium, such as Mackenzie Wark’s *Hacker Manifesto* (2004), an additional acceleration in manifesto writing has taken place in the ‘Web 2.0’ landscape, and specifically more traditional print publishing, since 2015. As we have found out over the course of the current research project, there is within this manifesto moment also a resurgence of manifesto translations into English (and other languages) in an effort to extend their circle of influence e.g., *The Countersexual Manifesto* (2018) by Paul Preciado, *Set Fear on Fire* (2023) by LasTesis, both translated from Spanish, or *The Darkness Manifesto* (2022) by Johan Eklöf translated from Swedish. This manifesto moment has been observed and declared, most notably in the already quoted *Manifesto Handbook* (2018) by Julian Hanna, who writes extensively on the inheritance of radical artistic and political manifestos, putting forth 95 theses for the form today. Also, some scholars have been criticizing the denigration of the form by manifestos taking up the moniker in name only without theorizing revolutionary or radical trajectories for political imagination (for example, see Kuźniarz).

⁶ At the same time, the manifesto label is not a guaranty radically transformative politics regarding the climate crisis, even when rhetorically used as the inciting incident for arguments. An example of a manifesto where the climate catastrophe is repeatedly invoked is Fleurbaey et al.’s *A Manifesto for Social Progress* (2018); here, the call to action directed towards the reader regarding the climate is remarkably moderate: ‘be a citizen’ who supports established international institutions such as the United Nations Framework Convention on Climate Change and again place hope on future technologies: “If green technologies become cheap sufficiently quickly, they could displace fossil fuels. However, public action in the form of research and taxes and subsidies can accelerate the technological transition. Citizen support for all such efforts is likely to be crucial in the coming years” (Fleurbaey et al. 209).

label for multiple revolutionary writings that have gained importance in public mobilization. Informed by their use in art and political discourses, manifesto forms signify historical continuity as well as radical thinking and are, therefore, uniquely positioned as tools for establishing a standpoint of political imagining in the public sphere. In academia and beyond, consequently, the meanings of posing a text as manifestary are equipping the speaking position of the manifestors with an aura of significance, which they need to amplify the possible influence and resonance of the politically relevant text (Ariel).⁷

Arguably, today no other topic than the ecological crisis leads more scientists to attempt to find a non-academic audience for their urgent calls to political action. Thereby, interesting formalizations have been found, which embrace illocutionary, activist speech, from Stefano Mancuso's *The Nation of Plants* (2021), expressing political demands through writing a constitution in 9 Articles, to the general rise of the subcategory of the ecocritical (or eco) manifesto. Rather than the discovery of a technological "solution," the climate crisis demands cultural changes fostered by policies and informed by thinkers at the juncture of humanities and climate science, to propagate a political imagination influenced by both. The form of the manifesto can be employed to change cultural paradigms of the Anthropocene and those of assuming a universal, "rational white Man," by ingraining ideas of feminist social justice in the scholarship of the Environmental Humanities. For example, in their *Manifesto for Living in the Anthropocene*, editors Kathrine Gibson, Deborah Bird Rose, and Ruth Fincher position themselves not only as scientists, but also as thinkers crucially motivated to share their affective state: "We are a group of concerned social scientists and creative scholars who are moved to address the unique qualities of our contemporary world" (i). More often than the collaborative approach to writing in a manifestary fashion, as exemplified by Gibson et al., contemporary academic manifestos (but also in political or artistic iterations of the form), are written by

⁷ Nana Ariel defines "language games"—a conceptualization taken from Wittgenstein, here meaning "What do people try to perform when they use this word?"(5)—enacted by 'manifesto' today, one of them being superlative:

'Manifesto' intensifies the prestige of a publication and gives it an aura of importance and public relevance. [...] In many [...] use cases, the term 'manifesto' is not given to a text that has any identifiable manifestary qualities such as explicit declarations or a call for action, or even the slightest hint of ideological devotion or programmatic vision, but rather the very labelling as a manifesto makes the text into one. (Ariel 5)

a single author—examples of ecomanifestos would be Arran Gare’s *The Philosophical Foundations of Ecological Civilization: A Manifesto for the Future* (2018) or Patricia MacCormack’s *Ahuman Manifesto: Activism for the End of the Anthropocene* (2020). They use the manifesto formalization for two main purposes: firstly, to broaden the possible audience, and secondly, to affectively, personally address and share with their audience the urgent need for social change to minimize the consequences of the climate crisis:

Some feminist eco manifestos criticize the use of the term Anthropocene in climate crisis discourses as it conjures up a universal human subject, which most often can be said to represent white masculinity. Since gender is a social construct, whose performance by individuals is perpetuated and learned via sociocultural institutions, most significantly the family and mainstream media, I want to contextualize human universality from a cultural (and literary) studies lens here. As feminist scholars Judith Roof and Robyn Wiegman have put it in their anthology *Who Can Speak? Authority and Critical Identity* (1995), “[although] we have witnessed a number of rather remarkable social transformations . . . the cultural hegemony of white masculinity certainly has not ceased” (x). This is very much the case for discourses about science in general and discourses of the Anthropocene in particular, which is picked up by contemporary manifestos. One of the main motivations for a feminist critique of Anthropocene-thinking is the Western capitalist ideology of a universal, “rational” subject of sociopolitical relations based on assumptions of white masculinity, which is countered with affect-based critiques of paternalism and respectability politics.⁸ The “white male . . . hegemonic model of identity” (Callaghan 196) results not only in a devaluation of the experiences of marginalized femme BIPOC peoples, but also on a more fundamental level, in a material denial of their subjectivity, as Sandra Harding states:

For women and other marginalized groups, subjectivity and its possibility of legitimated ‘experience’ must be achieved; subjectivity and experience are made, not born. To be a recognizable subject of history and knowledge is to be permitted—indeed, expected—to have rage, anger, desire, a history, and speech, all of which are

⁸ Although, sometimes, paternalistic positions are taken on by some eco manifestors, either in their rhetoric or on the lack of acknowledging the need for marginalized voices to be centered in political decision within the polycrisis of Global Warming, such as Robert William Sandford or arguably also Stefano Mancuso, who in his manifesto imaginatively appropriates the speaking position of all plants on earth.

human features forbidden to marginalized people. This denial of subjectivity is the product of material conditions. (120)

In light of this, I am not alone in arguing an approach to an aesthetics of ecocriticism must signify a counter-manifestation to the “geo-necrophilic” focus on rationality displayed by “The Man” (Caputi, *Call Your “Mutha”* 96). Contemporary ecofeminist manifestos therefore speak from an affective, polemic speaking position, which acknowledges and avoids a renewed centering of whiteness and maleness. One common strategy of eco manifestos more generally is to move away from the term Anthropocene by suggesting alternative terms. For example, Janae Davis, Alex A. Moulton, Levi Van Sant, and Brian Williams point out the “epistemological blinders . . . [of Anthropocene scholarship] to the role of racism and resistance,” and subsequently argue for the term Plantationocene (developed from the term plantation (4–5). Another example is brought forth by the writer of one of the most influential academic manifestos of the twentieth century: Donna Haraway, author of “A Manifesto for Cyborgs” (1985), specifies the glaring omission of not considering non-human entities in discourses of ecological justice and suggests Chthulucene (Haraway). Another notable example is a feminist art manifesto by Alexandra Pirici and Raluca Voinea, who sketch the Gynocene as a new geological era. It becomes clear that generally eco manifestos of the present are more prone to imagine beyond “only” ecological justice, than in a broader sense draw the connections between systems of oppression to demand a fundamental social change.

Conventionally, to counter respectability politics of public discourses, the performative manifestor, who aims to disclose and also demand transformative knowledge and behavior, can employ different strategies, but most likely a polemic one. In the words of Teresa Ebert, the manifesto is (inherited from the Ur-manifesto by Marx and Engels) “the genre of change-writing, of transformative textuality and the textuality of transformation” (533). Thereby, its central strategy is the polemic, “aimed at implicating the natural in its social, economic, and historical conditions of production” (554). This has made the manifesto ripe for feminist appropriation and hijacking, not despite but because of the paternalistic origins of the form (Pearce). While readers have to abide the, sometimes tense, uncertainty of what is meant literally (and therefore to be taken “seriously”), or what is ironic and to be taken metaphorically, manifestory speech channels audacious claims for

disclosing truths. This also extends to controversial practices for ecological change, such as anti-natalism. For example, the "GINK Manifesto" by Lisa Hymas (or the already mentioned *Ahuman Manifesto* as a more recent example) argue for ceasing human reproduction to express "green inclinations."⁹

The two manifestos by Caputi and Nuñez et al. already use polemical speech in their titles that counters white maleness by rhetorically embracing the femme 'Mutha' and "Pussy," which I will elaborate on in the following.

The 'Mutha' and the Pussy: Embracing Affect, Casting Spells

In the two ecocritical manifestos, a parallelization is made between human/non-human and male/female binaries, which affords effective critique of the rationalism of Anthropocene-thinking and gestures toward imagining social and environmental justice. In "The Anthropussy," the authors explicitly call for lesbian relations with our "nonhuman kin," the mother earth, thereby drawing from Donna Haraway's work on interspecies relations, when they write: "We are entangled in the same ecological web, and mirror each other's experiences of marginality. . . . To hold lesbian intimacy with the Earth is to reject this compulsory motherhood, and to hold the Earth instead as an equal" (Nuñez et al. 6). This relationship is to be "processed," similarly to a lesbian relationship, which means the subjects in relation engage in analysis and reflection together, and to make us recognize "the interconnectedness of our multispecies struggles" (8). The authors include a garden guide—"Because it is not an ecolesbian manifesto without a DIY home project guide"—in which this notions gains practical shape in the form of lovingly engaging with nature (10). The guide is determined as "sexy" in the sense of the non-hegemonic lesbian erotic: with a focus on rebirth, it centers bodily and spiritual engagement with the earth—be it in the form of soil, plants, insects or finally also fellow humans in the fourth step titled "Compost Your Exes, and Save Your Seeds" (12). The manifestors name the practices of ecolesbianism they put forth, their repertoire of action or "world-building scene," the Anthropussy and themselves "climate cunts" to signify the break with the logic of "The Man" of the Anthropocene (13). Thereby they also draw a connection with a previous manifestary text by citing the "Cyberfeminist Manifesto for the Twenty-First Century" and

⁹ GINK is an acronym for Green Inclinations, No Kids.

its revolutionary position of the “modern cunt” (13). This represents both the polemical rhetoric of the manifesto, its frequent intertextuality, and a break with the rationalizing tone of Anthropocene discourse.

The context of the reappropriation of the stigmatized terms “cunt” and “pussy” is present in both manifestos and will be elaborated on soon. First, for reading Caputi’s manifesto, I wish to contextualize her approach to spirituality through her previous work on myths, which also thematizes the femme non-/more-than-human. In her book *Goddesses and Monsters* (2004), Caputi exemplifies the power of myth, meaning its “transformative affects and effects” (10) through the scholarly discussions of gynocentric cultures (such as the Amazons) and popcultural references, concluding that the pivotal characteristic is the incitement of a “sense of wonder” leading to a suspension of disbelief resulting in material systems empowered by belief (12). The book hinges on the popcultural ambivalent representation of goddess/monster myths to that of the imperial (male) reigning god: “Above all, goddess/monster myth, comprehending the necessary dynamic and dualistic nature of Nature, makes peace with death, understanding natural death as a necessary part of the spiral of birth, life, death, transformation, and rebirth” (14). The image of the goddess links the femme more-than-human with transformation and rebirth and Caputi picks up this topos in the manifesto *Call Your “Mutha”* as well.

The aesthetics of the goddess as described by Caputi are closely connected to that of the witch as feminist figure, which is also evoked by contemporary feminists’ embrace of the “witchy” practices of neopagan religions praying to female deities (Berger 2). There are also manifestary precedents of “witchy” texts beginning in the Second Wave of feminism, exemplified by the “W.I.T.C.H. Manifesto” (1968). The relation between witchcraft and feminism can be based on aesthetics and political imagination only,¹⁰ but when countering the rationalism of Anthropocene discourse through affective-spiritual practices, they become relevant on the level of epistemology and structure as well. In the case of Caputi, the creation of the ‘Mutha’ is fundamentally rooted in non-Christian spirituality, which features on the level of structure: the four parts of *Call Your “Mutha”* each draw on practices of feminist witchcraft to introduce Caputi’s central theses: Part one,

¹⁰ For example, see Paulsen Mulvey and Keller, who write on small localized social media activism under the hashtag #WitchTheVote in the 2020 US presidential election.

called “Invocation,” (1) is focused on conceptualizing ‘Mutha’ earth, meanwhile part two, “The Curse,” (41) gestates “The Man,” who raped the ‘Mutha.’ Part three, “The Swear” (143), gives perspectives of cultural progress towards the ‘Mutha’ and the fourth and last part, the conclusion, is a “Convocation” (238). Caputi, who is a white cis-woman herself, also consciously attempts to “un-*Man* and un-*Missy*” (20) herself by specifically focusing on the work of non-white and specifically Indigenous thinkers—such as Jack Forbes (23, 78) Peggy Beck and Anna Lee Walters (6), or Katsi Cook (94). By highlighting their work, the “white supremacist, colonial, and capitalist logics instantiated in the origins of the Anthropocene” (Davis and Todd 763) are consciously countered by Caputi. Thereby, her manifesto explicitly reflects the author’s personal position and also practices a decolonializing approach by engaging scholarship by diverse voices.

Furthermore, this decolonial motivation against the Anthropocene is paired with an embrace of passionate affects, meaning anger, the erotic, and vulgar language. The cultural gendered meanings of anger as a reaction to injustice specifically (and passionate affects in general) necessitates a discussion of systemic silencing strategies of those marginalized due to gender or race (as well as sexuality and ethnicity and all who intersect). In people of non-dominant social identities, anger especially becomes highly politically relevant and can be a tool of political change, what Myisha Cherry terms “Lordean Anger” (5) in the context of anti-racist activism. Audre Lord’s “The Uses of Anger” makes clear the difference to the anger of the dominant and the depth of the epistemic injustice of silencing Black women’s angry affects. In this seminal text of feminist theory, the conclusion is to envision futures through anger to reach social justice:

It is not the anger of Black women which corrodes into blind, dehumanizing power, bent upon the annihilation of us all unless we meet it with what we have, our power to examine and to redefine the terms upon which we will live and work; our power to envision and to reconstruct, anger by painful anger, stone upon heavy stone, *a future of pollinating difference and the earth to support our choices*. (10; my emphasis)

I highlight the last sentence to show how the parallelization of social and environmental justice has a precedent here, too, and to emphasize how (eco)feminist political imagination is rooted in angry pain, which is also part of its solution. For Caputi, the material and metaphorical violence against human and more-than-human femmes must be met with a

linguistic and behavioral emphasis on mother earth: “Quiet as *The Man* might try to keep it, the ‘Mutha’ is the power capable of overwhelming him in the Anthropocene, not the other way around” (*Call Your “Mutha”* 5). Therein, also a pleasure can be received, which is incompatible with a fall into despair and also not necessarily based on physical sexuality. *Call Your “Mutha”* and “The Anthropussy” propagate a passionate engagement in earthly relations to, in the words of Nuñez et al., “[find] queer strength and intimacy in the ruins of the present” (9). The authors’ depth of feeling, and their humor, is made evident when they go on: “**Our world and our pussy are both on fire**” (Nuñez et al. 9), unequivocally equating the sincerity of their passion for change with the extent of the ecological crisis, wrapped in a lewd metaphor.

The affective tone of Caputi’s manifesto is announced by the subtitle already, when the author calls the text deliberately dirty-minded, positioning the manifestor against politics of respectability and purity.¹¹ In contemporary feminist manifestos as part of the intimate public sphere of feminist culture (Berlant), there is often a conscious rejection of politics of respectability around the affective matrix of politicized anger, rage and, specifically, hate from the perspective of affective solidarity and mobilizing for social change. At the same time, these expressions of affects can be also entrenched in a sentimentality for narratives representing an emotional catharsis in a reactionary stance of “anti-men.” Two examples are Pauline Harmange’s *I Hate Men* (2020) and, I would argue, Jessa Crispin’s *Why I am not a Feminist: A Feminist Manifesto* (2017), which performatively devests from the discursive labor of enlightening men about feminism: “Do your own fucking work, gentlemen” (111). The impetus of feminist manifestos’ performative misandry, however, also more often than not seems to be a disidentification of gendered personhood with the political, cultural, and political systems of heteropatriarchal masculinity; in other words, they differentiate men from “The Men” (but nevertheless seldomly give much attention to imagining alternative masculinities as is the case for the two examples mentioned).

¹¹ In the manifesto, Caputi here also draws from Audre Lorde, specifically her conceptualization of the erotic (*Call Your “Mutha”* 32).

The two manifestos by Caputi and Nuñez et al. take a more abstract and fluid approach against bio-essentialist and generalizing arguments,¹² as well as politics of respectability, which have been internalized as a marginalized person within the world not receptive of their subjectivity. Caputi states that the phallus is mainly a metaphor for god-like power and even the opposite of the biological penis, which is “attached, embodied, sensitive, fertile, and fragrant” (*Call Your “Mutha”* 57) and discusses multiple pronouns for the ‘Mutha’ who is “femme, female, non-binary, multiple, and a volatile essence” (36). Nuñez et al. define their political approach to the climate crisis, ecolesbianism, not necessarily in terms of sexuality or gender, but through the four identified values “intimacy, interdependence, processing, and resistance” (4). Caputi also describes her dirty-mindedness as (gender-)holistic: “A dirty mind perceives the inter-connectedness of all, including the dark in the light, the female in the male, the sensual in the intellectual, the obscene in the sacred, the cunt in the cock, the down in the up, the animal in the human, the sexual in the spiritual— and vice versa” (*Call Your “Mutha”* 32). These are texts that *acknowledge* and then *circumvent* the binary gender norms around affect expression. Thereby they use “vulgar” language, such as “cunt” and “pussy,” against notions of respectability, countering hegemonic norms of speech based in patriarchal thinking. Caputi reflects this when stating: “I invoke cunt [which] can be hurtful to hear. Readers may balk and ask why my language needs to be so downright dirty. My intention is not to shock or pain, but to reveal and work with the significant ecological implications of cunt and dirt itself” (27). Nuñez et al. conceptualize the “climate cunt” as follows: “an ironic, fierce, and elastic member of the ecologies that we inhabit” and conclude their manifesto with the significant addition that ecolesbianism is humorous and self-aware: “as we ecolesbians say, a little cunty” (13). Both texts manifest a “witchy” break from heteronormativity and patriarchy, answering calls for affective approaches in the Environmental Humanities.

¹² For a readable and enlightening exercise in refuting these kinds of arguments, see Cordelia Fine’s meta-studies on the many defects of clinical conceptualization of ‘biological sex’ specifically concerning the study of hormones, namely *Delusions of Gender: How Our Minds, Society, and Neurosexism Create Difference* (2010) and *Testosterone Rex: Unmaking the Myths of Our Gendered Minds* (2017).

Conclusion

Within the needful processes of change that are ever accelerating in societies that face the ecological development of the men-made climate catastrophe, negative emotions against the masculinized Anthropocene inevitably arise. Especially when witnessed by (queer) feminists,¹³ these affects lead to self-reflected formalizations of anti-masc performative ideologies focused toward a change in perspective on the generative powers of genders. Thereby they are fully referential to the gender binary, in the sense that it is a performative inversion of the Anthropos-centered paradigm of “The Man,” while still imagining a political futurity beyond patriarchal ideologies of the social, economic, political and crucially the ecological, including the more-than-human.

The two texts I have discussed use allegorical metaphors of the earth as the entity ‘Mutha’ or the “Anthropussy,” to counter Anthropocentric thinking. In the first case, we find a re-mystification of the natural in a call towards imagining a pro-femme futurity, and in the second text, “ecolesbianism” is presented as a political template against the Anthropocene. Both manifestos are weird and timely, while being an open mystification of the present which acknowledges and celebrates change and transformation. The icons of femme progressiveness that are erected by these texts are dealing with negative affects by thinking through them as a lens, entering language that is specifically provocative and not adhering to hegemonic politics of respectability. They do not perform to create “anew,” but consciously build upon the concepts and theories of others, making new relations in thinking, feeling and behavior, and finally make alternatives formulable for the despair of the climate catastrophe. Instead of attempting to appease and soothe, these manifestos imagine how we can think and behave passionately in relation to others, across the social boundaries of genders and also the human/non-human divide from a perspective which

¹³ I use brackets because in my interpretation this stands an inherent inclusion, feminism is always queer in the political sense and should also be as LGBTQIA+ inclusive towards individuals. However, this always needs to be specifically amplified to preemptively signal that I still understand the fact that others have varying and limited understandings of the term feminism connected to biological determinism, who also embrace negative affect in a way to further marginalize trans and gender-non-conforming people. Concerningly, but not surprisingly, there is a clear political and discursive connection between so-called trans-exclusionary radical feminists (TERFs) and neo-fascist activists today. Sophie Lewis has termed these social movements and schools of thought enemy feminisms in her book of the same name: *Enemy Feminisms: TERFs, Policewomen, and Girlbosses Against Liberation* (2025).

centers fluid, femme philosophies of interdependence and solidarity across the relativized human/non-human divide.

Works Cited

- Andreessen, Marc. “The Techno-Optimist Manifesto.” *Andreessen Horowitz*, 16 Oct. 2023, <https://a16z.com/the-techno-optimist-manifesto/>. Accessed 24 July 2025.
- Ariel, Nana. “Language Games with ‘Manifesto.’” *Culture, Theory and Critique*, vol. 63, no. 2-3, 2021, pp. 1–11, <https://doi.org/10.1080/14735784.2021.1984970>. Accessed 24 July 2025.
- Berger, Helen A., editor. *Witchcraft and Magic: Contemporary North America*. U of Pennsylvania P, 2005.
- Berlant, Lauren Gail. *The Female Complaint: The Unfinished Business of Sentimentality in American Culture*. Duke UP, 2008.
- Bourdieu, Pierre. *The Field of Cultural Production: Essays on Art and Literature*, edited by Randal Johnson, Polity, 1993.
- Callaghan, Dymna. “11: The Vicar and Virago: Feminism and the Problem of Identity.” *Who Can Speak? Authority and Critical Identity*, edited by Judith Roof and Robyn Wiegman, U of Illinois P, 1995, pp. 195–207.
- Caputi, Jane. *Call Your “Mutha’”: A Deliberately Dirty-Minded Manifesto for Mother Earth in the Age of the Anthropocene*. Oxford UP, 2020.
- . *Goddesses and Monsters: Women, Myth, Power, and Popular Culture*. U of Wisconsin P/Popular Press, 2004.
- Caws, Mary Ann. “The Poetics of the Manifesto.” *Manifesto: A Century of Isms*, edited by Mary Ann Caws, U of Nebraska P, 2001, pp. ix–xxx.
- Cherry, Myisha. *The Case for Rage: Why Anger Is Essential to Anti-Racist Struggle*. Oxford UP, 2021.
- Crispin, Jessa. *Why I Am Not a Feminist: A Feminist Manifesto*. Melville House Publishing, 2017.
- Davis, Heather, and Zoe Todd. “On the Importance of a Date, or, Decolonizing the Anthropocene.” *ACME: An International Journal for Critical Geographies*, vol. 16, no. 4, 2017, pp. 761–780, <https://acme-journal.org/index.php/acme/article/view/1539/1303>. Accessed 29 July 2025.
- Davis, Janae, et al. “Anthropocene, Capitalocene, ... Plantationocene? A Manifesto for Ecological Justice in an Age of Global Crises.” *Geography Compass*, vol. 13, no. 5, 2019, p. 1-15, <https://doi.org/10.1111/gec3.12438>. Accessed 24 July 2025.
- Diaz, Jaclyn. “Trump’s Passport Policy Leaves Trans, Intersex Americans in the Lurch.” *NPR*, 21 Feb. 2025. *NPR*, <https://www.npr.org/2025/02/21/nx-s1-5300880/trump-passport-policy-trans-gender-intersex-nonbinary>. Accessed 24 July 2025.

- Ebert, Teresa L. "Manifesto as Theory and Theory as Material Force: Toward a Red Polemic." *JAC*, vol. 23, no. 3, 2003, pp. 553–562, <https://www.jstor.org/stable/20866585>. Accessed 24 July 2025.
- Eklöf, Johan. *The Darkness Manifesto: How Light Pollution Threatens the Ancient Rhythms of Life*. Translated by Elisabeth DeNoma, Scribner, 2023.
- Fine, Cordelia. *Delusions of Gender: How Our Minds, Society, and Neurosexism Create Difference*. W. W. Norton & Company, 2010.
- . *Testosterone Rex: Unmaking the Myths of Our Gendered Minds*. Icon Books, 2017.
- Fleurbaey, Marc et al. *A Manifesto for Social Progress: Ideas for a Better Society*. Cambridge UP, 2018.
- Gare, Arran. *The Philosophical Foundations of Ecological Civilization: A Manifesto for the Future*. Routledge, 2018.
- Gibson, Katherine, et al., editors. *Manifesto For Living in the Anthropocene*. Punctum Books, 2015.
- Halberstam, Jack. *Gaga Feminism: Sex, Gender, and the End of Normal*. Beacon Press, 2012.
- Hanna, Julian. *The Manifesto Handbook: 95 Theses on an Incendiary Form*. Zero Books, 2018.
- Haraway, Donna. "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin." *Environmental Humanities*, vol. 6, no. 1, 2015, pp. 159–165. Silverchair, <https://doi.org/10.1215/22011919-3615934>. Accessed 24 July 2025.
- Harding, Sandra. "Subjectivity, Experience, and Knowledge: An Epistemology from/for Rainbow Coalition Politics." *Who Can Speak? Authority and Critical Identity*, edited by Judith Roof and Robyn Wiegman, U of Illinois P, 1995, pp. 120–136.
- Harmange, Pauline. *I Hate Men*. 4th Estate, 2020.
- Kuźniarz, Bartosz. "The Gesture of Manifesto." *Minnesota Review*, vol. 99, no. 1, 2022, pp. 60–76.
- LasTesis. *Set Fear on Fire: The Feminist Call That Set the Americas Ablaze*. Translated by Camila Valle, Verso UK, 2023.
- Lewis, Sophie. *Enemy Feminisms: TERFs, Policewomen, and Girlbosses Against Liberation*. Haymarket Books, 2025.
- Lorde, Audre. "The Uses of Anger." *Women's Studies Quarterly*, vol. 9, no. 3, 1981, pp. 7–10, <https://academicworks.cuny.edu/wsqr/509>. Accessed 24 July 2025.
- MacCormack, Patricia. *The Ahuman Manifesto: Activism for the End of the Anthropocene*. Bloomsbury Academic, 2020.
- Morton, Timothy. *Hyperobjects: Philosophy and Ecology after the End of the World*. U of Minnesota P, 2013.

- Nuñez, Isabella Blea, et al. “The Anthropussy: An Ecolesbian Manifesto.” *Journal of Lesbian Studies*, 2024, pp. 1–16, <https://doi.org/10.1080/10894160.2024.2334969>. Accessed 24 July 2025.
- Paulsen Mulvey, Alora, and Jessalynn Marie Keller. “Brooms and Ballots: #WitchTheVote, the Nostalgic Internet, and Intersectional Feminist Politics on Instagram.” *Social Media + Society*, vol. 9, no. 4, 2023, pp. 1-13, <https://journals.sagepub.com/doi/pdf/10.1177/20563051231205594>. Accessed 29 July 2025.
- Pearce, Kimber Charles. “The Radical Feminist Manifesto as Generic Appropriation: Gender, Genre, and Second Wave Resistance.” *Southern Communication Journal*, vol. 64, no. 4, 1999, pp. 307–315., <https://doi.org/10.1080/10417949909373145>. Accessed 24 July 2025.
- Pirici, Alexandra, and Raluca Voinea. “Manifesto for the Gynecene - Sketch of a New Geological Era.” *50 Feminist Art Manifestos*, edited by Katy Deepwell, KT Press, 2022, p. 43.
- Powell, Alvin. “Harvard Files Lawsuit against Trump Administration.” *Harvard Gazette*, 22 Apr. 2025, <https://news.harvard.edu/gazette/story/2025/04/harvard-files-lawsuit-against-trump-administration/>. Accessed 24 July 2025.
- Preciado, Paul B. *Countersexual Manifesto*. Translated by Kevin Gerry Dunn, Columbia UP, 2018.
- Puchner, Martin. *Poetry of the Revolution - Marx, Manifestos, and the Avant-Gardes*. Princeton UP, 2006.
- Roof, Judith, and Robyn Wiegman. “Introduction: Negotiating the Question.” *Who Can Speak? Authority and Critical Identity*, edited by Judith Roof and Robyn Wiegman, U of Illinois P, 1995, pp. ix–xi.
- Scranton, Roy. *Learning to Die in the Anthropocene: Reflections on the End of a Civilization*. City Lights Publishers, 2015.
- Sheetz, Michael. “NASA Awards Contracts to Jeff Bezos and Elon Musk to Land Astronauts on the Moon.” *CNBC*, 30 Apr. 2020, <https://www.cnbc.com/2020/04/30/nasa-selects-hls-lunar-lander-teams-blue-origin-spacex-dynetics.html>. Accessed 24 July 2025.
- The White House. “Defending Women from Gender Ideology Extremism and Restoring Biological Truth to the Federal Government.” *The White House*, 21 Jan. 2025, <https://www.whitehouse.gov/presidential-actions/2025/01/defending-women-from-gender-ideology-extremism-and-restoring-biological-truth-to-the-federal-government/>. Accessed 24 July 2025.
- W.I.T.C.H. “W.I.T.C.H. Manifesto.” *Burn It Down! Feminist Manifestos for the Revolution*, edited by Breanne Fahs, Verso, 1968.

*Holding Water to Hold Water: Comparing Levees and Tajines as Bodies of Water*¹

Lukas H. Seidler
Maastricht University

Abstract

This essay notices a material commonality between levees and tajines, namely that they need to hold water to hold water. Drawing on Astrida Neimanis' *Bodies of Water*, this essay takes that commonality as an occasion to comparatively read levees and tajines. Demonstrating the peculiar possibility of such a staging is this essay's main contribution to debates about how climate change is framed. When starting from this comparative stance, thinking the levee with the tajine brings out the everyday-like character of levees. This contrasts with how they are sometimes presented as bulwarks against apocalyptic, aqueous futures. On the other hand, thinking the tajine with the levee emphasizes the tajine's infrastructural character and the force of its vitally important nourishment. The current essay demonstrates how the humanities may be helpful when the exceptionality of apocalyptic narratives stifles action, reproduces nature-culture binaries, and obscures apocalypses which have already happened. By thinking across seemingly disparate phenomena, this essay produces a moment of strangeness where forms of water management come to leak through existing narratives.

Today's oceans are swelling, changing slowly yet ferociously. They rise, expand, and take new forms. One of the many ways of living within a changing hydrosphere is the levee. In the Netherlands, levees are often presented as part of a battle *against* water (Jensen), fending off the ocean and protecting them from incoming tides. They can also make their hinterland (temporarily) more habitable, leading to more settlements, only to thereby amplify the catastrophic consequences if they were to fail (see van Dam). Another way of living with water is the tajine, a dish and cooking utensil from the Maghreb region.² It is in many ways a microcosm of water management. Often thought to have been introduced by the nomadic Berber peoples more than a thousand years ago, the tajine's conical shape is integral to preserving water in the cooking process (Zaroual et al.). On a differently small and everyday scale compared to breaking levees, the breaking of a tajine and the spilling

¹ Though original in conception and thematically distinct, this essay was submitted, in part, as assessed coursework to a postgraduate course of the MA program "Philosophy" at the University of Amsterdam in 2023.

² The Maghreb region comprises Morocco, Algeria, Libya, Tunisia and Mauritania. I focus on the traditional, unglazed tajine.

Copyright © 2025 Hellenic Association for American Studies Digital Publications (Helaasdp). This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution ShareAlike 4.0 International License (CC-BY-SA 4.0). ISBN: 978-618-85422-2-8 (e-book, pdf).

of its contents can also prove catastrophic, especially amid increasing conditions of water scarcity.

Environmental humanities scholars Astrida Neimanis, Cecilia Åsberg and Joran Hedrén consider certain difficulties when climate change is negatively framed. It may stifle people's willingness to act or perpetuate the erasure of the "agency and future imaginaries" (77) of colonized, racialized, and marginalized groups, being the frontline communities of climate change (Gray). Moreover, the way frontline communities are and will be impacted by a changing climate is entangled with histories of colonial dispossession and environmental catastrophe (Gray; Sultana). For many, "the apocalypse has already happened; it continues because empire is a process" (DeLoughrey 7). Finally, Elizabeth M. DeLoughrey argues that many apocalyptic narratives surrounding climate change are undergirded by the heteronormatively loaded nature-culture binary of "Man versus nature," stemming from white settler-colonialism. Given how forms of water management are frequently apocalyptically framed in relation to planetary upheavals, I believe that there is a need for oblique angles which may complicate how water management is narrated in relation to climate change. Consequently, the main question of this essay is: How might forms of water management be thought of differently?

In this essay, I look at how levees are fragile in a sense that is different from the exceptionality of apocalyptic narratives. They must be tended to and cared for to produce the difference between water and their hinterland. Water also erodes the levees, seeps under and, potentially, flows over them. Indeed, if levees are not *kept* moist, they might not be able to withstand—or, rather, *stand with*—rivers, canals, and seas. A tajine also needs moisture to avoid breaking. Perhaps, the tajine functions similarly to the levee. When engaging the levee and the tajine with one other, I choose to "read" levees and tajines through the element of water. Here, I am inspired by the words of Stacy Alaimo in seeking to ignite "a love for that which is elemental in this strangely altered and altering world" (306).

This essay is thus an exercise in thinking levees and tajines beyond their conventional selves. As Alaimo also writes, such a project of elemental love might, in the end, be rebuffed, but hopefully this very dynamic of elemental love and strife makes us attentive to our "constantly churning world" (306). Given the elemental and "moist"

connection between the tajine and the levee, I inquire about their differences and similarities *as* bodies existing through their wateriness. To develop such an exploration, Astrida Neimanis' figuration of *Bodies of Water* will constitute the main conceptual scaffolding of this essay. First, I define and analyze what Neimanis means by a body of water and its amniotic onto-logic, and I put forward two ethico-political commitments that follow from this reading of *Bodies of Water*. Hereafter, I consider the tajine and the levee, respectively, and what it means to consider them as bodies of water. Lastly, "reading" them in tandem, I explore what they help express about each other. After concluding, I end my exploration with a brief reflection on the importance of refiguring familiar objects amid planetary upheaval.

The Amnion as Matter and Logic

The amnion, held by the uterus-bearer, is the membrane that encapsulates the gestational fluids and the embryo. Neimanis reimagines the embodiment of amnion, uterus-bearer, and embryo by underscoring their materiality as bodies of water, never singular in their leaks, seepages, "dribbles and deluges" (*Bodies of Water* 29). This means that they both need water but also that their waters need bodies, need to specifically *be* somewhere, somehow (96). According to Neimanis, the amnion functions as an interpermeable barrier. That is, as a barrier which allows for nutrients to pass through it, the amnion both connects and differentiates between what is on its inside and on its outside, between a gestated and a gestating body (95). Importantly, in this way, the amnion facilitates the life of both the embryo and the uterus-bearer. Simultaneously, the amnion itself also comes into being through these relations, pointing to relations of mutual interdependence. As a body of water, the amnion is continuously sustained by and produced out of relations with other bodies of water, and the bodies of water that encapsulate these relations. In other words, the amnion demonstrates a mode of being as continuous becoming.

Amnions are not limited to the human body since reptiles, birds, and other mammals have amnions as well. Moreover, Neimanis ventures further and argues that the gestationality of "[t]he amnion materializes a mode of relational being" common to bodies of water (97). "Bodies of water" thus becomes an expansive figuration: Our planetary, multi-species hydrocommons includes the body of water that is the Blue Pacific, the atmosphere that gestates terrestrial beings, the rapidly vanishing glaciers of the world, and

the bodies of humans, mosquitoes, cattle, and each of my fingers as they push their watery pulps against the keyboard while typing these words. These bodies of water both separate and leak, interpermeate and differentiate, facilitate life and gestate other bodies. While one might object that such an expansive conception of bodies of water becomes too vague, I believe that such vagueness is productive. They necessitate highly contextualized inquiries: Rather than seeking to define the being of bodies in any final, universal manner (their ontology), the mode of being of the amnion, as an onto-logic, “can rather gather or highlight something that helps us understand a common *how, where, when, and thanks to whom* that certain seemingly disparate beings share” (96). The potential vagueness of Neimanis’ figuration dissipates through the place-specific questions, stories, and explorations evoked by the situatedness of bodies of water.

Furthermore, since the amniotic facilitation of difference produces life, and life is the precondition for the very act of thinking about being, gestation is also the production of preconditions, of a “not yet” (97), in this case the being that has *not yet* been thought about. Accordingly, what gestation *is* can never be understood in any final sense. Thus, it becomes pertinent to also inquire *how*, not only *what*, gestational (life facilitating) practices are. Moreover, by centering the “how” of experience on something not-only human, an inquiry into gestationality makes for a posthuman phenomenology: A way of describing experience in its watery, more-than human facets and logics. When theorizing such an onto-logic of amniotics, “bodies of water” are presupposed. And since they are also always becomings, they are lively, material and situated. Hence, the onto-logic is always already situated in and affected by an also-watery world.

Two ethico-political commitments emerge from this reading of Neimanis’ *Bodies of Water*. The first is that bodies are always already leaking and never independent, thus rejecting “the masculinist logic of sharp-edged self-sufficiency” (3). In that sense, we are gestated by, as well as gestating others. On this account, there is an ethics to relations of gestation, for instance by imagining different ways of relating, of being “gestational as lover, as neighbour, as accidental stranger” (9). In this sense, “we”—(more-than) human, tajine, levee—are shaped by the onto-logic of amniotics, that is as gestating, differentiating, and interpermeating beings. Second, this “we” is implicated in a planetary hydrocommons and the woundedness of its “life-proliferating and life-sustaining gestational milieus”

(104). We must become attentive to our hydrocommons to better act on the planetary upheavals we, as bodies of water, *are part of*. In sum, “bodies of water” is a figuration that avoids detachment, while it helps establish connections across disparate phenomena in their/our planetarity. Two such phenomena are the levee and the tajine. Starting with the tajine, I explore how Neimanis’ thinking helps identify an amniotic onto-logic connecting these phenomena. There are few academic articles on the tajine so I will be supplementing with various blog and reddit posts, allowing small internet-mediated glimpses into day-to-day life with tajines.³ I start with a few expository remarks about the materiality of the tajine; first as a piece of earthenware, then as a form of water management. Afterwards, I discuss what an amniotic reading of these remarks may look like.

The Onto-logic of the Tajine

The tajine stems from the Maghreb region in North Africa and its modern form has a complex history, starting with the Berbers and influenced by multiple waves of colonization (Gardenswartz; Studer). The tajine is both associated with a variety of dishes and the pot that is used to cook and serve the dishes. The tajine that is cooked can neither be neatly separated from its cooking vessel, nor from how it is served. Hereby, the cooking process is materially connected to the often-communal cultures of eating that surround it (Frendo; Gardenswartz). In a Reddit post, the author complained that their tajine had cracked (“My Tagine Cracked”). It prompted fifty-one comments, discussing whose fault it might be, what to do next time, how to fix it, and the question of whether one should buy a “cute” tajine that potentially contains toxins and heavy metals or a functional, non-glazed one. Indeed, the “cracked tajine” is a ubiquitous theme whenever the tajine is mentioned online: The materiality of the tajine is as lively and unruly as any.

³ However, see Zaroual et al. for insights into the use and construction of the tajine. See David Crawford for an ethnography of a Berber village in Morocco where the tajine plays an important role. The lack of an explicit and sustained academic engagement with the tajine may speak to the embodied nature and politics of the practices and knowledge associated with it. Consequently, the limited scholarly attention to tajines may be indicative of the academy’s rootedness in racialized and imperialist hierarchies of what does and does not count as knowledge (Todd; Santos). Unfortunately, developing a sustained engagement with the repertoires, archives, practices, politics and histories surrounding tajines would necessitate a methodology different in scope and breadth from this essay’s focus on analogizing the two.

The tajine can be understood as a microcosm of water management. It is a shallow dish with a conical shape that is designed to lead the evaporating moisture back into the dish by condensing the water at the top and then falling back down (Zaroual et al. 88). Hereby, minimal water is needed for the cooking process. This especially matters because of the scarcity of water throughout much of the Maghreb region (Gardenswartz). The tajine is earthenware which means that it is porous and can absorb water. If it is not sufficiently wet, it cracks. The tajine must be immersed in water for at least one night before using it for the first time. Throughout its lifetime, with proper care, it will harden and become sturdier (Zaroual et al.). While tajines become resistant to thermal shocks through this process (Zaroual et al.), many blog posts and online conversations nevertheless ascribe tajines a defiant sense of agency since tajines “don’t like sudden changes in temperatures” (Eljaz, “Finding the Best Moroccan Tagine Pot”), making it important to choose recipes which “respect” the tajine (Eljaz, “How to Cook with a Tagine Like a Pro”). According to these and similar posts, careful use of water is both a way of managing thermal shocks as well as mending cracks (Beiler). A relation of care emerges between the tajine and its user, one which is dependent on the proper use and dispersal of water throughout the tajine’s pores.

These remarks set a stage for an amniotic reading of the tajine: The food that the tajine facilitates (and *is*) nourishes and provides conditions for life. Importantly, the tajine does so when it becomes a body of water with its waters properly dispersed throughout its material. This dispersion of water sustains a barrier between what is being cooked and the heat source. As a body of water, the tajine-as-barrier is enabled by being wet, and thus not cracking. Hereby, it facilitates the food and nourishes the people eating (from) it. It envelops, differentiates, and intensifies the food, making it tasteful and edible. In contexts of water scarcity, the tajine also preserves vitally important flows of water. By being that which “allows another being to be, and that which connects beings to one another,” the day-to-day becomings of the tajine, like other bodies of water, are “exploding certain understandings of ‘the ontological’” (Neimanis, *Bodies of Water* 100). Namely, that a pot is “just a pot.” It partakes in a hydrocommons, conserves water, and facilitates the nourishing of other bodies. In doing so, the tajine makes it possible for other beings to be.

Drawing on such an amniotic reading of the tajine's everyday use, the contours of an onto-logic, a mode of being shared between disparate phenomena, start to appear: The tajine helps produce the difference between food and fire, but also between an empty and a full stomach, between nourishment and lack of sustenance, between community and solitude, between differing temporalities of cooking. It does so by holding the waters and, thus not cracking, also holding the waters of the food. Hence, the tajine may be characterized through an amniotic onto-logic of *holding water to hold water*. Looking at another common form of managing water, the levee, a similar logic may be at play, at least for those made of peat. In the following section, I explore an amniotic reading of such levees and how water figures in their earthy composition.

Levees and Gestationality

Peat levees are earthy barriers separating water from their hinterland. In doing so, they (may) keep water out. Yet, in creating such a difference, they also enable new ways of connecting with water—the varied ecosystems they allow to flourish, their surrounding canals and rivers that change behavior, their ways of living that may turn less amphibious, and the numerous anxieties when their construction is put under pressure by a changing climate. Levees may also relate to forms of governance and differing perceptions of water: After building an expansive network of levees in the thirteenth century (van Koningsveld et al.), the Netherlands began a shift away from an amphibious culture, culminating with the nineteenth century's introduction of new materials and levee construction techniques (van Dam). Thus, levees are not only technical tools of disaster management, but they also shape cultures and ways of relating to water.

Nevertheless, these considerations still assume “the” levee to be a monolithic, independent structure. However, levees are lively. They are often composed of earth and strengthened by Bermuda grass which prevents erosion (United States, Federal Emergency Management Agency). Moreover, a variety of animals such as crabs, porcupines, badgers and beavers dig holes through levees, affecting their vulnerability by creating new pathways for water to travel (Ceccato et al.; Balistrocchi et al.). Levees may provide easy access to food and shelter for many of these animals (Kay), particularly when water levels rise (van den Berg and Natarajan). The construction of levees may be intended to guard ecosystems from one another. At the same time, they seem to pressure such intentions with

their productive liveliness and porosity, providing a home for some animals, while affecting the livability of others by allowing water to seep through in new ways. What might an amniotic reading of such complex entities look like?

Water is necessary for the levee's plants, insects, animals, and its earthy configuration, and thus also for its ability to provide transition and difference between ecosystems. If levees are too dry, they become lighter and may be pushed aside by incoming floods (Van Baars). Moreover, for the levee to gestate its liveliness, it needs to be cared for. For instance, in the Netherlands, levees are watered from small boats on the canals (Riegert). Additionally, in generating such a liveliness inward, the levee also produces differentiations outwards between, for instance, polder and water. Accordingly, following Neimanis, levees are bodies of water. And, as transitional zones between ecosystems which nevertheless facilitate their own liveliness, levees resemble, what Neimanis calls, an ecotone; "a zone of fecundity, creativity, transformation; of becoming, assembling, multiplying; of diverging, differentiating, relinquishing" (Neimanis, "Hydrofeminism" 93).

So, here again, there is the amniotic onto-logic of *holding water to hold water*. As an ecotone, the levee "is a sort of membrane too" (93). If they were to dry out completely, they would cease to hold the water back. In this case, the logic is the turning point for connecting the inner and outer gestationalities of the levee, between the life that is facilitated and differentiated in its insides, and the life that is sustained and made possible on either side of the levee. To be a levee, which facilitates differences that do not collapse the ecologies of its sides, it must exist as a body of water.

Everyday Levees, Vital Tajines

At this point, I have explored the levee and the tajine as watery bodies independently from one another. I have noticed that they share an amniotic onto-logic. Drawing on such a moment of noticing, I read the two comparatively, starting from this similarity. As an analogical reading, the exploration is parsed through an attentiveness to how the tajine elicits metaphorical and material insights into the levee and vice versa. One finding of this essay is that figurations such as Neimanis' *Bodies of Water* are productive because they make for curiously comparative stances such as this. In the following, I tentatively demonstrate what this could look like.

On the one hand, I think with the tajine's three roles of serving recipient, dish, and cooking vessel to "read" the levee. These three roles can be also identified in the levee. First, the levee as a serving recipient helps "serve" the water. The levee serves the water for fishing, swimming, canoeing, and not-only human inhabitation. It can serve recreational, aesthetic, gentrifying, or capitalist purposes, to name a few, as the Dakpark levee in Rotterdam illustrates with its shopping center, grassy hills, waterfront shops, and park (Kimmelman 2017). Second, similarly to how the tajine makes food edible to humans, the levee makes a new agricultural landscape possible. It may facilitate new farmlands that deliver produce (perhaps delivering ingredients for tajines). Third, the juxtaposition of levee with cooking vessel foregrounds how "food" and "presentation" are woven into the levee's materiality of not-breaking, of holding the waters. Thinking about the levee via the tajine metaphor, one can come to an understanding of the material everydayness of the levee. The levee is not an independently erected "technological fix," but one that must be maintained, watered, and cared for. It exists in relation to its milieu. If the levee stands in for "Man" in aqueous, apocalyptic nature-culture binaries (DeLoughrey), this reading of the levee as interdependent, relational, and unexceptional challenges such ways of imagining it.

On the other hand, reading the tajine with the levee emphasizes tajines as (part of) infrastructures. The tajine helps conserve water. And, as is sometimes the case with infrastructures, the tajine might retreat into the background when taking part in the cooking infrastructures of the everyday. Yet, its varied communal and aesthetic functions resonate with Brian Larkin's point that infrastructures express a plethora of visibilities, thus producing differing "ambient conditions of everyday life" (336). Furthermore, like the levee, the tajine makes itself particularly visible when it breaks. During the 1953 floods in the Netherlands, a ship was steered into a 15-metre-long hole in the levee, preventing the floods from becoming vastly more disastrous (Bregman). Likewise, holes in tajines must also be plugged or, alternatively, pulled together with a metal ring. Left untreated, their cracking affects and disrupts vital flows of sustenance, a potentially spectacularly disastrous moment, especially in places of water and food scarcity. The comparison attenuates the forcefulness of such disruptions of processes of nourishment. The tajine embodies a vital force when it *holds water to hold the waters* of the foods. It protects those

who use it from water scarcity, from inedible foods, and from the broken pieces of a poorly maintained tajine.

With the levee as an analogy, the spectacularity and forcefulness of the broken tajine comes to the fore, but the cracks' unexceptional, everyday occurrences also seem to challenge the apocalyptic overtones of the broken levee. Still, the apocalyptic narrative might be part of what lends the broken levee its spectacularity, thus making it operative as a way of differently noticing the tajines' cracks. This analysis resonates with DeLoughrey's contention that "[t]he spectacularity of apocalyptic narratives may be less of an issue than the ways in which apocalyptic thought presumes a fall from nature" (149). Accordingly, despite how I have separated the comparison into two paragraphs, a comparison of the levee and tajine mirrors the relationality inherent to them both: They affect each other in the act of comparison. Starting the analogy from their amniotic onto-logic makes for moments where the levee and tajine start tangling up.

Concluding remarks

This essay responded to how apocalyptic framings may stifle volition and erase agencies, obscure the also-apocalyptic forces of history subtending climate change, and reproduce the (white, heteronormative, settler-colonial) nature-culture binary. My response was sparked by an interest in a dynamic common to levees and tajines: The former need water to hold the water off, and the latter need water to hold their food contents. I have argued that the levee and the tajine can be characterized by Neimanis' concept of an amniotic onto-logic. That is, they are bodies of water that facilitate the interpermeations and differentiations necessary for life. These differences include those between polder and water, pot and fire, flooded and dry, nourished and unnourished. Nevertheless, such differentiations are made possible because of how the tajine and levee are nourished and maintained by their surroundings.

Consequently, I argued that tajines and peat levees demonstrate an amniotic logic of *holding water* (inside the earthenware of the tajine; in the earth of the levee) *to hold water* (of the tajine dish; of the river, canal, or sea, held back by the levee). Demonstrating such a similarity, Neimanis' *Bodies of Water* opens a space for thinking the tajine and the levee together. As a "moveable bridge" (Grosz 14), the amniotic onto-logic provides a moment for thinking sameness and difference across materialities which are often not

thought together. When tentatively attempting this, I demonstrated that the tajine-levee comparison helps foreground the vital force of the tajine and the everydayness of the levee.

Neimanis, Åsberg, and Hedrén write that climate change can be hard to grasp in the temperate global North, and when it is grasped it is often considered through apocalyptic narratives which make it difficult to mobilize action. This essay is situated within attempts in the humanities to counter these tendencies by complicating, decentering, and producing oblique angles on ways of living with water. By thinking the vulnerabilities and relationalities of the levee and tajine differently, I have avoided thinking them as “technological fixes” to apocalyptic narratives. As such, I am sidestepping the notion of “the fix.” In a political context where technological fixes hold urgency and intensity, this essay might very well be met with “the strife of being rebuffed” (Alaimo 306). Regardless, I hope to have offered a different sensitivity to how levees and tajines relate while providing forms of shelter, sustenance, breakage, and leakage amid the everyday lives and the aqueous catastrophes of a changing climate.

Works Cited

- Alaimo, Stacy. “Elemental Love in the Anthropocene.” *Elemental Ecocriticism*, edited by Jeffrey Jerome Cohen and Lowell Duckert, U of Minnesota P, 2015, pp. 298–309, <http://www.jstor.org/stable/10.5749/j.ctt1b18v88.15>. Accessed 24 July 2025.
- Balistrocchi, Matteo, et al. “Failure Probability Analysis of Levees Affected by Mammal Bioerosion.” *Water Resources Research*, vol. 57, no. 12, 2021, pp. 1–24, <https://doi.org/10.1029/2021WR030559>. Accessed 24 July 2025.
- Beiler, Laura. “Tagines: Tips and Tricks.” *GlobeIn Blog*, 17 Jan. 2020, <https://globein.com/blog/tagines-tips-tricks/>. Accessed 24 July 2025.
- Bregman, Rutger. “This Is What Climate Change Means If Your Country Is Below Sea Level.” *The Correspondent*, 24 Sept. 2020, <https://thecorrespondent.com/685/this-is-what-climate-change-means-if-your-country-is-below-sea-level>. Accessed 24 July 2025.
- Ceccato, Francesca, et al. “Effect of Animal Burrows on the Vulnerability of Levees to Concentrated Erosion.” *Water*, vol. 14, no. 18, 2022, pp. 1–13, <https://doi.org/10.3390/w14182777>. Accessed 24 July 2025.
- Crawford, David. *Moroccan Households in the World Economy: Labor and Inequality in a Berber Village*. Louisiana State UP, 2008.
- DeLoughrey, Elizabeth M. *Allegories of the Anthropocene*. Duke UP, 2019.

- Eljaz, Safaa. "Finding the Best Moroccan Tagine Pot: What to Consider?" *Moroccanzest*, 15 Apr. 2019, <https://moroccanzest.com/best-moroccan-tagine-pot/>. Accessed 24 July 2025.
- . "How to Cook with a Tagine Like a Pro." *Moroccanzest*, 25 June 2020, <https://moroccanzest.com/how-to-use-a-tagine-pot/>. Accessed 24 July 2025.
- Frendo, Daniela. "The Tajine: Morocco's Pride & Passion." *Epicure & Culture*, 5 Aug. 2015, <https://epicureandculture.com/tajine/>. Accessed 24 July 2025.
- Gardenswartz, Sofia. "RE-ENVISION: Tagine." *Appetite*, n.d., <https://research.appetitesg.com/idea/re-envision-tagine/>. Accessed 24 July 2025.
- Gray, Summer. *In the Shadow of the Seawall: Coastal Injustice and the Dilemma of Placekeeping*. U of California P, 2023.
- Grosz, Elizabeth. "The Future of Feminist Theory: Dreams for New Knowledges." *Undutiful Daughters: New Directions in Feminist Thought and Practice*, edited by H. D. Gunkel et al., Palgrave Macmillan, 2012, pp. 13–22.
- Jensen, Lotte. "Floods as Shapers of Dutch Cultural Identity: Media, Theories and Practices". *Water History*, vol. 13, no. 2, 2021, pp. 217–233. <https://doi.org/10.1007/s12685-021-00282-8>. Accessed 24 July 2025.
- Kay, Carly. "A New App Tracks Burrowing Animals That Weaken Levees." *Eos*, 11 Dec. 2024, <https://eos.org/articles/a-new-app-tracks-burrowing-animals-that-weaken-levees>. Accessed 24 July 2025.
- Kimmelman, Michael. "The Dutch Have Solutions to Rising Seas: The World Is Watching." *The New York Times*, 15 June 2017. NYTimes.com, <https://www.nytimes.com/interactive/2017/06/15/world/europe/climate-change-rotterdam.html>. Accessed 24 July 2025.
- Larkin, Brian. "The Politics and Poetics of Infrastructure." *Annual Review of Anthropology*, vol. 42, no. 1, 2013, pp. 327–343. Annual Reviews, <https://doi.org/10.1146/annurev-anthro-092412-155522>. Accessed 24 July 2025.
- "My Tagine Cracked 🍲. Is There a Way to Fix It or Is It a Lost Cause?" R/Morocco, 2 Oct. 2022, www.reddit.com/r/Morocco/comments/xu3nbh/my_tagine_cracked_is_there_a_way_to_fix_it_or_is/. Accessed 24 July 2025.
- Neimanis, Astrida. *Bodies of Water: Posthuman Feminist Phenomenology*. Bloomsbury Academic, 2017.
- . "Hydrofeminism: Or, On Becoming a Body of Water." *Undutiful Daughters: New Directions in Feminist Thought and Practice*, edited by H. D. Gunkel et al., Palgrave Macmillan, 2012, pp. 85–99.
- Neimanis, Astrida, et. al. "Four Problems, Four Directions for Environmental Humanities: Toward Critical Posthumanities for the Anthropocene." *Ethics and the Environment*, vol. 20, no. 1, 2015, pp. 67–97, <https://doi.org/10.2979/ethicsenviro.20.1.67>. Accessed 24 July 2025.

- Özer, Işıl E., et al. "Sub-Seasonal Levee Deformation Observed Using Satellite Radar Interferometry to Enhance Flood Protection." *Scientific Reports*, vol. 9, no. 1, 2019, pp. 1–10, <https://doi.org/10.1038/s41598-019-39474-x>. Accessed 24 July 2025.
- Riegert, Bernd. "Dry, Hot Summers Put Dutch Dikes at Risk." *Deutsche Welle*, 8 Nov. 2022, <https://www.dw.com/en/dutch-dikes-at-risk-of-climate-change-drought/a-62771283>. Accessed 24 July 2025.
- Santos, Boaventura de Sousa. "Beyond Abyssal Thinking: From Global Lines to Ecologies of Knowledges." *Review (Fernand Braudel Center)*, vol. 30, no. 1, 2007, pp. 45–89.
- Studer, Nina S. "Too Spicy for the French: Medical Descriptions of Sexuality, Masculinity and Spices in the Colonial Maghreb." *Anthropology of Food*, vol. 16, 2022, <https://doi.org/10.4000/aof.13668>. Accessed 24 July 2025.
- Sultana, Farhana. "The Unbearable Heaviness of Climate Coloniality." *Political Geography*, vol. 99, 2022, pp. 1–14, <https://doi.org/10.1016/j.polgeo.2022.102638>. Accessed 24 July 2025.
- Todd, Zoe. "An Indigenous Feminist's Take On the Ontological Turn: 'Ontology' Is Just Another Word for Colonialism." *Journal of Historical Sociology*, vol. 29, no. 1, 2016, pp. 4–22, <https://doi.org/10.1111/johs.12124>. Accessed 24 July 2025.
- United States, Federal Emergency Management Agency. "A Look at Preventing Levee Erosion." *FEMA*, 2021, <https://www.fema.gov/case-study/look-preventing-levee-erosion>. Accessed 24 July 2025.
- Van Baars, S. "Dutch Dike Breach, Wilnis 2003." *Proceedings of the Fifth International Conference on Case Histories in Geotechnical Engineering: Session 02: Case Histories of Slopes, Dams and Embankments*, Missouri University of Science and Technology, 2004.
- van Dam, Petra J. E. M. "An Amphibious Culture: Coping with Floods in the Netherlands." *Local Places, Global Processes: Histories of Environmental Change in Britain and Beyond*, edited by Peter Coates et al., Windgather Press, 2016, pp. 78–93.
- van den Berg, Frans, and Aditi Natarajan. "Beaver Behaviour during High Water Regarding Burrows in Levees." *Deltares*, 2023, https://www.kenniscentrumbever.nl/sites/default/files/2024-05/i1000679-001-oa-0002_v1.0-beaver_behaviour_during_high_water_regarding_burrows_in_levees_-_for_publication.pdf. Accessed 24 July 2025.
- van Koningsveld, M., et al. "Living with Sea-Level Rise and Climate Change: A Case Study of the Netherlands." *Journal of Coastal Research*, vol. 242, 2008, pp. 367–379, <https://doi.org/10.2112/07A-0010.1>. Accessed 24 July 2025.
- Zaroual, Hicham, et al. "Traditional Foods in Maghreb: Production and Research Progress." *Traditional Foods: History, Preparation, Processing and Safety*, edited

by Mohammed Al-Khusaibi et al., Springer, 2019, pp. 51–114,
<https://doi.org/10.1007/978-3-030-24620-4>. Accessed 24 July 2025.

Part IV

Storytelling Called to Arms

“I Count My Hopes”: Humanities and Narrating the Environmental Crisis

Susen Halank
University of Bamberg

Abstract

This article explores how literature and the humanities influence and shape our understanding environmental issues and how these are addressed publicly. In particular, I argue that narratives of climate change work more effectively when their storylines are combined. The article further examines how literature (and media) serves as valves for addressing climate change in ways that both engage and mobilize audiences. I explore how literary studies should strive for developing a language that conveys the profound urgency of environmental action to a broader public. To do so, I work with a range of texts—including poems by Linda Hogan, Fatimah Asghar, and Annelyse Gelman, as well as multimedia representations of the Great Pacific Garbage Patch—to claim that literary studies can illustrate shifts in thinking about the environment while also reflecting the extent to which society fears climate change. Through combining ecocritical and psychological approaches, I demonstrate how combining narrative threads of several texts into one linear storyline reflects more affectively on human cruelty and on a lack of action regarding the environmental crisis.

Humans grow up surrounded by stories—bedtime stories, fairytales, the first books, and films—that shape our understanding of the world. As we grow older, we realize that history, politics, and even science communicate through stories, influencing how we perceive and respond to key issues. This is especially true in the context of the environmental crisis: Although scientists have been warning humanity about the consequences of global warming for decades, counter-narratives to climate change often seem more appealing. As such, during his 2024 election campaign, President Donald Trump repeatedly demanded clean air and clean water while also using “drill, baby, drill” as a central slogan, employing empty rhetoric and ultimately dismissing climate change science entirely (Gelles). Stories, even when only consisting of slogans, appeal to our “emotional brain” and help to make sense of the information we receive, regardless of whether they represent facts as long as they are compelling (Marshall 105-106).

The environmental crisis is “a crisis of the imagination the amelioration of which depends on finding better ways of imaging nature and humanity’s relation to it” (Buell 2). The lack of accepted, broadly consumed, imaginative engagement with the issue makes it difficult for the public to envision solutions. Additionally, the overwhelming numbers and data about climate change often have “numbing, desensitizing effects” (Slovic and

Slovic 1), further hindering resolute and consequent responses. In 2014, Ursula Kluwick expanded on Buell's argument around the ecological crisis as an imaginative crisis by asserting that "public perceptions of climate change are intrinsically tied to narrative strategies" (503). Consequently, the stories we tell about the environment shape how we understand and respond to it. Kluwick's work on conveying the inevitability of climate change (513) serves as a foundation for my approach in which I claim that we can create broader, more effective and overarching narratives by identifying similar storylines from different literary text and combining them into one.¹ Indeed, George Marshall highlights the importance of stories, arguing that both specialists and the general public transform "climate change into stories that embody their own values, assumptions, and prejudices" (3)—a powerful notion to understand how cultural codes and group identities influence the decision of people to (not) believe in climate change (23). In recent years, scholars such as Sarah Fekadu have responded to Kluwick's claim by expanding the stories about the Anthropocene to include historical and geological questions, broadening the scope of environmental humanities (255-256). Similarly, Paul Slovic and Scott Slovic have dedicated a volume, *Numbers and Nerves: Information, Emotion, and Meaning in a World of Data* (2015), to bridging and understanding the gap between scientific data, overwhelm, and public engagement (3). My argument embarks from an intersectional, comparative scope of literary studies, and environmental humanities, while also taking into account different scientific research on what generally renders a story successful, ultimately combining separate storylines of these stories into broader narratives of climate change. To do so, I focus on the broad narratives that a text reveals without concentrating too much on smaller sub-plots, in order to make the connection of storylines across literary texts clearer.

In this article, thus, I examine how selected primary texts analyzed through their connected storylines affect readers by engaging them with their embodied and embedded narratives—terms introduced by Alexa Weik von Mossner (*Affective Ecocriticism* 4-5)—that have even more force when combined into an overarching storyline, when they are read as what I call "combined eco-narratives." I focus on different short forms that

¹ I apply a broad understanding of what constitutes a literary text here. The present study includes films, poetry and a short story.

employ imagery in distinct, more or less literary, ways: short films, a short story, and poetry. I explore how my selected primary works indirectly build storyworlds about the climate crisis whose underlying connections literary scholars and, more generally, the audience needs to identify.² I argue that the combined storyworlds and the language they provide resonate with a broader audience both affectively and conceptually, ultimately enabling us to better conceptualize and address environmental issues. This aligns with Slovic's and Slovic's view that humankind "think[s] best when we allow numbers and narratives, abstract information and experiential discourse, to interact, to work together," and with the notion that humankind needs both numbers and nerves to understand reality (4-5). Further, this article is tightly connected to the material turn in ecocriticism and ecofeminism: Christa Grewe-Volpp observes that "the notions of interconnection, entanglement or more precisely, intra-activity" render new materialism so valuable for ecofeminism because "these categories are based on a non-hierarchical relationship among phenomena which dissolves the concept of hyper-separation, a concern which lies at the heart of ecofeminist theory" (217). Exploring the interconnection of broader storyworlds addressing climate change and considering the material turn, I engage with the notion of storied matter—a term coined by Serpil Oppermann and Serenella Iovino (Oppermann 9)—to trace how literary works construct non-hierarchical yet interconnected "narratives." This framework enriches an understanding of environmental storyworlds, calling for a boarder, comparative approach to climate change narratives. Throughout my argument, I align separate threads of individual narratives with more abstract information on environmental change to create an experiential discourse around scholarship of ecocriticism, ecofeminism and environmental storyworlds.

I selected examples of texts that either span across genres or centuries. In my first example, I pair a mockumentary with a documentary and a science fiction short story to make the range of genres as broad as possible. My second example examines how contemporary poetry echoes Linda Hogan's ecofeminist work, particularly her insights on humanity's environmental ignorance and the role of gender in the climate crisis. Both examples consist of three different texts, in the case of the first created storyworld, to

² I follow Marie-Lure Ryan and Jan-Nöel Thon in my use of the term storyworlds "as representations that transcend media . . . [by] expand[ing] the scope of narratology [and] provid[ing] a much-needed center of convergence and point of comparison to media studies" (2).

trace the process of an unfolding environmental crisis across its different stages, storylines and genres and, in the second case study, to emphasize how little civilization has yet responded to climate change, with each poem employing different metaphors to address the similar issue. To demonstrate the effectiveness of my approach, I start my analysis by comparing the mockumentary *The Majestic Plastic Bag* with the documentary *Albatross*. The two films offer contrasting approaches to dealing with the Great Pacific Garbage Patch, while both underscore the severity of plastic pollution. My analysis then shifts to the Catherynne M. Valente's dystopian short story "The Future is Blue," which imagines a possible and only consequential future where humanity has ignored the impact of plastic waste as depicted in the films before and is forced to live on the Great Pacific Garbage Patch. Read together, these three texts form a clear, discernable, and affective narrative, indicating how one coherent storyline can be constructed across very different genres.³ The question of narrative threads becomes more subtle and with that more complex when considering texts that cannot be connected in an obvious way such as in many non-science-fiction texts or, particularly, poetry. To explore how a broader, more nuanced and differently but equally powerful approach to environmental storytelling can be applied, I examine three poems that allow a rising ecofeminist awareness of the 1990s to resonate with a contemporary take on human ignorance and the role of gender: Linda Hogan's "Hunger," Annelyse Gelman's "The Climate," and Fathima Ashgar's "I Don't Know What Will Kill Us First: The Race War or What We've Done to the Earth." These poems engage with themes of nature's beauty, human destruction and cruelty, as well as with the dangerous ignorance that perpetuates environmental damage. By combining these storyworlds, I argue that the connections between different narratives—whether in film, fiction, or poetry—are crucial for mobilizing collective actions and fostering a deeper public response to the climate crisis. Instead of reinforcing apathy, combined narrative threads, combined eco-narratives, can unite diverse efforts, mobilize knowledge and storytelling, as well as provide an affective vocabulary to finally drive effective change.

³ This paper is not concerned with tracing intertextual influences of individual works. Rather than focusing on the history of themes or tracing overlapping texts, I want to unearth coherent, almost linear narratives hidden in the separate texts. This is very much in line with what Dina De Rentiis calls "Chresiology," a metatheory combining traces of concepts and their dynamic relations in different fields, forming broader contextual networks.

Our Culture: Tracing Plastic Waste from Reality to Science Fiction

One of the many ways to address worldwide problems is to create an emotional response. In this section, I explore both the dark humor of satire in relation to the deeply shocking images of plastic pollution, as well as its severe, future consequences displayed in speculative fiction. Written by Sarah Miller and directed by Jeremy Konner, the mockumentary *The Majestic Plastic Bag* (2010) follows the journey of a lonesome plastic bag as it travels to the Pacific Ocean, eventually reaching the Great Pacific Garbage Patch, its home (0:22). Described as “one of the most clever and illustrious creatures” (0:15), the bag relies on the wind to travel vast distances and has to overcome many challenges such as the park services (1:20), or teacup Yorkies (1:30). The short film mocks typical documentary elements like bragging with never-before-seen footage—here capturing an image of the plastic bag at night in “pitch black” (2:05-2:10)—or commenting on dangers such as sea life that “feed on the helpless plastic” (3:04). Irony and satire are omnipresent throughout the film, further emphasized by an underlying, continually swelling music. While the short film offers essential information about the Great Pacific Garbage Patch, commenting on how plastic breaks down into many small pieces—mockingly described as “complet[ing] the cycle of life” (3:42)—the last scenes shift the tone towards a serious message. Therefore, the film ends with a shot of the open sea accompanied by the following text: “[p]lastic bags are not indigenous to the Pacific” (3:46). The NGO behind the mockumentary, *Heal the Bay*, then finally provides links and information on how to take action against pollution.

The reversed logic of the short film has the desired effect: while many might grow weary of continuous (and of course vital) reminders to live sustainably and to recycle, this deconstructed documentary serves as a reminder of the severe consequences of inaction while also indicating the various stages where humans can intervene—such as gathering litter in parks or from river sides—without taunting or moralizing anyone directly. The mockumentary does not elaborate on any dire consequences of microplastic in oceans, nor does it expand on the environmental impact of the Great Pacific Garbage Patch. Instead, it leaves an ideal gap for the humanities to expand the narrative, such as by contrasting the mockumentary with the severe repercussions of pollution resulting from a lack of taking action. Connecting another storyline here, and thereby expanding

the storyworld, fills the gap created by the mockumentary and re-directs a (newly) gained understanding of the human role in environmental pollution towards its consequences. An ideal text to do this and to follow my call for unearthing narrative threats, is to compare *The Majestic Plastic Bag* to Cris Jordan's project and film *Albatross*.

Jordan embarked on his *Midway* project (now known as *Albatross*) in 2008, seeking to comprehend the effects of plastic pollution. Visiting the Midways Atoll in the Pacific Ocean, Jordan and his team quickly learned of the damages which plastic had caused to the albatrosses on the island: numerous birds were dying due to ingested plastic in their stomachs. *Midway* (2009) features disturbing photographs of the deceased birds which were expanded into a very creative documentary: *Albatross*. Jordan admits to “depart[ing] from the traditions of documentary filmmaking” which not only results in close case studies and deep looks into the lives and deaths of albatrosses but in an “intensely vivid sensual, emotional, and spiritual experience of being with them [the albatrosses] on the island” (“Our Story”).

Artfully, the documentary opens with zooming into a kaleidoscope, followed by the first photograph of a dead albatross. The kaleidoscope then slowly transforms into many small plastic pieces—almost resembling a mosaic. While the film includes many paradise-like shots of Midway, the disturbing images of the dead albatrosses, their stomachs filled with plastic, keep haunting the viewer from the beginning. In the first few minutes, the film invites the audience to endure nearly two minutes of disturbing photographs depicting dead birds and the detrimental plastic pieces in their stomachs. Jordan shrewdly observes that “this is our culture. Turned inside out” (5:15). This early scene leaves no doubt that the documentary will depict the severe consequences of human consumption, waste, and ignorance. The horrible scenes can resonate deeply with the audience's embedded knowledge, sympathy and even guilt. However, although the objective of the documentary is straightforward from the beginning, the film then continues by following the albatrosses in their daily lives. Learning about the endearing, almost “human” behavior of the birds, allows viewers to relate to them and form an emotional connection. Jordan achieves this, by slowing down the albatrosses' movements of their mating dance, which otherwise looks hectic to the human eye (24:50). The film then shows the breeding process of the albatrosses, and while the audience is reminded of

their own monogamous tendencies, Jordan uses this emotional moment to shock the viewer by drawing a painful parallel between the birth of an albatross chick and their dying either within the egg or shortly after hatching (44:55). At all times, even when witnessing a moment of pure beauty such as birth, viewers are reminded that this is a documentary as much about life as about death. Jordan's voice-over narration expands this by explaining that the chicks are fed poison from the moment they hatch since their parents cannot help but accidentally picking up plastic pieces from the sea. Again, viewers are confronted with the shocking amount of plastic in the stomachs of chicks (48:55) which is further dramatized by a horrible scene in which a mixture of nutrients and plastic leaves a parent's beak and is fed to its chick (56:32). Jordan's voice-over comments on that as follows: "Along with the nutrients in their belly, she is carrying something toxic and sharp: and it's headed for the soft membrane of the stomach of her baby" (55:15).

When the birds reach the age to attempt their first flight, a stage in which they must cough up all previously ingested nutrients, many fail to complete the process due to the consequences of pollution: While some birds manage to cough up the plastic (1:12:25), others, as depicted later, die of the plastic within them (1:19:00). The final minutes of the film feature a period of more than five minutes in which birds are painfully dying. In one of the last scenes, Jordan cuts one of the dead birds open and takes out whole handful of plastic waste, leaving no room for doubt. Although the film ends with footage of albatrosses flying freely, the final kaleidoscope serves as a reminder that this is an endangered species threatened currently by the detrimental effects of plastic pollution.

The kaleidoscope recurrently functions as a symbol of death throughout *Albatross*. One hour into the film, Jordan and a colleague build a kaleidoscope out of flowers and twigs around a dead albatross chick, emphasizing the connection between the abstract image and the dead birds. Thus, the kaleidoscope not only symbolizes the deadly life cycle of the albatrosses but also reflects the complex web of interconnected relations in the world. Jordan explicitly states that the documentary is not intended to make anyone feel guilty, but rather to open a doorway (58:00) that prompts, as I argue, critical reflection. The approach of combined storylines brought forward in this article not only

inspires action based on the film but creates a broader narrative when the film's threads are connected to the mockumentary examined previously. While *The Majestic Plastic Bag* mockingly forces its viewers to empathize with a plastic bag, *Albatross* vividly depicts the death and long suffering of innocent birds resulting from plastic pollution. Both satire and disturbing visualization are dramatic yet very different ways to achieve affect.

Finally, neither the mockumentary nor the documentary immediately connects to the human world; they rather hint towards the severe role of human (in)action in the environmental crisis. While science fiction texts do not address the serious consequences of the ecological crisis in a lived reality, they can raise awareness about environmental issues (Weik von Mossner, "Sensing the Heat" 186) and their activist "orientation and intent" render them "pedagogic warnings about the coming realities of the planet's ecological demise and ways in which human wills have to deal with it" (Huffman 65). Thus, I want to culminate the storyworld of *The Majestic Plastic Bag* and *Albatross* in Catherynne M. Valente's "The Future is Blue," a short story that is set on the Great Pacific Garbage Patch in a place called Garbagetown.

The dystopian setting is a result of drastic climate change, rising sea levels, and trash islands mostly devoid of greenery. The story follows Tetley on her coming-of-age journey, where she understands the underlying class system of her world and, thus, attempts to make others aware of their own blindness—a mission she ultimately cannot accomplish. The story feels reminiscent of debates surrounding climate change, where those who are blind to the issue seem unwilling to listen or care.⁴ I do not want to dwell too long on dystopian settings, as the key point of this argument is to show how structures and narratives of climate change are connected outside of speculative literature. However, it is crucial to note that such dystopias can resonate in similar ways as real-world depictions, such as *Albatross*. Not taking action, not fighting pollution, and not accepting devastating environmental change results in ecological crises that, one day, might lead us to living in trash—maybe not as literal as in Valente's short story, but still devastatingly real when thinking of already noticeable consequences such as albatrosses

⁴ This narrative thread could also be further connected and indeed is similar to Adam McKay's 2021 film *Don't Look Up*, in which the US-American population up to the president chooses to ignore warnings about a comet about to hit the earth.

dying of consuming plastic. The narrative threads in *The Majestic Plastic Bag* and *Albatross* remind us that pollution leads to the suffering of animals and the devastation of ecosystems. The sarcasm of the documentary, combined with the realness of *Albatross* and the imagined future in the short story, create a "three-step narrative"—the acknowledgement of plastic pollution in the past, the effects of said pollution on the animal world in the present, and lastly, the dystopian consequences for humanity in a (dystopian) future if action is not taken—that is affectively convincing, since two of these three steps are already lived reality. While this first case study has focused more on the non-human than the human world, my second example will approach the question of how environmental poetry addresses the connection between genre, gender, and the ecological crisis in relation to the crucial role of the individual.

Black and Raging Depths: Poetry's Narratives about Climate Change

The poems examined in this section illuminate how environmentalist and Chickasaw poet Linda Hogan's "Hunger" still echoes in the works of contemporary poets, namely James Laughlin Award-winning Annelyse Gelman and queer, South-Asian American poet Fatimah Asghar. The three poets and their different perspectives, both concerning identity but also the decade in which they compose their poetry, are connected by their deeply resonating themes, establishing subtle connected storyworlds that can be revealed via a more nuanced comparative approach. All poetry in this section addresses humanity's destructive impact on the natural environment, driven by greed, ignorance, and hubris. Comparing and aligning the three poems offers a new perspective on the discussion in the previous sections, where human actions were implied but not explicitly traced or depicted other than in the form of dystopian consequences. In the three selected poems in this paper, the ecological crisis, human responsibility and the dooming necessity for action is growingly spelled out throughout the years: "Hunger" introduces the topic more subtly in the 90s, while "The Climate" indicates its key issue of the poem in the title, which finds its climax in "I Don't Know What Will Kill Us First: The Race War or What We've Done to the Earth."

Hogan's "Hunger" powerfully compares human greed and the exploitation of the natural world to a universally understood experience: hunger. Motivated by hunger—a natural need that is metaphorically expanded to signify greed—the predominantly male

characters in the poem violently exploit the sea. This exploitation is further linked to a ruthless treatment of women. The poem further suggests that the overall male inability to recognize nature's beauty mirrors men's disregard for the dignity of marginalized groups. This echoes the central tenet of ecofeminism that essentially aligns the "the exploitation of nature . . . [with] the exploitation of women and other minorities" (Grewe-Volpp 210). Hogan's poem directly connects the themes of rape and environmental exploitation, highlighting said intimate relationship between the degradation of nature and the violation of vulnerable bodies:

Hunger was the fishermen
Who said dolphins are like women,
We took them from the sea
And had our way
With them. (l. 10-14)

Aligning the dolphins, an animal known for its interested engagement with humans, with women, here emphasizes how men exploit the very nature of both creatures. By employing the pronoun "we," the poem ensures that its readers are included in the shared responsibility and guilt of having yielded to greed and to capitalism's insatiable hunger. The violent exploitations of the natural world intensify in the poem when hunger "loses its milk teeth" (l. 2), symbolizing humanity's growing insensitivity and loss of respect toward the natural world. Thus, instead of admiring the passing whales, the growing greed compels humans to construct "hooks to catch / the passing song of whales" (l. 5-6). Sayed Sadek convincingly connects this imagery to imperialist motivations, suggesting that the poem underlines how colonizers—"minute little creatures with no value" (62) in comparison to the majestic whales—created the current power structures that perpetuate exploitation and are still reflected in the insatiableness of capitalist societies.

Even though hunger is described as "thin, afraid" (l. 4), sitting and crying on ships (l. 1, 35), the poem leaves little room for sympathy towards it. Neither does it leave any

doubt that hunger is purely fueled by greed.⁵ As such, in the fifth stanza, hunger is depicted as the

old man
who comes in the night
to cast a line
and wait at the luminous shore.
He knows the sea is pregnant
with clear fish. (l. 17-22)

Hogan's diction again emphasizes the deep and caring, thus ecofeminist, connection between women and the natural world. While humans try to convince themselves that they are not culpable, their false sense of living securely in towns is revealed by the perpetual cycle of greed which surrounds them even in their homes, "[W]hose walls are made of shells" (v. 30) and renders them "surrounded by what they've eaten" (v. 32-33). In this manner, humans are constantly reminded of their consumption and exploitation. The fourth stanza makes this notion very clear:

Hunger knows we have not yet reached
the black and raging depths of anything. (l. 15-16)

The adjectives "black" and "raging" underline that we have not yet experienced the worst depths of greed and exploitation. While humans might not be aware of that fact, their internal(ized) drives are.

Hogan's influential and ground laying ecofeminist poetry resonates with contemporary notions of the exploitation of women or marginalized people and the natural environment. To expand the storyworld created in Hogan's 1993 "Hunger" and to illustrate how its narrative transcends the centuries, I want to explore how two contemporary poets (Gelman and Asghar) that are different in identity, writing style, and perspective, approach the topic of an impending ecological crisis, and how Hogan is echoed in their work. Twenty-six years after the publication of "Hunger," Annelyse

⁵ This is a narrative that Kim de l'Horizon explores in the 2022 play *Hänsel & Greta & the Big Bad Witch* where hunger and greed have completely consumed the parents of Hänsel and Greta.

Gelman's poem "The Climate" places the ignorance and negligence of humanity at its center. While greed is no longer the primary critique in this poem, a culture of leisure and convenience takes its place—a culture that, when viewed through the lens of "Hunger," can be seen as a direct result of the exploitation that has allowed certain groups to live in comfort, enabling them to avert their gaze from the unfolding climate crisis. Gelman's poem opens with a powerful simile, describing climate as a wave, a comparison that resonates throughout the poem's syntax which unfolds as one breathless sentence, propelled forward by enjambement and a series of enumerations:

It was like watching a wave approach
from a great distance, so great

that at first it is not a wave at all, but
a mere horizon, static and singular,

so that one, it being possible, presumably,
to avail oneself of the diversions

of the beach, might turn one's back
on the ocean altogether, might turn instead

to the sand ... (l. 1-9)

Gelman lets both language and events swell over these first few lines and sets the scene for her criticism. Climate change is a tsunami, building up in a distance we cannot really perceive which facilitates turning back to reading books at the beach "not-laboring" (l. 19), enjoying "the pleasure of wasting / oneself, of decadent uselessness" (l. 18-19). The sarcasm and diction emphasize Gelman's sharp criticism of human attitudes toward the environmental crisis: ignoring the impending risks while selfishly prioritizing convenience and turning a blind eye to any news or actions that might disrupt this comfortable life. Very accurately, Gelman seems to echo Marshall's argument that not talking about the ecological crisis can form "a pervasive narrative" based on "the collective social norm of

silence" (Marshall 3). This is tightly connected to not wanting to know about climate change due to the anxiety and overwhelming emotions that the phenomenon causes; emotions that counter a set of cultural norms (Norgaard 8-12).⁶ Thus, while the poem depicts a situation of climate change denial in which its characters cannot cope with the complex emotions that accompany confronting the consequences of global warming on an individual level, it relentlessly criticizes humanity for exactly this attitude.

In contrast to Hogan's poem set at night, "The Climate" unfolds in broad daylight where everyone can perceive the developing crisis. Nevertheless, a sense of emergency is only triggered when a child drowns, grotesquely disrupting the supposedly peaceful beach setting. And yet, the poem's tone remains composed and neutral, almost unsentimental—a comment on how calm humanity remains while their planet is slowly deteriorating:

though one might, of course, always alarm

to some emergency, a child caught
in the undertow, say, who must be

dragged to shore and breathed into
like an empty balloon, an empty balloon

on which everything depends [...] (l. 20-25)

Only an immediately dooming death causes a disruption big enough for the characters in the poem to anxiously wait for the child to breathe—and, in alignment with the natural world—to "rise, to float" (l. 27) again, like the sea. Gelman's criticism of human negligence culminates in the now unfolding catastrophe and the explicit mentioning of the many warnings that have been willfully ignored for too long:

[...] one was, of course, warned
it would come, and soon, the shadow

⁶ Marshall compares this to the taboo of talking about death and indicates his own journey of really understanding how "deadly serious" climate change is (2).

of that wave, like a new sky, already
overhead and even now descending. (l.29-32)

The poem offers no form of relief: the death of the child and its imprudent swimming in dangerous waters resemble humanity's ignorance of scientists' warnings about climate change. While readers are left uncertain whether the child can be revived, the agency of the poem pulls its readers away from the child and towards the now literal wave of climate change descending upon humanity. Just as readers will not find out whether the child can be reanimated—it seems highly unlikely—we do not know if we can “revive” the earth or whether it is already much too late. Gelman's tone remains neutral, distant, and as mentioned earlier, almost bored. Everything unfolds as it inevitably is supposed to if people continue to ignore the numbers and the warnings, and refuse to acknowledge the dangerous environmental state we are in.

Gelman largely echoes Hogan's sense of urgency to reflect on and change our actions by describing the detrimental crisis humanity is still facing nearly thirty years after the publication of “Hunger.” While Hogan disguises this in her hunger metaphor, Gelman already makes the conclusion readers should draw from reading the poem clear by calling it “The Climate.” Even more openly, Fatimah Asghar's poem “I Don't Know What Will Kill Us First: The Race War or What We've Done to the Earth” places the impending and detrimental catastrophe immediately in its title. Asghar contrasts the anxiety of a looming death with a tone that almost seems hopeful:

so I count my hopes: the bumblebees
are making a comeback, one snug tight
in a purple flower I passed to get to you; (l. 1-3)

Readers are initially led through what appears to be good news: the return of the bumblebee, a persona admiring the natural world without harming it. The purple of the flower, a color symbolizing threatening misfortune (Rohner 681), is echoed in the second stanza, where the persona and their friend cannot believe that Prince's favorite color could have been orange. While the focus remains on bright colors, the poem subtly shifts to critique humanity's tendency to diverge from pressing issues, instead fixating on

celebrity culture. The persona comments "today the park is green, we take grass for granted" (l. 6), softening this observation with a reflection on what humans overlook or take for granted, never fully considering the implications. The poem's dramatic turn occurs in stanza four and five, but the shift is foreshadowed in stanza three, when the persona notices a butterfly:

[...] by my old apartment
 was a butterfly sanctuary where I would read
 & two little girls would sit next to me;
 you caught a butterfly once but didn't know what to feed it

 so you trapped it in a jar & gave it to a girl
 you liked. I asked if it died. you say you like
 to think it lived a long life. yes, it lived a long life. (l. 9-15)

While the poem does not explicitly reveal any gender identities of the persona or their friend, the peaceful and quiet scene where the persona reads, surrounded by two little girls near a butterfly sanctuary, evokes an ecofeminist notion of women and the natural world co-existing peacefully. Following Linda Hogan's insights in "Hunger," the actions of the friend can be interpreted as male here—damaging nature and ultimately killing the butterfly is, following core ecofeminist arguments, attributed to "male" behavior given their disconnect from nature (Grewe-Volpp 211). However, all human disinterest in the non-human world—regardless of being connotated as male or female—is as dangerous as it is destructive. Asghar's poem seems to neutrally recount an event that could happen every day: the focus on trivia (Prince's favorite color) while neglecting the harm caused by trapping an animal, particularly without understanding how to care for it. This reflects a human hubris, where people ignore that forcefully removing a creature and giving it as a gift to somebody else can deeply affect an ecosystem. The pronoun "you" in the poem might assume that the butterfly lived a long life, but the stereotypical answer paired with the persona's repetition of the phrase is not an affirmation, but rather an attempt to convince oneself to believe the unlikely positive outcome. The largely undefined identities of the persona and its friend allow the poem to be read in a variety of contexts.

Relating the poem's context to its title, the connection to the natural world is evident, but so is the reference to the "race war" included in the title as well as to any other form of discrimination. Trapping any living creature, reducing them to one narrow aspect of their identity and not allowing them to transcend, is a form of violence that harms both humans and animals. Racial and gendered stereotypes, like environmental ignorance, are just as damaging and destructive, rooted in the same human tendencies toward control, exploitation, and erasure.

Conclusion: Counting Hopes

As the previous discussion has shown, narratives around humanity and nature are deeply interconnected and can form coherent storyworlds with broader, more convincing, and more affective narratives. These storyworlds can be traced in filmic depictions of pollution—as seen in works like *Albatross*, the mockumentary *The Majestic Plastic Bag*, and science fiction adaptations that speculate on possible environmental consequences—but they might also be more complex or less straightforward when located in more complex texts like poems. Literary studies can and must study the connections of storylines to broader issues facing the world today, such as the reading of Asghar's poem in the light of Hogan's "Hunger" reveals: the imperial behavior depicted in the latter poem resurfaces in Asghar's mentioning of the "race war." I believe that exploring the connections between (non-speculative) texts—particularly how they address the natural world and the environmental crisis—should be a central focus of ecocritical scholarship and teaching, expanding and understanding how reactions to these texts are embodied in humans and embedded in nature. This should not occur in the vein of exploring motives and intertextuality but, as this article has shown, through unearthing underlying connections of storylines between the individual texts in order to provide convincing narratives, foster empathy and action, and, most importantly, to provide a vocabulary—such as combining satire with reality or providing metaphors like climate change as a tsunami and greed as hunger—with which individuals can better address the overwhelming anxiety towards and threat of climate change once they left their state of denial.

Different perspectives offer varied points of entry into the topic, allowing more people to grasp the contemporary complexities of climate change and the urgency of the

issue as well as offering different but affective and comprehensible vocabulary for addressing the crisis. Bill McKibben claims that "[w]e haven't come up with words big enough to communicate the magnitude of what we're doing" (156). A way to do this effectively in literary studies is tracing and combining environmental stories into "combined eco-narratives" in order to give the individual text more momentum than any single poem, film, or short story could provide on its own. Read together, these texts can then also offer a combined, meaningful vocabulary. Agreeing with Marshall who calls for more compelling stories "follow[ing] narrative rules, with recognizable actors, motives, causes, and effects," I consider it essential to construct effective, engaging stories around climate change (233). If a broader public is meant to understand the complex science behind climate change, we need more than mere information but convincing storyworlds. Since environmental literature has been around for years, my article calls for a combination of narratives found in both speculative and non-speculative fiction to create and multiply affective storylines to ultimately involve audiences from all types of genres. The narratives discussed in this article present different approaches to advocating environmental activism, with each text being grounded in its own distinct, yet intersecting crisis. Fittingly, this volume's title, *Reconnections*, suggests what the humanities must do: connect stories of the environment, teach and explain them, and create a space where storytelling can spark action through affective language.

Works Cited

- Asghar, Fatima. "I Don't Know What Will Kill Us First: The Race War or What We've Done to the Earth." *100 Queer Poems*, edited by Mary Jean Chan and Andrew McMillan, Penguin Random House, 2022, p. 145.
- Buell, Lawrence. *The Environmental Imagination. Thoreau, Nature Writing, and the Formation of American Culture*. Harvard UP, 1995.
- De Rentiis, Dina. "Chresiology." Project Description available under https://www.researchgate.net/publication/336564691_DeRentiis_Chresiology_Short_Description?channel=doi&linkId=5da9878092851c577eb822c0&showFulltext=true. Accessed 24 July 2025.
- De l'Horizon, Kim. *Hänsel & Greta & The Big Bad Witch: Eine Weltrettung in 13 Übungen*. Schaeferphilippen, 2022.
- Fekadu, Sarah. "The North and the Desert: Tayeb Salih's Poetics of the Anthropocene." *Metrologies of Modernity: Weather and Climate Discourses in the Anthropocene*, *REAL*, 33, edited by Sarah Fekadu et al., Narr Francke, 2017, pp. 255-272.

- Gelles, David. "Trump's Environmental Claims Ignore Decades of Climate Science." *The New York Times*, 29 Oct. 2024, <https://www.nytimes.com/2024/10/29/climate/donald-trump-climate-change-claims.html>. Accessed 24 July 2025.
- Gelman, Annelyse. "The Climate." *The New Yorker*, 23 Sep. 2019, <https://www.newyorker.com/magazine/2019/09/30/the-climate>. Accessed 24 July 2025.
- Grewe-Volpp, Christa. "Ecofeminisms, the Toxic Body, and Linda Hogan's Power." *Handbook of Ecocriticism and Cultural Ecology*, edited by Hubert Zapf, De Gruyter, 2016, pp. 208-225.
- Heal The Bay*. <https://healthebay.org>. Accessed 24 July 2025.
- Hogan, Linda. "Hunger." *The Book of Medicines*. Coffee House Press, 1993, pp. 17-18.
- Huffman, Bennett. "Postmodern Ecocriticism in the Science Fiction Novel: J.G. Ballard and Ken Kesey." *The Environmental Tradition in English Literature*, edited by John Parham, Routledge, 2016, pp. 64-74.
- Jordan, Cris. *Albatross*. 2017, <https://www.albatrossfilm.com/watch-albatross>. Accessed 24 July 2025.
- . *Midway: Message from the Gyre*. 2010, <https://prix.pictet.com/cycles/growth/chris-jordan>. Accessed 24 July 2025.
- . "Our Story." *Albatross*, <https://www.albatrossfilm.com/ourstory>. Accessed 24 July 2025.
- Kluwick, Ursula. "Talking about Climate Change: The Ecological Crisis and Narrative Form." *The Oxford Handbook of Ecocriticism*, edited by Greg Garrard, Oxford UP, 2014, pp. 502-516.
- Konner Jeremy, director. *The Majestic Plastic Bag*. 2010. YouTube, <https://www.youtube.com/watch?v=GLgh9h2ePYw>. Accessed 24 July 2025.
- Marshall, George. *Don't Even Think About It: Why Our Brains Are Wired to Ignore Climate Change*. Bloomsbury, 2014.
- McKay, Adam, director. *Don't Look Up*. Netflix, 2021.
- McKibben, Bill. "When Words Fail: Climate Change Activists Have Chosen a Magic Number." *Numbers and Nerves: Information, Emotion, and Meaning in a World of Data*, edited by Scott Slovic and Paul Slovic, Oregon State UP, 2015, pp. 156-58.
- Norgaard, Kari Marie. *Living in Denial: Climate Change, Emotions, and Everyday Life*, MIT Press, 2011. JSTOR, <https://www.jstor.org/stable/j.ctt5hhfvf>. Accessed 24 July 2025.
- Oppermann, Serpil. Introduction. *New International Voices in Ecocriticism*, edited by Serpil Oppermann, Lexington Books, 2015, pp. 1-24.

- Rohner, Isabel. "Violett." *Metzler Lexikon Literarischer Symbole*, edited by Günter Butzer and Joachim Jacob, Metzler, 2021, p. 681.
- Ryan, Marie-Laure, and Jan-Nöel Thon. "Storyworlds across Media: Introduction." *Storyworlds across Media: Toward a Media-Conscious Narratology*, edited by Marie-Laure Ryan and Jan-Nöel Thon, U of Nebraska P, 2014, pp. 1-21.
- Sadek, Sayed. "'Grandmothers Were My Tribal Gods': An Ecofeminist Reading of Linda Hogan's *The Book of Medicines*." *International Journal of English and Literature (IJEL)*, vol. 3, no. 5, 2013, pp. 61-76.
- Slovic, Scott, and Paul Slovic. "Introduction: The Psychopsychis of Brightness and the Value of a Life." *Numbers and Nerves: Information, Emotion, and Meaning in a World of Data*, edited by Scott Slovic and Paul Slovic, Oregon State UP, 2015, pp. 1-22.
- Valente, Catherynne M. "The Future is Blue." *The Best Science Fiction & Fantasy of the Year*, edited by Jonathan Strahan et. al., vol. 11, Solaris, 2017, pp. 435-460.
- Weik von Mossner, Alexa. *Affective Ecocriticism: Empathy, Emotion, and Environmental Narrative*. Ohio State UP, 2017.
- . "Sensing the Heat: Weather, Water, and Vulnerabilities in Paolo Bacigalupi's *The Water Knife*." *Metrologies of Modernity: Weather and Climate Discourses in the Anthropocene*, *REAL*, 33, edited by Sarah Fekadu et al., Narr Francke, 2017, pp. 173-189.

Call to Action, Remember Nature: Literary Visuality and Visual Sustainability as Advocates of Environmental Sensibility

Maria Virginia Tsikopoulou
Aristotle University of Thessaloniki

Abstract

Remember Nature: 140 Artists' Ideas for Planet Earth (2021) is a multilayered volume edited by Hans Ulrich Obrist and Kostas Stasinopoulos. Through an array of literary and artistic manifestations, the collective piece explores nature and the urgency of climate crisis. How do print literature and artistic manifestations combine their forces to foster environmental sensibility, raise ecological awareness, and promote eco-consciousness? By placing special emphasis on selected pieces that shape *Remember Nature*, this paper offers an interdisciplinary reading of the volume, one that pays attention to the synergy of the concepts of “literary visuality” (Bodola and Isekenmeier) and “visual sustainability” (Crippa). The medium of the book creates fresh page-spaces that unveil the interplay between visual elements while bringing together diverse artistic and literary expressions. At the very core of this multiplicity, an ecological advocacy is established, one that maintains a pro-environmental, positive stance and inspires sustainable practices and attitudes. Conceptualized as an imaginative and powerful interface, this volume is a direct call to action: *remember nature*.

From global warming and the accelerated melting of the ice caps to pollution, plastics, and fast fashion waste, the Earth’s destiny seems to be not only compromised but also predetermined. Humanity has reached a turning point where human actions and their repercussions predict, with statistical precision, a bleak and unsafe future for the planet. By not being environmentally conscious, anthropocentric activities are already resulting in mounting uncertainty, bending toward eco-catastrophe. Tomorrow’s environmental reality, which everyone around the globe will have to face, sooner or later, illuminates the condition of a global, pressing matter that relates to the spectrum of all social life in its entirety, including cultural production and its various dimensions. For literature, a vibrant part of the cultural production, the first relevant question that arises is whether literary texts can address such urgent and critical concerns. The simplest answer to this would be a direct and clear yes, which derives from and alludes to an array of literary pieces that thematically explore and respond to such issues.

Hubert Zapf in his *Literature as Cultural Ecology: Sustainable Texts* (2016) argues that “[l]iterature is seen as a cultural form in which this living interrelationship [between culture and nature] is explored in specifically productive ways, providing a site of critical self-reflection of modern civilization as well as a source of creative cultural self-renewal”

(3). This implies that literature creates the liminal spaces to interrogate modern civilization in a self-reflective manner and, at the same time, nurture spaces of creativity and cultural transformation. Such an approach illuminates both the significance of literary works within the broader cultural production but also the definitive role they play in the interconnection between culture and nature, all the while creating opportunities for productive dialogues. Building upon this, it can be argued that literature is endowed with the power to transcend mere documenting or reporting; it bears the potential to inspire and empower readers both to think critically and act. An example that corroborates this hypothesis is that of multimodal literature, a genre which encourages readers to actively participate through reading in the reshaping of the literary text while transforming the typically receptive process of reading literature into an active one. The case study for this paper is *Remember Nature: 140 Artists' Ideas for Planet Earth* (2021), a multilayered volume, edited by Hans Ulrich Obrist and Kostas Stasinopoulos, which incorporates the work of contributors who come from diverse cultural backgrounds including North America, Latin America, Europe, among others; the selected material will be analyzed through the concepts of “literary visuality,” as explored by Ronja Bodola and Guido Isekenmeier, and “visual sustainability,” as introduced by Benedetta Crippa. In the methodology section of the present paper, the two theoretical concepts merge while investigating how literary and artistic creations join forces on the page, through an interplay of several distinct modes that occur within the same medium, i.e. the book. *Remember Nature*, a printed text, is analyzed through this theoretical prism to showcase that the literary universe can foster environmental sensibility, promote eco-consciousness through the turning of the pages, while the book’s materiality transforms into a fresh kind of bookish interface, one that cultivates a mentality of taking action. Finally, by synthesizing pieces produced by an array of artists/studios/projects that belong to different communities, the volume highlights the need for a universal togetherness and open dialogue when confronting the present global climate urgency.

Methodology

Ecocriticism and environmental literature investigate thematically issues of ecology and environmental awareness; this is something evidenced in literary works like Ben Lerner’s novel *10:04* (2014) where the climate crisis prevails as a theme and Duncan

MacMillan's play *Lungs* (2011) where the couple, in a world that seems to be so climatically brittle, negotiate the possibility of giving birth to a child. While falling within this broader field of studies that explores the Anthropocene and the environmental crises of the present, this article builds upon the notion that literature serves as another form of advocate for ecological responsibility, accountability, and eco-conscious initiatives; to further support this point of view, the concepts of literary visibility and visual sustainability are explored and interpreted in a complementary and synthesizing way to showcase how the synergy of the visual and the written forms of expression has the power to inspire change. The volume *Literary Visualities: Visual Descriptions, Readerly Visualisations, Textual Visibilities* (2017), edited by Ronja Bodola and Guido Isekenmeier, starts with a sheer affirmation that "[s]tudies in literary visibility investigate the role of literature(s) in visual culture(s)" (9). Such a statement implies that literature plays indeed a significant role within and is connected to the field of visual culture. However, to better understand the dimensions of visual culture, Tripp argues that it "is characterized by 'the dynamic, contextualizing interplay of discourses, practices, and artefacts connected to vision, sight and seeing, in short: *visuality*'" (qtd. in Bodola and Isekenmeier 10). Visuality, definitive of visual culture, establishes an interplay of materiality, diverse practices, as well as discourse and communicative affordances, all of which are visual and connected with the politics of vision. The main argument that Bodola and Isekenmeier make is "that literary visibility is the active participation of literature in visual culture, for literature is involved in the production of discourses as well as practices and artefacts that negotiate and (pre-)configure visualities" (11). According to this definition, the very conceptualization of literary visibility is infused with a kind of active-ness and, as a term, it reveals the productive ways in which the literary and the visual converge; literary visibility also highlights the significance of literature in becoming a creative visual space that can afford negotiations, construct diverse ways of seeing and, hence, reshape visual culture.

In the case of multimodal literature, this productive dialogue between the literary and the visual is further enhanced and accentuated due to the multiplicity of modes that co-exist within the medium of the book. In her work *Working with Multimodality: Rethinking Literacy in a Digital Age* (2013), Jennifer Rowsell refers to a mode as "a unit of expression and representation" (xv), offering a broad definition of what could potentially function as

a mode while implying that such a definition concerns all those elements that can generate meaning. Rowsell further postulates that “[a]lthough modes in isolation create meaning, combining modes can offer more options for conveying message to audiences” which means that, in the case of synergy, the impact of conveying a specific message can amplify (xvii). As an approach, multimodality orchestrates “multiple modes to communicate, represent, and express meaning” within the same medium and “attends systematically to the social interpretation of a wide range of communicational forms used in making meaning”; this makes modes fundamental in the meaning-making process and the diverse ways they could be interpreted, both socially and in terms of communication (Rowsell xvii). Such a line of thought traces back to Gunther Kress and his *Multimodal Discourse: The Modes and Media of Contemporary Communication* (2001); for Kress, contrary to traditional linguistics “where a message was an articulation as a form and as a meaning, we see multimodal texts as making meaning in multiple articulations” (4). So, beyond the linguistics-oriented, two-dimensional formula of form + meaning = message, multimodal texts exhibit multiple layers: pluralistic and multidimensional in their nature, modes have the power to function on multiple levels allowing for intricate patterns of meaning-making.

Within the field of literature, when placing emphasis on visual modes, such as those belonging to the art of design, meaning-making through visibility takes center stage, and is established through a productive dialogue between the visual and the literary. From its very conceptualization, literary visibility investigates the role of literature within the visual culture while this exploration can materialize through a wide range of modes, visual in nature, that participate in the meaning-making process. With literature forming an integral part of the visual culture, the spotlight is on meaning-making and how it responds to societal issues like that of climate crisis; literature does not constitute a topos of sterilized and sanitized subject matters but, more often than not, it is heavily influenced by an array of socially fueled issues. While emphasizing the pressing and challenging social conditions pertaining to the climate crisis, environmental sustainability, and eco-consciousness, the concept of visual sustainability offers a fresh perspective to the discourse. Introduced by Benedetta Crippa, the term illuminates a synergetic and synthesizing approach that places emphasis on the visual in conjunction with the notions of sustainability and ecological awareness and their potential to bring about change. In Meg Miller’s interview of Crippa

in “What Is ‘Visual Sustainability,’ and How Can Designers Challenge Power Through Form?” uploaded to AIGA’s editorial platform Eye on Design, Crippa mentions that:

[a]s designers, we must. . . find a way to work responsibly with our craft, since visibility, just like other design disciplines, impacts everyone. I think we owe it to ourselves, to our students, and also to our clients to be able to thoroughly answer the question of how visual craft is crucial to sustainable co-existence, and what to do about it. (Miller)

While focusing on the art of design, Crippa refers to the ethical responsibility attached to the role of the designer. Her approach brings forth accountability of all agents involved in visual production of visual since the prominence of visibility in contemporary cultural forms has significant power over audience reception. Thus, the creators of visibility into life share a collective, social responsibility, as visibility can influence public consciousness and shape perspectives, making the designer a key figure in the production of content.

As Crippa creates a connection between the visual and the notion of accountability, steering the focus toward the problematics of the environmental issues defining the present, she further postulates in the interview:

I feel it’s really urgent to say that sustainability is not about stopping existing or designing, or limiting creativity, but rather is about acting with responsibility, understanding design as a relational practice to everything and everyone else around us. . . . What I am hoping for is to encourage designers and especially students to believe they can contribute to meaningful change through their work, not by not doing it; that their craft is not only important but powerful and necessary; and that the question is not if but how, and that they have the knowledge to find the answer to that, too.

By introducing the dimension of sustainability and advocating in favor of a sustainable mindset to govern visual practices, Crippa accentuates the relationality between visibility, sustainability, and society; she believes in addressing the current condition of environmental crisis through the work of the designer, thereby contributing meaningfully to society through the art of design. Thus, she defines the concept of visual sustainability as “sustainability that’s fostered through the visual qualities of the design, beyond questions of production or materialization alone.” Through this lens, sustainability can be strengthened and cultivated, not simply through sustainable production, but also through design itself and its symbolic and communicative capacity. This forms the point where Bodola and Isekenmeier’s approach of literary visibility and Crippa’s visual sustainability

complement one another: visibility can shape meaning and have cultural affordances; when it promotes sustainability both symbolically and literally, through the ways it is produced, then it can have societal impact and raise an ecological awareness. Within the context of multimodal literature, the book becomes the physical topos where visibility, through an array of different modes, expands and reshapes the literary work while reinforcing notions of sustainability.¹

When applying this intersection of the two concepts in the context of printed literary work, then this osmosis reveals how the visual can actively promote environmental sensibility and sustainability by incorporating design and diverse modes into its composition. Literary visibility positions itself as a theoretical framework that accentuates the participation of literature in the formation of visual culture; visual sustainability, by the same token, regards visibility as a definitive element of shaping the potential ways individuals perceive the notion of sustainability and ecology within a cultural framework, while alluding to and encompassing the symbolic function of the term, its embeddedness in the process of meaning making, and the accountability that stems from having this kind of power. Through this synthesis, the notion of sustainability becomes prevalent, and is expanded through the productive communication of literature and the art of the design, establishing the interplay between the two on the page through an array of modes.

Case Study

*Remember Nature: 140 Artists' Ideas for Planet Earth*² is a collective, multimodal volume, exhibiting multiple layers of meaning; it constitutes an extension of the Serpentine Galleries' project named *Back to Earth* that, according to their official website, attempts to directly answer the following question: "How can art respond to the climate emergency?" The project invited "over sixty leading artists, architects, poets, filmmakers, scientists, thinkers, and designers to respond to the environmental crisis" through interdisciplinarity as all the contributors, coming from diverse disciplines, offer their unique point of views and unique perspectives. The name of the volume is inspired by the artist Gustav Metzger and his nature-oriented project named *Remember Nature* which took place in 2015.

¹ Adeline Johns-Putra, John Parham, and Louise Squire have edited the volume *Literature and Sustainability: Concept, Text and Culture* (2017) exploring how literature and sustainability intersect.

² The book lacks pagination, so I will refer to each piece by the number assigned to it.

According to Serpentine Galleries' website, *Remember Nature* is "a compendium of recipes, sketches, photographs, essays, spells, and instructions that ask us to engage with the climate emergency in new and imaginative ways in our daily lives, in our homes and communities, parks and public spaces." The book amplifies its page-spaces through the modes it features, crafting fresh and kaleidoscopic angles that unveil the interplay between artistic and literary expressions which address current environmental issues and the emergency of the climate crisis. The volume's palimpsestic quality marks its uniqueness, as the reader can encounter pieces written in lists, recipes, poems, prose, musical notations, sketches, creative maps, photographs, different languages, among others. Due to its unique form, production background, and content, this book is an exemplary case of putting the theoretical framework that combines literary visibility and visual sustainability into practice. In this way, firstly, the volume substantiates the solidity of such a synergetic hypothesis and, secondly, it highlights the significance of cultural products in forming diverse viewpoints, educating the audience, and planting the seeds of change.

Through the combination of the literary, the visual, and the sustainable, *Remember Nature* is investigated and interpreted as a cultural product that exhibits very specific environmentally-oriented dimensions, whose cultural and symbolic affordances participate in a meaning-making process that reinforces sustainability through visibility. What levels of sustainability can be discerned within the book? I suggest that sustainability functions on three different levels: first, on a very practical level, sustainability concerns the book's materiality. Second, the book operates on a symbolic level, one that creates meaning through the diverse modes that are interconnected with the notion of sustainability. Third, the final level exceeds the book's own limits and introduces another dimension, one that goes beyond the page and meets real life; in this sense, the volume initiates a dialogue between what's written, designed, and formed, activating the reader and inspiring them to take action that goes beyond the book's last page. Starting with the first dimension, sustainability is inscribed on the book's materiality. Penguin Random House, the book's publishing house, on their official website, maintains that "Environment & Sustainability" constitutes one of their company's three core business commitments:

We are committed to the practices of responsible book publishing. Our global policy on sustainable sourcing and production reflects our values of conservation,

and our local actions at our offices around the world allow us to address the varied environmental challenges faced by different regions.

Choosing to publish the book through a publishing house whose company culture and core values align with the concept of sustainability and make a dire commitment to the environmental impact is far from coincidental in this case. The materiality of the book, as noted in its credits section, is crafted from “[p]aper from responsible sources” and “has been produced climate-neutrally.” In the same section, it is further stated: “Penguin Random House is committed to a sustainable future for our business, our readers and our planet. This book is made from Forest Stewardship Council® certified paper.” Thus, the material aspect of this volume’s environmentally responsible production practically supports and promotes the book’s sustainable thematic explorations. At the same time, the absence of colored ink throughout the book constitutes another testament of committing to a sustainable mindset, as B&W printing is considered to be more environmentally friendly than colored.³ Ink and paper are the two key elements shaping the book’s materiality while the reader is invited to see it, feel it, and explore how it is crafted. For Jessica Pressman, the medium of the book can be approached through this materiality, its thingness and ultimately “bookishness,” a term that combines the word bookish and the suffix -ness suggesting “an identity derived from a physical nearness to books, not just from the ‘reading’ of them” (10). Since “[a] book is a thing” (Pressman 61), bookishness is a concept that “turns our attention to the materiality of books . . . [to] appreciate the book as a thing whose thingness and thereness matter – matter in ways we measure through a range of values, emotional and economic” (84). By treating the book as a material object crafted in an environmentally conscious way, the sustainability effort that has been put into its production is highlighted. It is the book’s “bookishness” that makes the medium of the book matter and connects its material form with the symbolic dimension: in the specific case of *Remember Nature*, this concerns the value of an ecological awareness and a mindset that promotes sustainability.

The volume’s materiality represents the first level through which sustainability is introduced in *Remember Nature*. While flipping through the book’s pages, a second level,

³ Several printing services (e.g. Print & Bind, 55printing.com), in blog posts, recommend B&W printing because it uses less ink making more environmentally friendly.

a symbolic one is introduced, one that regards the book as an integral part of visual culture, defining the process of meaning-making. The volume is structured in a cubist-like technique, without having concrete pagination; it combines multiple perspectives, exhibiting the work of 140 different artists/projects/studios coming from diverse disciplines and cultural backgrounds, all brought together within the volume's pages. Instead of creating a sense of fragmentation, the multiplicity of the pieces produced accentuates the theme of urgent sustainability which becomes a connecting thread that unites voices and unifies the volume. An array of visual modes that appear on the pages create meaning, fostering an awareness of sustainability throughout the book. "46 Girls Garage" (a US-based project) directly encourages the reader to take action: "[b]uild [s]omething [t]hat [f]eeds [y]our [c]ommunity" and "[t]hink about how you define your community, and how you could best nourish and serve them. Make a planter box to feed your family, or build an entire chicken co-op for your local urban farm!" These instructions are further enhanced by the presence of two photographs in black and white, one that shows a planter box with fresh produce and another one that presents a community farm. Through the art of photography, Garage's sustainability efforts and its contributions to the local communities are visualized. In "3 Agnes Denes," the emblematic Hungarian-born American conceptual artist whose seminal 1982 work "Wheatfield—A Confrontation" still remains one of the most influential and symbolic environmental artworks, provides her "Manifesto" (1969), a free verse, quite vague, poem-like piece that places emphasis on "working with a paradox" and which lists an array of oxymora. Each line starts with a gerund that adds to the piece's rhythm, and, at the same time, insinuates a kind of persistence and continuity. By "communicating the incommunicable," "seeing in new ways," and "questioning, reasoning, analyzing, dissecting, and re-examining," Denes' writing compels the reader to challenge and question, use their creative and rational thinking while remaining active. Approaching this through the prism of ecology, and by "understanding the finitude of human existence and still striving to create beauty," the reader is asked to contemplate, reflect on the present and, possibly imagine environmental change. "127 Suzanne Lacy" (an American artist and university professor) incites the reader to "CREATE A NEW STATE." Spreading over two pages, the piece exhibits words and some sketches of a map, trees, and mountains. This artwork implores the reader to

“ignore existing borders” and, instead, bring their own terrain into life. On this state-sketch that expands between the two pages, there is a question concerning the nature of this imaginative entity, asking whether it is a state “of common geographies,” “of hidden inequities,” “of chosen identities,” or “of nature,” among others. Lacy’s piece is multilayered both in terms of the modes that are employed, and the direct conversation that it initiates with the reader, one that opens a dialogue that touches upon the relation between nature and territory. By creating this hypothetical and imaginative scenario, the artist succeeds in making the reader find a connection between the notions of nature and territory, identify their interrelation and interdependence, and actively consider “pathologies” that need to be confronted, such as inequities and shared economies.

“26 Cecilia Vicuña,” (a Chilean poet based in New York and Santiago) is another piece that combines concrete poetry with the sketch of the tree. The poem appears as following:

Instruction:

See

a

tree

as

true

‘true’ comes from

‘tree’ :

it lives & dies

truth, like trees

can be murdered

by lies. (Obrist and Stasinopoulos)

In the poem, the words arranged on the page in a playful and inventive manner that places emphasis on creating visual connotations: the words see — tree — true — a — as that form the first verse of the poem are also both visually and acoustically similar to one another; the visual repetition of the letters t, e, create a mirroring effect while the alliteration of the /t/ and /ɪ/ sounds and the assonance of the /ɪ/ and /ε/ sounds create a kind fluidity that is both seen and heard. The words connect to one another as each word/line runs to the next one forming a zigzag pattern and while abstractly shaping an almost triangle that slightly points to the next page's sketch of a tree. From the very beginning, the poem instructs the reader to create a parallel mental connection between truth and tree and associate the essence of something being true to that of nature: according to the poem, "true" stems from "tree," that is to say, from nature itself. The second verse is more dense, visually, and ends with a statement indicating that truth and trees live and die. In this sense, there is a kind of truth-ness embedded in nature, one that alludes to the primordial connection between nature and the circle of life. What is unexpected here is that both truth and nature can also be murdered by lies. The personification that attributes human actions to notions like truth, nature, and lies creates a kind of intensity that is built upon, little by little, and ends with a violent image, that of murder. In the next page, a sketch of a tree accompanies the poem while the tree's branches and twigs end up in words like "loyal," "firm," and "tree nymph" being perfectly readable, and others being illegible. Espen J. Aarseth, in his seminal work *Cybertext: Perspectives on Ergodic Literature* (1997), forms the theoretical concept of ergodic literature as an approach to the concept of cybertext beyond "the study of computer-driven (or 'electronic') textuality" (1); in his work, cybertext is approached as "a perspective on all forms of textuality" (18) and could extend to a piece like "26 Cecilia Vicuña" that combines concrete poetry with a sketch and puzzles the reader with words that cannot be fully read and word-shapes that can only be imagined. Aarseth coins the term ergodic, "a term appropriated from physics that derives from the Greek words *ergon* and *hodos*, meaning 'work' and 'path.' In ergodic literature, nontrivial effort is required to allow the reader to traverse the text" (1). An ergodic approach to literature requires the reader's actual effort into navigating the literary work. This means that the reader is inclined to make an effort to understand what they read and, at the same time, engage in the whole meaning-making process. The piece under study requires the

active participation of the reader as they decipher and interpret the poem-sketch that might uncover a loss of connection between nature and the individual, while it can also highlight the need for reflection and reconnection.

“37 Evan Ifekoya” (a Nigerian, London-based interdisciplinary artist) is a one-line piece that spans across two pages and conveys a very concrete message: “Practice stillness as a matter of urgency.” The piece’s sole line serves as an encouragement to act; in today’s fast-paced world where everyone moves, crosses physical boundaries, and can be found in a state of a continuous, relentless motion, the reader is invited to remain still instead. With only one verb in the imperative form and three consecutive nouns, the message is simple, concise, and compelling while the repetition of certain sounds contributes to the overall effectiveness of the line. With the letter “r” being a liquid consonant, the alliteration of the /r/ sound creates a rhythm, a sense of rolling, and a flow. In addition to this, the hissing, almost whispering, effect produced by the sibilance of the /s/ sound contributes to the overall smoothness of the sentence. At the same time, the subtle nature of the assonance of the /ε/ and /α/ sounds accentuates the feeling of softness and a kind of ethereality that aligns with the concept of *stillness*. The economy of words, only seven in total, also translates into economy of ink on page, making *stillness* visually depicted on page through an absence. With no more words and no more ink, *stillness* is shaped through a visual economy and artistic choice that leaves the two pages of the piece completely blank and meaningful. So, in this line, stillness appeals to the senses: first, it can be seen through the absence of text. Second, with no more words displayed on page but stillness, this blankness can be “heard” the moment the reader’s inner voice has nothing else to read. Third, the notion transcends the page and can be practiced; it is framed both as a praxis and a remedy, an intervention and an action of resistance that rejects hyperactivity, overconsumption, and a need for constant motion.

As evidenced by the pieces already explored, the volume operates also on a third, ontological level, one that endorses sustainability beyond the medium’s physicality and the page-space. Ontologically—that is to say, the nature of their existence—a book of fiction and the reader exist in different universes; however, what happens when the boundaries between these two universes coincide and coexist? *Remember Nature* can be characterized neither as purely fictional nor fully non-fictional; on the contrary, it functions as a bridge

that brings these two realms together by incorporating pieces that transcend the physical page and open a productive dialogue between the creation and the reader. Another characteristic example of this is “90 Martino Gamper” (an Italian-born, London-based designer) which functions as a list: the piece starts with a call to action, “Collect now!” appearing in larger font size and in bold. An exclamation mark constitutes the punctuation mark that highlights the urgency of what is stated and asks for the reader’s attention. Then, the following list is written on the page:

Guidelines

1. Go for a walk or swim and pick up a small
item of plastic waste (or other material)
2. Recycle and dispose accordingly
3. Repeat daily, increasing quantity
4. You’ll quickly become an expert
5. Collect with your patron friends, or start
a collecting group (Obrist and Stasinopoulos)

The piece is concluded with a few more lines that mention the equipment needed to perform the collection described and it is also accompanied by a final warning: “this might become addictive.” The list addresses the reader as they are asked to experiment with it beyond the page, meaning that the purpose of the list is not simply to be read but also to be performed in real life, reinforcing sustainability and, at the same time, encouraging a sense of collectivity. Hence, often throughout the volume the reader does not simply read but is expected to practice the literary pieces that they read in real life. They are practically encouraged to act and experiment with all the pieces that have practical suggestions on how to practice sustainability. This means that the volume’s power is multifaceted and not limited to the literary dimension; on the contrary, it enters the realm of everyday life as individuals are asked to respond to nature and interact with it in a creative but always sustainable manner. The multiplicity of modes and artistic manifestations on the page make

the book multidimensional, as every page repurposes elements to approach sustainability in a fresh and visually intriguing way. The diverse modes establish a space of negotiation: the space of the book turns into an interactive interface whose prosthetic extensions, on a symbolic level, argue in favor of a sustainable future.

A Few Closing Remarks

Literary visibility and visual sustainability have typically been studied separately without making any connections between the theoretical frameworks they derive from. The former combines the visual with the literary as transformative forces of culture, while the latter, by bringing together the visual and the sustainable, aspires to elucidate that visual practices and sustainability can coincide. In their essence, the two concepts belong to different disciplines but when brought together, can create an even more powerful theoretical tool that approaches the literary through the prism of multimodality and the diverse modes that can take place on the page, while connecting the special emphasis placed on the visual with the notion of sustainability. At its very core, this methodology illuminates the different ways literature is a part of visual culture while, through multimodal multiplicity, the medium of the book is not simply enhanced but has also the power to explore and respond to pressing societal issues of the present like climate crisis.

Remember Nature: 140 Artists' Ideas for Planet Earth (2012) establishes layers of interactions and connections between the reader and the text but also in conjunction with all its contributors; diverse experiences, cultural backgrounds, artistic practices, and voices all unite and complement one another. North American artists like David Lynch, Ed Ruscha, Simone Forti, and Maren Hassinger “meet” artists like Olafur Eliasson (Icelandic-Danish), ANOHNI (British-born), and Anna Bella Geiger (Brazilian of Jewish-Polish ancestry) and participate in a productive, multimodal dialogue that critically reflects on and responds to the urgency of climate crisis, sustainability, and human agency. With most of the pieces sharing advice, making suggestions, and inviting the reader to participate in the meaning-making process, *Remember Nature* succeeds in raising ecological awareness and promoting environmental sensibility. The process of reading turns into a holistic experience, with the reader *making an effort to understand*, as the book, through its bookishness, thingness, and visual complexity, is transformed into another kind of interface

that demands interaction. Most importantly, beyond reading there is a robust call to action for all: not to simply remember nature, but to practically become its advocates.

Works Cited

- Aarseth, Espen J. *Cybertext: Perspectives on Ergodic Literature*. The Johns Hopkins UP, 1997.
- AIGA *Eye on Design*, 9 Dec. 2020, <https://eyeondesign.aiga.org/what-is-visual-sustainability-and-how-can-designers-challenge-power-through-form/>. Accessed 24 July 2025.
- “Back to Earth.” *Serpentine Galleries*, www.serpentinegalleries.org/whats-on/back-to-earth/. Accessed 24 July 2025.
- Bodola, Ronja, and Guido Isekenmeier, editors. *Literary Visualities: Visual Descriptions, Readerly Visualisations, Textual Visibilities*. Walter de Gruyter GmbH, 2017.
- “Color vs B&W Printing: Environmental Impact and Sustainable Choices.” *55Printing.com*, <https://www.55printing.com/color-vs-b-w-printing-environmental-impact-and-sustainable-choices.html>. Accessed 24 July 2025.
- “Is Black/White Printing Better for the Environment?” *Print & Bind*, www.printenbind.nl/en/news/blackwhite-printing-better-environment?srltid=AfmBOoqmrI11JubJpJPDPMW3CJCr5aZyfFdMVKgY1_voYFrr8fUUmpsJ. Accessed 24 July 2025.
- Johns-Putra, Adeline, et al., editors. *Literature and Sustainability: Concept, Text and Culture*. Manchester UP, 2017.
- Kress, Gunther, and Theo Van Leeuwen. *Multimodal Discourse: The Modes and Media of Contemporary Communication Discourse*. Arnold, 2001.
- Lerner, Ben. *10:04*. Picador, 2015.
- Miller, Meg. “What Is ‘Visual Sustainability,’ and How Can Designers Challenge Power Through Form? Benedetta Crippa on How Visual Craft is Crucial to Sustainable Co-existence.” *AIGA Eye on Design*, 9 Dec. 2020, <https://eyeondesign.aiga.org/what-is-visual-sustainability-and-how-can-designers-challenge-power-through-form/>. Accessed 24 July 2025.
- Obrist, Hans Ulrich, and Kostas Stasinopoulos. *Remember Nature: 140 Artists’ Ideas for Planet Earth*. Penguin Random House UK, 2021.
- “140 Artists’ Ideas for Planet Earth: A New Book Inviting Artists to Re-Think the Climate Emergency.” *Serpentine Galleries*, 23 Feb. 2022, www.serpentinegalleries.org/whatson/140-artists-ideas-for-planet-earth/. Accessed 24 July 2025.
- Penguin Random House. “Environment & Sustainability.” *Penguin Random House: Social Impact*, <https://social-impact.penguinrandomhouse.com/our-commitments/enviroment-sustainability/>. Accessed 24 July 2025.
- Pressman, Jessica. *Bookishness: Loving Books in a Digital Age*. Columbia UP, 2020.

- Rowse, Jennifer. *Working with Multimodality: Rethinking Literacy in a Digital Age*. Routledge, 2013.
- Tripp, Ronja. *Mirroring the Lamp: Literary Visuality, Strategies of Visualization, and Scenes of Observation in Interwar Narrative*. Trier: WVT, 2013.
- Zapf, Hubert. *Literature as Cultural Ecology: Sustainable Texts*. Bloomsbury Publishing, 2016.

Biographical notes

Yildiz Aşar ( <https://orcid.org/0009-0009-6769-3415>) is a PhD student and lecturer in American Studies at the University of Bamberg since 2022. She has acquired a Bachelor's Degree in English Language and Literature at Boğaziçi University in 2017, and a European Joint Master's Degree in English and American Studies at the University of Bamberg in 2021. Her current dissertation project explores representations of marginalized girlhoods and ecological crisis in contemporary U.S. speculative young adult literature through her developing concept of ecogirlhood. Her research interests include ecocriticism, ecofeminism, girlhood studies, contemporary speculative fiction (utopian/dystopian, post/apocalyptic, ethnic futurities), as well as children's and young adult literature.

Judith Campagne ( <https://orcid.org/0009-0007-4914-1137>) is a PhD candidate in Philosophy at the Vrije Universiteit Brussel (VUB). Her research starts from the works of Hannah Arendt, focusing on the political and ethical impetus of "natality." In light of this she questions visions of futurity and forms of power in and around big data technologies. She especially relates this to critical refusals. Academically, Judith has an interdisciplinary background with influences from philosophy, (art) history, and artistic research.

Loredana Filip ( <https://orcid.org/0000-0002-8538-9881>) earned her PhD in American literature and cultural studies from Ludwig Maximilian University of Munich, where she was a fellow at the Collaborative Research Centre "Cultures of Vigilance." She holds an MA in North American Studies from Friedrich-Alexander University of Erlangen-Nuremberg, where she also taught and supported international students. Her research blends literary studies, environmental humanities, and affect theory, exploring how everyday reading shapes ecological aesthetics, multisensory engagement, and human–nonhuman relations. She is the author of *Self-Help in the Digital Age: TED Talks, Speculative Fiction, and the Role of Reading* (De Gruyter, 2024), and her work has appeared in *COPAS*, *Medical Humanities*, and several edited collections. In addition to

her academic writing, she publishes creative nonfiction, literary fiction, and children's books under the pen name Laurel Dunn.

Susen Halank ( <https://orcid.org/0009-0006-1520-3654>) studied Romance Studies, Pedagogy and Psychology, as well English and American Studies at the University of Bamberg (Germany), where she completed both her teaching degree and her M.A. in English and American Studies. She is currently a PhD-candidate and contract lecturer at the American Studies Department. In support of her research, she completed research stays in the United States at the University at Buffalo (NY), the University of Chicago, and Loyola University Chicago in 2023 and 2025. Her academic interests include Dickinson studies, gender and feminism studies, genre theory, ecocriticism, and kinship studies.

Laura Handl ( <https://orcid.org/0009-0005-7856-5700>) is a research assistant at the Dresden University of Technology (TUD) in the field of American Studies. From 2022 until 2025 she worked at the TUD as a research associate on the contemporary formalization of the manifesto funded by the German Research Foundation (DFG, project no. 501505288). She holds a BA in media communication (University of Würzburg, 2016) and an MA in literature and culture studies with a specific focus on English and American Studies (Dresden University of Technology, 2022). While working on a dissertation on the politics of anger in contemporary queer-feminist manifestos, her further research interests include queer/feminist narratology, media studies and critique. Her contribution to *American Literatures* on placemaking in L.H. Stallings's *A Dirty South Manifesto* (2021) was published in October 2024 (<https://doi.org/10.25364/27.4:2024.2.6>) and she is currently editing a volume on the contemporary manifesto moment together with Professor Carsten Junker (forthcoming in 2026).

Niki-Grigoria Karamanidou ( <https://orcid.org/0009-0003-4784-7540>) is an independent scholar and EFL teacher focused on literature-based education. She has received a Bachelor's degree in English Language and Literature and a Master's degree

in English and American studies, both from the Aristotle university of Thessaloniki. Her current research touches upon selected works of Native American literature in relation to issues of environmental destruction and its close connection to identity, space, social injustice, dislocation and transcultural negotiations. More specifically, she is interested in ecocritical readings of Native American and Native Canadian fiction, and in close examinations of slow and epistemic violence as well as in the various restorative cultural practices and sustained communal resistance that can combat these types of violence and restore the afflicted communities.

Evripidis Karavasilis ( <https://orcid.org/0009-0005-8342-2763>) is a PhD candidate in the research line “Construction and Representation of Cultural Identities,” part of the doctoral program entitled “Linguistic, Literary and Cultural Studies” at Universitat de Barcelona, Spain. His thesis explores the interrelation of sexuality, immigration, and space, and examines contemporary Caribbean-Canadian fiction through the lenses of queer of color critique, intersectionality and queer geography. Mr. Karavasilis holds an M.A. (Honors) in English and American Studies from the Aristotle University of Thessaloniki, Greece. His M.A. thesis offers an intersectional remapping of queer sexualities in the Caribbean and Canada and critically analyzes novels written by Dionne Brand and Shani Mootoo. The second chapter of his MA thesis, “Homosexuality, Societal Expectations and the Claims of Family: Queering Geographies of Domesticity and Belonging in Shani Mootoo’s *Valmiki’s Daughter* (2008),” has been published in the edited volume *The Asian Caribbean in the Caribbean Diaspora: Essays on Migration, Identity, and Literary and Cultural Representations*.

Christina Koukouli ( <https://orcid.org/0009-0002-2010-9049>) is an independent scholar and educator. She holds a BA in English Language and Literature from the National University of Athens and an MPhil with distinction in Comparative Literature from Trinity College Dublin. Her main academic interests include ecocriticism, posthumanism, and post-colonial studies with a specific focus on the portrayal of the relationship between the human body and the environment in art and literature.

Thomas Mantzaris ( <https://orcid.org/0000-0003-0099-3228>) is an affiliated postdoctoral researcher at Vrije Universiteit Brussel (VUB) at the [Centre for Literary & Intermedial Crossings](#). He is a Fellow of the UK Higher Education Academy, a Fulbright Fellow, and has received the 2022 HELAAS Young Scholars Excellence Award. He is currently serving as Young Scholar Representative for the Hellenic Association for American Studies and is a co-founder of the EAAS Postgraduate and ECR Network. His first monograph, *Multimodal Poetics in Contemporary Fiction: Design and Experimentation in North and Central American Texts*, was published by Palgrave/Springer Nature in 2024. His research revolves around multimodal communication and experimental forms of narrative-building in American print-based fiction and other medial contexts.

Paschalia Mitskidou ( <https://orcid.org/0009-0006-3884-1667>) is a PhD candidate in the Department of American Literature and Culture, School of English, Aristotle University of Thessaloniki (AUTH), Greece. She holds an MA in Creative Writing (University of Western Macedonia) and a BA in History (Ionian University). Her PhD research project concentrates on Virtual Reality in contemporary American culture and the representation of the historical past through Virtual Reality narrative practices. She has presented her research in various national and international conferences, and workshops. She is a member of the Hellenic Association for American Studies (HELAAS) and the Multimodal Research and Reading Group of the School of English, AUTH. Her research interests include contemporary American fiction and digital culture, interactive digital narratives, and virtuality in the context of new media technologies. She is a freelance writer and editor, and a private tutor of Greek as a foreign language.

Lukas H. Seidler ( <https://orcid.org/0009-0008-8895-391X>) is a PhD candidate at Maastricht University and is currently researching the materialities and political ecologies of agricultural robotics. Having studied philosophy and anthropology at the University of Amsterdam, he works in the interstices of the environmental humanities. Especially interested in the continuously knotting colonialities and modernities of today's planetary ruptures, he has explored how coloniality and the concept "sea-level rise" relate when

affecting those in positions vulnerable to climate change. He also did an ethnography of nature-based forms of climate adaption and how coloniality patterns their export from the Netherlands' water sector to the rest of the world through the dredging industry. As part of these projects and elsewhere, he works with multimedia methods and other sounded meanderings.

Foteini Toliou ( <https://orcid.org/0009-0003-5654-2941>) is a Ph.D. candidate in the Department of American Literature and Culture at the Aristotle University of Thessaloniki. She received her B.A. in English Language and Literature (AUTH) in 2019 and completed her M.A. in English and American Studies (AUTH) in 2021. Her Master's thesis focused on Chicana/o literature and borderlands theory. Her research interests include diasporic literature, migration literature, Caribbean women's writing, transcultural criticism, and feminist theory. Her research also focuses on urban studies and on ecocritical readings of contemporary American literature. She has delivered conference presentations and workshops on diasporic literatures in Greek, British, and US universities and her work has been published in the journal *Revista Canaria de Estudios Ingleses*. Foteini was awarded a semester-long Erasmus+ scholarship to conduct part of her doctoral research at Stockton University, US. She also carried out independent PhD-related research at Princeton University and the University of Pennsylvania during her US research stay.

Maria Virginia Tsikopoulou ( <https://orcid.org/0009-0008-7888-1756>) is a Ph.D. candidate at the Department of American Literature and Culture, School of English, Aristotle University of Thessaloniki, Greece and a Fulbright alumna. She holds an MA (2018) in English and American Studies (AUTH) and a BA (2015) in English Language and Literature (AUTH). She has conducted PhD-related research at New York University and the Brooklyn Art Library in New York City under the auspices of the Fulbright Foundation in Greece. She has also received an Erasmus+ scholarship at the Universidad Complutense de Madrid, in Spain for her PhD studies. Her research appears in collective volumes and academic journals, including *Roczniki Humanistyczne*. Her research

interests revolve around urban environments and architecture, contemporary American fiction, experimental narratives, and artistic practices.