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Editors:
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Editorial
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Jenny Stümer

Editor's Note on Posthuman Survival

For this issue of *Apocalyptica* we turn to the notion of posthuman survival. Of course, the concept of the posthuman encapsulates a diverse and vast range of theoretical approaches, the scope of which by far exceeds the discussion we are suggesting here. However, at its core posthuman thought questions the centrality of the human, which gains particular significance in the context of evolving anthropogenic crises. As such, the often postulated 'posthuman condition,' and particularly its relation to measures of 'survival,' is vital in working through the many aspects of apocalypse in past, present, and future. Seen in this light, the construction of the human as a narrative, fantasy, and hegemonic point of reference is pivotal to understanding the histories of colonialism and global capitalism as based in hierarchies that categorize (or decategorize) the meaning of specific lives. The conceptualization of the human also inflects current framings and discussions of anthropogenic climate change and its many interconnected shades of vulnerability and injustice. At the same time, Eurocentric conceptions of the human also have vast effects on how powerful nations in particular conceive of, respond to, and prepare for various anticipated crises, such as those related to migration, ecological devastation, food and water scarcity, etc. The problem of the human in shaping these understandings and their political consequences, in other words, is grounded in its capacity to dress up as a universal concept, uniting a global community in peril, while simultaneously effecting and sustaining a complex web that confines the majority of people to a state of permanent exposure, exclusion, and inequality. As Rosi Braidotti (2013, 1) puts it, "not all of us can say, with any degree of certainty, that we

have always been human, or that we are only that." And, more pertinently, "the human has exploded under the double pressure of contemporary scientific advances and global economic concerns" (Braidotti 2013, 1) invoking what she calls a "posthuman predicament" at the core of apocalyptic upheaval.

Of course, the posthuman certainly reproduces its shares of inhuman advances (consider the threat of viral human-animal exchanges resulting in ever less controllable pandemics, the traumatic escalation of drone warfare at the expense of largely vulnerable populations, or the techno-colonial fantasies and ambitions to colonize Mars in the aftermath of planet Earth's destruction, etc.). These developments are concerning and deserve critical attention; however, the posthuman also holds vast promises for rethinking the apocalyptic potential of revealing, rupturing, and transforming these problems as well as the structures they rely on. For example, Pramod Nayar (2013, 2) thinks of posthumanism as the "radical decentering of the traditional sovereign, coherent, and autonomous human in order to demonstrate how the human is always already evolving with, constituted by, and constitutive of multiple forms of life." Nayar's approach speaks to the apocalyptic potentials of ending a destructive and non-inclusive world as a means of making a new (and perhaps) better one. This account changes the construction and meaning of the human at the core of anthropogenic disaster and potentially opens new vistas for taking stock of existing ecological and political vulnerabilities, potential multispecies in/justice and various cross-species entanglements which may prove vital in understanding the nuanced politics of apocalypse today.

In this context, it is important to point out, that the human as a category of power has long been subject to wide-spread philosophical and practical critique by public intellectuals, artists, and activists alike—most notably by black feminist scholars (Wynter and McKittrick 2015, Ferreira da Silva 2015, Weheliye 2014). Exemplifying this critique, Sylvia Wynter (2015) maintains that conceptions of the human are inherently related to the notion of 'Man' which has attained a ubiquitous and exclusive presence since the enlightenment, projecting a particular ideal of the human that centers whiteness and Europeanness in such a way that 'others' do not qualify to measure up. The concept of 'Man' thereby enables and supports a fundamentally racist, sexist, violent, and ultimately unsustainable structure of global exploitation, which has not only significantly propelled what is now commonly perceived as 'the end of the/this world' but which may also describe precisely that which needs to be abandoned or which needs to 'end' in order for new and more just (posthuman and post-apocalyptic) worlds to emerge. Building on this line of thought, Braidotti

explains that appeals to the human "are always discriminatory" (2020, 2) reproducing structural inequalities that are ultimately reliant on differential hierarchizations of the human. In this continuum, the white, masculine, Eurocentric, able-bodied, heterosexual subject called 'Man' reigns supremely, marginalizing all other positions. However, the decentering of this harmful standard also brings about the proliferation of different views and experiences that may vitally retell the trajectory of possible contemporary politics.

In each case, the notion of the human has consequences on how past and present crises are politically framed and interpreted, entangling existing and potential politics, as Kathryn Yusoff (2018) has shown. To Yusoff the "sudden concern with the exposures of environmental harm to white liberal communities" evolving in the context of fears about climate change, for example, demonstrates a particular incapacity of largely white, global centers of power to acknowledge the "histories in which these harms have been knowingly exported to black and brown communities under the rubric of civilization, progress, modernization and capitalism" (2018, xiii). In this sense, hegemonic notions of the human erase the fact that apocalypses have been part and parcel of creating the very world whose end is now repeatedly lamented; a world which, it seems, "is just now noticing the extinction it has chosen to continually overlook in the making of modernity and freedom" (Yusoff 2018, xiii). However, the notion of the posthuman, by contrast, unsettles these assumptions and thereby prompts important questions about what constitutes a crisis or apocalypse in the first place? At what point do we speak of emergencies? Whose anxiety takes center stage? And most crucially, whose survival must be secured?

Such questions provide insight into the intersectional stakes of apocalyptic thinking, precisely because they expose (reveal!) the power-ridden conventions of dominant fears about human extinction or forthcoming apocalypses encoded in the many ends of the world (Yusoff 2018, Mitchell and Chaudhury 2020, Salih and Corry 2022). At the same time, the posthuman also puts into focus the many voices that have been marginalized from Eurocentric notions of the human, potentially elevating the perspectives of those who have been historically othered, dehumanized, and routinely excluded from the 'world'. As Braidotti (2020, 2) explains, "as these multiple crises unfold, the politics of the sexualized, racialized, naturalized others are moving center stage, pushing old Anthropos off-centre." This includes a turn to indigenous epistemologies, decolonial thought, and a long overdue reexamination of the past in terms of different scales of

'Man-made' catastrophes that may well (re)constitute pre-existing forms of local and global apocalyptic experience and crisis embodiment.

At the core of these attempts to decenter 'Man' as the measure of universal humanness stands the proliferation of a particular kind of vitality or assumptions about the agentic quality of living matter itself, which upends the Eurocentric paradigm of a fundamental nature-culture binary. Of course, the distinction between the categories of the natural and the cultural have long been pressured by technological and scientific advances; however, a non-dualistic understanding of the nature-culture continuum also throws up various questions about the politics of apocalypse, often in conflicting and ambivalent ways. For example, robotics, AI technologies, bio-genetics or transhumanism may unsettle the discriminatory structures of abusive global politics or provide new avenues for profit-minded exploitation and unethical categorizations of vulnerability and otherness. What is at stake here is, as Braidotti (2013, 2) puts it eloquently once more, "a qualitative shift in thinking about what exactly is the basic unit of common reference for our species, our polity and our relationship to the other inhabitants of this planet"— a shift which necessitates a nuanced discussion about "what kind of political analysis and which progressive politics is supported by the approach based on the nature-culture continuum" (Braidotti 2013, 3). If the apocalypse is not simply a mythological event, but rather an experience that holds a philosophical and practical lens on the cultural politics of specific contexts, then the contestation of the human is a central means of upending the world in relevant and consequential ways, of forming and deforming the historical present. The posthuman as a vector of apocalyptic analysis thus deserve more nuanced and critical attention.

More to the point, apocalypse holds significant potential for thinking the posthuman and vice versa, precisely because the politics of the 'end' and the 'post' are productively entangled. One way of approaching this complex intersection is the notion of a radical ontological uncertainty made palpable through the upending of Eurocentric conceptions of individuality, time, space, etc. For example, on the one hand, the premise of a whole range of apocalyptic fears (and hopes) is the unsettling presumption that humanity is in a critical condition, the various meanings and implications of which are anything but clear. On the other hand, the problem of the human as a category of power also exacerbates these various crises, leading to an ambiguous loss of continuity or futurity, which changes the coordinates of what this slowly ending world may offer, represent, or operationalize. For example, anthropogenic catastrophe as well as multispecies entanglements may upend the notion of quantifiable,

linear time and non-relational space, in so far as both time and space intensify or compress under the pressures of a shrinking world. In turn, these changes in perception and lived reality effect a heightened alertness or negative affective economy in which people, communities, and nations may scramble for all kinds of ways to preserve or upend a common world. The politics of apocalypse are then also always connected to complex and ambivalent negotiations of identity politics within the realm of catastrophe as well as to attempts at managing one's existence, and the ever-looming question to what ends, how, and *if* the status quo should be preserved or survived?

In this regard, Kyle Powys Whyte (2021) warns about emerging forms of 'crisis epistemology' whereby the assumption that a particular emergency is new, unprecedented, urgent (or apocalyptic) might lead to actions that disadvantage disenfranchised communities once more—thereby escalating, slowly but incessantly, the very structures that brought about the current crises in the first place. Solutions to climate emergency that end up excluding marginalized communities through massive concrete structures, barbed wire, drones, and fences in the effort to protect the fossil fueled lifestyles of hegemonic power, for example, reinstate the problematic questions of whose world is ending and whose world is to be saved, escalating the tensions of apocalyptic politics once more. The question is then: Does apocalyptic thinking, in this sense, have to be avoided? Does it deprive a crisis-ridden world of political drive and creativity? Or, does the apocalypse itself hold a particular kind of politics that benefits from the changing meanings of the human, precisely because these changes produce a counterimage to/of hegemonic ideals of life, community, and world altogether?

One way of approaching these tensions (without strictly trying to resolve or exhaust them) may be a turn to the figure of the zombie, whose traces in the apocalyptic imaginary go back all the way to West African and Caribbean Vodou traditions, but whose presence also works as a constant reminder of the undead necropolitical structure of racial capital and enduring coloniality. Mel Chen (2015, 25) crucially describes the zombie as a "complexly racialized, eternally laboring figure" that maps posthuman biopolitics onto intense fears about the collapse of "borders of nation, geography, natural barriers, class, gender, age, race, ability, and health" (26). As such, the zombie is a central figure of the posthuman predicament and, yet more poignantly, of posthuman end times scenarios. In fact, Jack Halberstam points out that "every zombie represents a critique of the human" (2020, 166) invoking a central concern of ending the world and thereby reformulating apocalypse's most contentious claim through

the lens of the posthuman: The zombie imagines the end of the human as such, but, like the apocalypse as a scenario against which the zombie emerges, this annihilation of the human bespeaks the abolishment of a category that depends on "white racial fantasies of longevity (even in the face of diminished environmental capacity), technologically enhanced futurity, and a maximized relation to survival" (Halberstam 2020, 166). The apocalypse, hence, emerges as a form of heightened anxiety that articulates profound injustices located in past, present, and future, but it also describes a form of posthuman world-making. In this sense, apocalypse itself may also work as a poignant rejection of the human that can be read as a refusal of the gendered, racialized, and ableist structures that indefinitely reproduce crisis and injustice in this world. Apocalyptic thinking then not only sustains but also potentially questions the various responses to 'the end of the world,' particularly as they emerge in the form of human enhancement or survival at all cost.

Without claiming to reproduce an exhaustive conversation, the articles in this issue, in one way or another, begin to contour these predicaments but crucially do not aim to resolve their many tensions, conflicts, and ambiguities. In the following, our authors discuss the propensities of posthuman survival in the light of apocalyptic histories that blend different temporalities and spaces as well as forms of looking back to the past through moments of unresolved trauma, contemporary negotiations of exceptional borderscapes, elemental politics of intersecting forms of ecological violence, and the ambivalent mediation and fictionalization of artificial intelligence.

The issue opens with a special feature of Robert Folger's Annual Tagore Lecture, entitled "(Un)veiling Extinction: Notes on an Apocalyptic History of Mexico," which he held at University College London in April 2024. Folger outlines how the apocalypse operates as a mythical narrative that requires a human subject in order to imagine different scales of extinction. The analysis reveals that while Western notions of this 'end' have been conceptualized around anthropomorphism, as well as a specific hegemonic topography and linear temporality, a closer look at the apocalyptic history of Mexico in particular unveils a kind of blending or montage of apocalyptic moments in time and space that unsettle this notion. Helping to make sense of the tension between apocalypse and post-apocalypse more broadly, Mexico generates a specific form of folding extinction onto the past that is helpful in complicating the spatial, temporal, and emotional scales of apocalyptic experience. Working through this overlap, from the supposed extinction of the Dinosaurs to the colonial periods of past and present, Folger's analysis not only untangles the

centering of Man as an apocalyptic narrative trope, but with view to the apocalyptic impulses of Mexican history, nevertheless demonstrates, how "apocalypse is not just an end, but a conclusion that folds towards a beginning." Apocalypse in this sense "is not only destructive but opens new possibilities beyond the existing" and may thereby point us to forms of life beyond the realm of the human.

Following on from this insight, Lawrence May's article "Undead Return: Japanese Videogames and Nuclear Memory" examines the origins of Japanese zombie video games in the light of *yōkai* folklore. May's analysis resituates the zombie in these games as a distinctly Japanese variation of mediated undead monstrosity, which articulates a communal and public grappling with the unresolved trauma of the repercussions of the Pacific War in Japanese culture. As such, the figure of the ludic zombie emerges as a potent mediation of apocalyptic anxiety that provides insight into the historical foundations of posthuman imaginaries. In reading the zombie against (and within) the tradition of Japanese *yōkai*, however, May also puts into focus the "fertile terrain" of uncanny and abject zombification in the affective and aesthetic articulation of the nation, which, in this case, returns the repressed of post-1945 apocalyptic scars and wartime experience of "economic, emotional, political and social living death" with the end of the Shōwa era in 1989. In tracing the figure of the Japanese zombie in its specific invocation, May's analysis further challenges the centrality of the American and Caribbean-derived figure of the undead and thereby not only importantly broadens the genealogy of the mediated zombie, but also reinstates what he calls the "double inscription of global and local concerns" that shape the cultural mediation of specific trauma articulations alongside the figure of the posthuman zombie.

Lea Espinoza Garrido's article "'Death or Rebirth': Apocalyptic Borderscapes, Topographies of Exception, and Regulating Survival in Zack Snyder's *Army of the Dead* (2021)" looks at the film's portrayal of the border as a site of territorial and symbolic exclusion that profoundly shapes and re-organizes the ethical proportions of survival management in the aftermath of apocalypse. Crucially, exclusion in Espinoza Garrido's analysis does not simply function in the spatial sense, as the border's overwhelming visuality as a central trope of zombie aesthetic seems to suggest, but also demonstrates how the border maintains a specific exclusion from the sphere of the living, reproduced in the uncanny figure of the undead zombie. Reworking the layered necropolitical dimensions of the border in this way, Espinoza Garrido sheds light on the particular imaginary intertwinement of apocalypse and survival with a view to the biopolitical consequences of such entanglements. The zombie, then, functions, in Espinoza

Garrido's words, as a "liminal figure" that projects the critical potential of apocalypse precisely because it not only "blurs the boundaries between living and dead, human and non-human, self and Other" but also because it "functions as a transtemporal figure onto which present, past, and future issues can be projected." In this sense, the spatio-temporal layers in *Army of the Dead* (2021) invoke the visual grammar of transnational crises, such as the COVID-19 pandemic and anxieties about migration control. Yet, the film also makes a specific claim about locally contained apocalypse and thereby mediates, similarly to May's analysis, the tension between global and local acts of survival, which in this instance reproduce an apocalypse that is both plural and particular in its negotiation of human and not-so-human exclusion.

In his contribution "Foul Waters: Contemporary Zombie Apocalypse Narratives and the Elemental Turn," Drago Momcilovic takes on the zombie apocalypse through the lens of elemental politics. Looking at the television series *The Walking Dead* (2010–2022) and its first major spinoff, *Fear the Walking Dead* (2015–2023) more specifically, Momcilovic conceptualizes the zombie as a "posthuman predator," who, in his embodiment of fluid elements in particular, allegorizes the ecological violence shaping postapocalyptic imaginaries today. Focusing on the prevalence of blood, oil, and water, Momcilovic reworks the zombie apocalypse as an elemental apocalypse, in which zombies not only reshape the world through various fluid exchanges with their environments, "leaking, bleeding, festering, and putrefying" into the landscape, but thereby also render these grounds malleable, unstable, and ultimately precarious. To Momcilovic this visualization of destructing the once stable grounds of human civilization allegorizes perceptions of global catastrophe as uncertain, ambiguous, and uncomfortable. It also demonstrates that the fluid elements at the center of these narratives work themselves to escalate the ecological and political violence depicted, particularly where blood, oil, and water are seen to escalate "the dismantling of cultural practices, social hierarchies, and institutions and infrastructures of the world." In reading the zombie through its elemental politics, Momcilovic thus pays attention to an increasingly wet and volatile world, in which the posthuman other is simultaneously a threat to human survival and a fitting allegory for a range of political, cultural, and environmental transformations unsettling, remaking, and finally re-imagining the very grounds on "which the dramas of human survival are now staged."

Teresa Heffernan's article "Orga is not Mecha: How Literal Readings of Fiction are Damaging the World" shifts the discussion from the posthuman zombie to the AI industry, tracing the fictional roots of contempo-

rary anxieties about "superintelligent machines." Going as far as claiming that AI machines pose an existential risk of apocalyptic proportions to humanity, many AI industry giants have warned about the possibility of losing control of machines. However, critically examining these developments, Heffernan's analysis chronicles that it is only through the lens of fiction that AI is granted this posthuman agency that far exceeds its actual capacities. To Heffernan this susceptible move away from a scientifically grounded reality stipulates a disconcerting symptom of the dangerous entanglement between fiction and science at the expense of much needed action on climate change. In this sense, the irrational fears resulting from the unsettling arrangement between fiction and science mark a "distraction from real concerns," in so far as the fiction-science fold psychologically displaces any sense of responsibility for the actual environmental and societal damages wrought by the AI industry today. More to the point, this blind spot in AI discourse entails a troubling shift of the conversation about planetary catastrophe, which erases concerns about "the concentration of wealth and power in the hands of a few, copyright violation, biased data, intrusive surveillance, ghost work, deep fakes, and the dissemination of disinformation" otherwise intensely propelled by the AI industry. Looking at the work of Stanley Kubrick in particular, Heffernan is interested in tracking an evolving relationship between science and science fiction, explaining that both vectors shape each other in problematic ways. Outlining Kubrick's own relationship to science from his work on *2001: A Space Odyssey* (1968) to his later take on the subject matter in *A.I. Artificial Intelligence* (2001), Heffernan maintains that fictional accounts in turn may critique the industry's flawed obsession with fairytale narratives.

Closing this section on posthuman survival, Alessandro Sbordoni's commentary "The Coming Apocalypse" muses on the peculiar and repetitive temporality of apocalyptic thinking. Florian Mussgnug reviews *The Environmental Apocalypse: Interdisciplinary Reflections on the Climate Crisis* (Routledge, 2023) edited by Jakub Kowalewski, which brings together scholars from a wide array of disciplines to consider whether eco-apocalypticism can inform progressively transformative discourses about climate change. Meanwhile, Aanchal Saraf looks at Anaïs Maurer's new book *The Ocean on Fire: Pacific Stories from Nuclear Survivors and Climate Activists* (Duke UP, 2024) in which Maurer analyzes an extensive multilingual archive of decolonial Pacific art in French, Spanish, English, Tahitian, and Uvean in order to trail moments of resistance to the environmental racism and carbon imperialism brought about by nuclear colonization.

Sticking with the themes of survival and posthuman agency, but expanding the discussion to an examination of the archeological archive

of Mexican artwork in the context of an apocalyptic imaginary, the second part of this issue offers a dossier on the exhibition "Imagining the End of Times: Stories of Annihilation, Apocalypse, and Extinction" which opened at the National Museum of Anthropology in Mexico City under the curatorship of Adolfo Mantilla Osornio late last year. The dossier brings together a range of short papers reflecting on the notion of 'the end of times' through the lens of different perspectives and disciplines. Originally presented at the exhibition's inauguration, the papers include work by Robert Folger, Adolfo Mantilla Osornio, Patricia Murrieta-Flores, Alejandra Bottinelli Wolleter, Emily Ray, and Robert E. Kirsch. The dossier is introduced by Robert Folger and assembles a thoughtful discussion on how the end of times is inherently connected to catastrophic destruction and fear, but simultaneously offer glimpses at the cultural and political efficacy of the 'post' in the form of multi-layered imaginaries and desires for emerging new worlds.

We hope you find much interest in these contributions!

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Bibliography

Braidotti, Rosi. 2013. *The Posthuman*. London: Polity Press.

Braidotti, Rosi. 2020. "'We' Are In *This* Together, But We Are Not One and the Same." *Bioethical Inquiry* 17: 465–469. https://doi.org/10.1007/s11673-020-10017-8

Chen, Mel. 2015. "Lurching for the Cure? On Zombies and the Reproduction of Disability." *GLQ* 21 (1): 24–31. https://muse.jhu.edu/article/567814

Ferreira da Silva, Denise. 2015. "Before Man: Sylvia Wynter's Rewriting of the Modern Episteme." In *Sylvia Wynter: On Being Human as Praxis*, edited by Katherine McKittrick, 90–105. Durham: Duke University Press.

Halberstam, Jack. 2020. *Wild Things: The Disorder of Desire*. Durham: Duke University Press.

Mitchell and Chaudhury. 2020. "Worlding Beyond 'the' 'End' of 'the World': White Apocalyptic Visions and BIPOC Futurisms." *International Relations* 34 (3): 309–332. https://doi.org/10.1177/0047117820948936

Nayar, Pramod. 2013. *Posthumanism*. London: Polity Press

Salih, Ruba and Olaf Corry. 2022. "Displacing the Anthropocene: Colonisation, Extinction and the Unruliness of Nature in Palestine." *Nature and Space* 3 (1): 381–400. https://doi.org/10.1177/2514848620982834

Weheliye, Alexander. 2014. *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human*. Durham: Duke University Press.

Whyte, Kyle Powys. 2021. "Against Crisis Epistemology." In *Handbook of Critical Indigenous Studies*, edited by A. Moreton-Robinson, L. Tuhiwai-Smith, C. Andersen, and S. Larkin, 52–64. London: Routledge.

Wynter, Sylvia and Katherine McKittrick. 2015. "Unparalleled Catastrophe for Our Species? Or, to Give Humanness a Different Future: Conversations." In *Sylvia Wynter: On Being Human as Praxis*, edited by Katherine McKittrick. 9–89. Durham: Duke University Press.

Yusoff, Kathryn. 2018. *A Billion Black Anthropocenes or None*. Minneapolis: Minnesota University Press.

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Robert Folger

(Un)veiling Extinction: Notes on an Apocalyptic History of Mexico

(Annual Tagore Lecture, UCL, London, United Kingdom, 29 April 2024)

Introduction

Already at the beginning of the millennium, scholars of literature, film, and popular culture observed how, as Fredric Jameson put it, "visions of total destruction and of the extinction of life on Earth" (Jameson 2005, 199), or apocalypses, alongside dystopian future scenarios, that is post-apocalypses, were proliferating. The apparent yet seldom reflected-upon paradoxical tension between apocalypse and post-apocalypse will be discussed in the following special feature. The perceived crescendo of the apocalyptic and post-apocalyptic in recent times now serves as a prehistory not only to today's surge of apocalypse in cultural imagination but also as a kind of realization of cultural imagination in the real world, with apocalyptic images, rhetoric, and narratives seeping into societal, political, and, notably, scientific discourses.

A prominent example of said boom is the launch of the adaptation of the first part of Chinese author Cixin Liu's *Remembrance of Earth's Past* trilogy: *The Three-Body Problem*, first published as a book in 2008. Cixin's novel serves as a kind of philosophical thought experiment with a notably scientistic underpinning and, particularly in its Netflix series adaptation, incorporating eco-mythical elements. The plot can be summarized as follows: Ye Wenjie, a Chinese astrophysicist whose father was killed during the Cultural Revolution, makes contact with an alien civilization several light years away on a hostile and doomed planet called Trisolaris. She invites the aliens to conquer Earth in order to put an end to the destructive and self-destructive actions of humans inhabiting Earth. The Trisolarians

mobilize a fleet that will eradicate humanity like vermin upon their arrival in 450 years. To halt humanity's technological progress, which would lead to the destruction of their fleet, and thus the salvation of the human race, they send two 11-dimensional supercomputers called sophons to Earth. These sophons not only spy on and manipulate humanity but also make developments in nanotechnology and physics, through the disruption of particle accelerators, impossible. The philosophical problem explored in multiple dimensions is how humans react to certain extinction or how, through desperate efforts within the remaining technological possibilities, humanity can be scientifically armed to win a war against the Trisolarians and escape extinction.

Cixin's trilogy presents the hegemonic form of the apocalypse under the conditions of global modernity in its purest form. The apocalypse is a certainty towards which we approach on a strictly linear timeline toward a "continuously open horizon of finite possibility, an infinity of finite possibilities" (Dillon 2011, 781), yet one that can be prevented through scientific and technological progress. Within this scientific progress, the premodern figures of the Anti-Christ and the Katechon (Lienkamp 2001), the withholder who delays the end of a finite world, converge. Modern science is simultaneously the potential cause of life's destruction and the only means by which the end can be further delayed. Modern temporality is not only linear but also inherently a shrinking or expanding end time.

However, "visions of total destruction and of the extinction of life on Earth" (Jameson 2005, 199) are actually the exception, with notable examples such as Lars von Trier's 2011 film *Melancholia* (Elsaesser 2016), as indicated by dystopian visions and scenarios categorized under the term of post-apocalypse. A recent example of the boom of post-apocalypticism, is the 2024 Amazon Prime hit *Fallout*, an adaptation of a role-playing video game franchise, depicting the aftermath of a nuclear apocalypse in 2077 where parts of the population sought refuge in fallout bunkers known as vaults. The plot unfolds 219 years later as a vault resident named Lucy embarks on a quest to find her father in the post-apocalyptic wasteland of devastated Los Angeles. The *Fallout* apocalypse illustrates that apocalypse does not necessarily, and usually does not, entail the total destruction of all life and human civilization. The apocalypse followed by a post-apocalypse, and indeed the post-apocalypse itself, are characterized by a more complex temporality than the typical modern apocalypse envisioned by Cixin, intertwining the temporalities of stasis and standstill (Baraitser 2017) within the bunkers with the temporality of regression and the persistence of the past, as well as the collapse of futurity on the surface.

3-Body Problem and *Fallout* also demonstrate that apocalypse and post-apocalypse exhibit distinct spatial characteristics. While *3-Body Problem* unfolds in an infinite and incomprehensible yet scientifically manageable geometrically homogeneous space, where Earth and Trisolaris are no more than coordinate points, the post-apocalypse of *Fallout* depicts contrasting and socially as well as ecologically determined spaces in the form of bunkers or vaults and the wasteland, each with their respective social practices, norms and laws (Lefebvre 1984).

Fallout further illustrates the existence of a topology of the apocalypse. Even within the broader scope of the global biblical apocalypse, Armageddon stands out as the location where, according to the *Book of Revelation*, the armies of good and evil gather for the final battle. Armageddon is not merely a metonymy of the apocalypse that has become a synonym for the world-ending, but a geographically locatable place: the mount of Megiddo in Israel (Cline 2000). There are not only spaces but also specific places that are more apocalyptic than others. Similarly, the setting of *Fallout*, Los Angeles, is not arbitrary but loaded with apocalyptic significance, partly due to actual potentials for natural existential threats like earthquakes and human-made threats including nuclear weapons, anthropogenic drought, and wildfires. Moreover, this is a cultural process whereby these places are attributed apocalyptic imagery and narratives, as seen in the case of Los Angeles in John Carpenter's 1996 *Escape from L.A.* (in the post-apocalyptic-dystopian variety) or Michael J. Sarna's 2015 *L.A. Apocalypse* (in the katechontic variety).

The apocalyptic topography is often intertwined with a colonial past and postcolonial present, as seen in cases such as Afghanistan, the Congo, and, of course, Palestine, and the violence inherent in the unequal distribution of resources and power on a global scale. This also holds true in relation to the ground zero of globalizing colonialism (Milhou 2003): Latin America and the apocalyptic hotspot which is the actual focus of my article: Mexico. I aim to demonstrate that Mexico's apocalyptic narratives and imagery have a gravitational center rooted in colonial times. I argue that this nexus is capable of organizing apocalyptic impulses and formations that are linked both to pre-colonial times and indigenous visions of the end of the world, as well as to events, real and imagined, belonging to deep history and geological time, which articulate global apocalyptic predicaments of our present. With this approach, I pursue two interrelated goals: to understand the history of the apocalypse in Mexico as an apocalyptic history and, at the same time, to elaborate and deepen some ideas, in particular in relation and opposition to the Anthropocene and the booming notion of extinction, which appear important to me regard-

ing apocalypse and post-apocalypse, and specifically through the lense of Mexico.

1 The Dinosaur Apocalypse

66 million years ago, an asteroid approximately fourteen kilometers in diameter impacted Earth, first causing a global ice age then followed by extreme global warming. Climate changes led to the so-called Cretaceous–Paleogene extinction event which caused the extermination of 75% of all species on Earth (Jablonski 1994), including dinosaurs, which had dominated the Earth for millions of years. Although some scientists disagree on ascribing the extinction event exclusively onto a cataclysmic impact from outer space (Courtillot 1990), the impact scenario is the scientific consensus and the connection between a sudden event and the Cretaceous–Paleogene extinction is firmly anchored in popular imagination. At any rate, the impact event in prehistoric times, what Dipesh Chakrabarty (2021) would refer to as deep history, generates intriguing narratives.

Take, for example, Netflix's 2023 'documentary': *Life on Our Planet*, produced by Steven Spielberg, and narrated by Morgan Freeman, which recapitulates the evolution of life on Earth from its beginnings 3.5 billion years ago to the present, infused with a dystopian, anthropocentric vision towards the future, and the threat of another mass extinction. The first episode begins with the exposition of some updated Darwinian principles (adaptation, competition). However, the evolution of life is not simply a process unfolding in chronological or geological time. The episodes are organized around cycles of 'dynastic' species that 'rule' the planet (invertebrates, reptiles, dinosaurs, mammals), and that are eliminated by mass extinction events. The flow of chronology, strictly linear, is structured by events, namely extinctions. The history of the dinosaurs and their apocalyptic staging complicates the chronology and chronocracy that forms the basis of human history and modern sciences.

This prehistoric story is presented as a tragedy. The site of this tragedy was the Yucatán Peninsula in Mexico, as can be still seen today in the 180 km Chicxulub crater. However, does it make sense to speak in terms of a 'Dinosaur Apocalypse' in relation to these events in Earth's history, and does our way of speaking about the extinction of dinosaurs tell us something about the apocalypse? The apocalypse is not primarily an event but a narrative. A narrative requires protagonists and, in this case, victims or annihilated 'rulers': the dinosaurs. They are clearly conceived in anthropomorphic terms, as seen in the rage, fear, and agonizing suffering

displayed by the dinosaurs in the face of catastrophe and their imminent demise, in many artistic renderings of the Dinosaur Apocalypse, including Spielberg's offering. Documentaries like *Life on Our Planet* suggest that dinosaurs were the rulers of the Earth, much like we are today. Therefore, the Apocalypse needs a human subject or generates a substitute such as our imagined predecessors, the dinosaurs; in the mass extinction, other creatures like ammonites, spiral-shelled cephalopods, also disappeared, but we are unlikely to identify with them. Ammonites simply went extinct a long time ago, excluded from the genealogy of homo sapiens. The end of the dinosaurs is different from the extinction of ammonites because their "tragic" end is imagined as our prehistory and possibly the precondition for the human species.

It is evident that the apocalypse does, again, not signify the end of everything or annihilation: with the end of the dinosaurs, their world ended and the world of mammals began. From this, we can understand that the apocalypse does not occur just once and at a future point in time, and we can see that it operates on different scales: it was 75% annihilation in our dinosaur history, but it could also be more (all human life on Earth) or less (a species, a society, or a culture). Therefore, when we speak about the apocalypse today, we are commonly not referring to biblical history but rather to the end of the world as we know it, meaning how we experience it, or how we project our own history onto prehistory. Hence the apocalypse has a particular temporality in which the present folds onto the past (Folger 2022); in other words, the extinction of the dinosaurs folds onto the beginning of their 'dominion' on Earth, and this fold prefigures our own dominion on Earth.

Before discussing Mexican apocalypses that are appropriately situated within 'our' history, I would briefly like to make another observation about the persistence and historical transcendence of apocalyptic events and narratives. Although a portion of the Chicxulub crater can be found today in the Mexican peninsula Yucatán, geological records show that 66 million years ago the asteroid impacted in the North Atlantic Ocean rather than in Yucatán; which did not exist at that time, at least not as a peninsula of Mexico. Why then speak of apocalypse, and why associate it with Mexico?

The apocalypse as narrative and imagery gives meaning and form to events that are too large and complex for our experience or cognition. Therefore, apocalypses and post-apocalypses can be seen as *realizations* of hyperobjects. Timothy Morton (2013) describes hyperobjects as entities that extend so vastly in space and time that they escape human sense and understanding. According to Morton, encountering hyperobjects brings feelings of powerlessness and fear: although human societies have

developed symbolic systems to analyze and describe hyperobjects, individuals can only experience them from within as a set of forces and constraints beyond their control. In the intellectual and cultural history of the West, there is a semantic and experiential charge to the concept of apocalypse, through which hyperobjects seem real and comprehensible, while, at the same time, the emotions that arise when facing the immense and incomprehensible reality are channeled (Pitetti 2017), in a "paranoiac" (Freud 1958) worldmaking of sorts, through narratives and images that anchor the end of the world as a guiding reference point (Kermode 2000). Although apocalypse, if conflated with annihilation and extinction, is not only paranoiac but also precludes visions of a human (or post- or trans-human) future, as such, it is a coping mechanism. Moreover, apocalypse as a temporal and spatial falling into place of past, present, and future can also bring about an opening, and process of mending and renewal, which I will discuss in the concluding section of this essay.

At any rate, identifying with dinosaurs as our predecessors helps us to cope with fears about our own existential risks, substituting the inconceivable with a terrifying yet 'satisfying' vision of an apocalyptic cataclysm, that does, after all, provide the solace of a continuity of world-ruling 'dynasties.' An integral part of this process is assigning a particular apocalyptic site (equivalent to the biblical Armageddon) that helps mitigate spatial incompatibility; thus, establishing the apocalyptic topography that is reflected in cultural representations of sites ranging from Armageddon to Los Angeles. Furthermore, identifying Mexico as the site of a (past) apocalypse indicates the temporal overlap between past, present, and future within apocalyptic temporality. I assume the history of the Dinosaur Apocalypse in Yucatán is an integral part of the distorted Eurocentric image of Mexico as an apocalyptic space of chaos and violence today, which turns the imaginary Mexico of the dinosaurs into a perfect place for the apocalypse. However, the anchoring point that organizes Mexican apocalypses in the past, the supposed extinction of the dinosaurs, and apocalypses of the present and future, is the colonial period and the events today labelled—and mislabelled—as *Conquista*.

2 The Apocalypse of Tenochtitlán

On August 13th 2021, Mexico commemorated the 500 years of an occurrence with an importance for world history. This anniversary went largely unnoticed in Europe and the 'Western World.' However, the event I'm referring to was critical in the making of this 'Western World,' and it was a

milestone for the rise of modernity as well as its darker side. I'm referring to the Fall of the Aztec or, more accurately, Mexica capital Tenochtitlán, 'conquered' by Hernán Cortés on August 13th 1521.

In 1521 the European presence in the Americas dated back nearly three decades. However, the making of the 'New World' took place in Mexico, and it is marked by the Fall of Tenochtitlán. The early focus of Iberian colonialism was the Caribbean, but the exploitation of the island world, which caused, in a brief period of time, the extinction of various indigenous populations—although recent research shows that they did not go extinct, the extinction trope prevails—had no significant impact on European cultures and economies. In Mesoamerica, however, the Spaniards subdued numerous highly developed cultures with millions of inhabitants and began to extract resources; natural as well as human. This led to the establishment of a new world system (Wallerstein 1974), marking the genesis of globalized capitalism, which is the hallmark of our own present. The making of the modern world meant the unmaking of existing indigenous worlds. To simplify matters, this unmaking was the unmaking of the Aztec (or Mexica) Empire. In less than 200 years, the Mexica in their capital Tenochtitlán had established an extensive empire. Its population was far greater than the population of any other European country of the time. Some scholars estimate 25 million.

This empire was 'conquered' by the Spanish adventurer Hernán Cortés who at any given time never commanded more than 3,000 Europeans. The crucial factor for this astounding feat was that the Spaniards mustered the support of large indigenous groups against the hated imperial power of the Mexica. It is with good reason that we can talk about a civil war triggered and instrumentalized by Cortés. The final battle in this campaign took place in the valley of Mexico. To understand the events, it is necessary to take into account the particular nature of the Mexican capital. Tenochtitlán was a metropolis built in a lake; the city was connected by three dams to the mainland. Cortés's final conquest was a campaign of destruction which culminated in the onslaught on the capital in the lakes (Añón 2022). Even from the Spanish sources, we can gather an impression of the eerie, phantasmagoric process of destruction and massacre. Due to the siege, the population were starving and the victims of several raging diseases added to those slaughtered in the battle. The streets and the canals were filled with corpses. The city was not just conquered. In a street fight, the Spaniards and their allies tore down building after building, using the debris to fill the canals. When the last survivors surrendered on August 13th 1521 the city was erased and nearly abandoned. It is close to impossible to calculate the death toll, but the numbers must have been

staggering. One estimate reckons that about 250,000 people died in the final battle alone (Semo 2021).

2.1 European Apocalypticism and the 'Conquest'

The Fall of Mexico is overdetermined from the perspective of apocalyptic thought, which has both a European and an indigenous dimension. Ten years after the destruction of Tenochtitlán, the city witnessed a very particular spectacle. The representation of one of the earliest known pieces of theatre in Mexico. It was composed, shortly before 1531, by a Franciscan friar Andrés de Olmos, in the indigenous language Náhuatl and preserved in a Spanish transcription with the title *El Juico final*, [The Final Judgement] (Olmos 2004). This is an allegorical play with the didactic purpose of reminding the neophyte Mexica of the importance of a virtuous life in the face of the impending, or ongoing, apocalypse (López de Mariscal 1999). The content of the apocalyptic play is trivial from a modern perspective, but the emotional impact must have been overwhelming: 800 indigenous people, survivors of the massacres that had happened less than a decade ago, participated in the play. It took place in the postapocalyptic scenery of the erased city, probably on the ruins of the pyramid of Tlatelolco.

The apocalyptic framing of the Fall of Tenochtitlán is by no means gratuitous. It is at the core of Latin American history, that is, history after the *Invention of America*, as historian Edmundo O'Gorman (1961) has called it. Christopher Columbus, the discoverer of the 'New World,' is one of the celebrated heroes of modernity (Bennassar and Bennassar 1992). It is well-known that there was another side to this modern man: his insistence of having found a route to Asia, his fervent Christian belief, including the idea that he found the earthly paradise in modern day Venezuela. The two sides of Columbus, the modern and the 'medieval,' are no contradiction. They are part and parcel of apocalyptic mentality and thinking at the beginning of the 'New World' (Milhou 1983).

Columbus's last work, composed in the year 1504, was the *Libro de las profecías* [The Book of Prophecies] (Colombo 1993). The text is mainly a miscellany of biblical quotes foretelling, according to Columbus, the discovery of the New World. This discovery is essentially related to the Apocalypse. Among other apocalyptics, Columbus was strongly influenced by Joachim of Fiore, who had modified the calculus of the end of the world which was often modeled after the "cosmic week" (Turner 2022), each day corresponding to 1,000 years, which postulates the end of the world after 6,000 or 7,000 years. Joachim divided human history in three periods according to the Holy Trinity: the age or realm of the Father, the

age of the Son, and the age of the Holy Spirit, a Kingdom of freedom, prosperity, and love that precedes the definite end of the world.

The apocalypse was not simply a fatal accident but, rather, God's final plan for humanity, and this plan required the fulfillment of several conditions, among others, the conversion of the Jews, and, most importantly, to quote Columbus, the recuperation of the "Holy City and God's Mount Sion" (Colombo 1993, 16) that is, the reconquest of Jerusalem. Columbus relates all this to his discoveries, by drawing on Isaiah 65 who foretells the transformation of heaven and earth before the end times. Columbus interprets this passage as the discovery of a New World, accomplished by himself, and made possible by the influence of the Holy Spirit on the Spanish Kings. America, the Americas, are the New Jerusalem, which is instrumental in bringing about the apocalypse. Of course, first Mount Sion and Old-World Jerusalem must be recuperated. 'New World' and 'Old World' apocalyptic topography are superimposed. Columbus argues that Divine Providence has made this possible because the Spanish Kings have been given riches of the New World, the gold and silver stolen by the conquistadors, which make the final crusade possible. He urges the Spanish King that time is of the essence because, as his calculation shows, the world will end in the year 1650, when the world reaches the age of 7,000 years.

The allegorical apocalyptic play on the rubbles of Tenochtitlán was staged by the Franciscans. The Friars Minor had a particularly close relation to apocalypticism. As missionaries supported by Hernán Cortés, they played a fundamental role in shaping what is today known as Mexico. They were convinced that the conquest of Mexico was a compensation for the loss of the Holy Land, a New Jerusalem (Phelan 1972, Weckmann 1982; Milhou 1983, West 1989, Roest 2013). They were also convinced that Mexico would be a Millennial Kingdom preceding the Second Coming of Christ and the Final Judgement. The Franciscans had a key role in the shaping of colonial Mexico, which they imagined as a Kingdom of peace and love. Nothing could have been further from reality. They had to witness one of the most horrifying demographic collapses and human catastrophes in history: the population of New Spain diminished in the first century dramatically, with an estimated reach of 95% (Brierley et al. 2019), which can be mostly attributed to diseases and genocidal violence brought by the Europeans. How could God allow that their Millennial Kingdom, and the peoples converted to the true faith, had suffered so horribly? Friar Jerónimo de Mendieta argued that this punishment of apocalyptic dimensions was actually meted out to the Spaniards who depended on the forced labor and tributes by the indigenous peoples, while those indig-

enous inhabitants who died in good faith were saved by God after the Final Judgement (Phelan 1972).

2.2 Mexica Apocalypse

Thus far, I have focused on the apocalypse and the function of the idea of the end of the world to justify the destruction of the Mexica world and the creation of a new world, and, at the same time, to make sense of barely comprehensible historical catastrophes. Those were traditional European notions of the apocalypse. However, apocalypticism was not limited to Christian Europe. In Mesoamerica, the Europeans encountered cultures whose cosmogony was fundamentally determined by the notion of the end of worlds. The Nahua peoples believed in repeated creations and destructions of the world and its inhabitants (Christensen 2022). Each world was governed by a sun, associated with an element, and a dominant deity. By the time of the arrival of the Europeans, they believed to be living under the fifth sun, the sun of the sun, attributed to Quetzalcoatl, the Feathered Serpent. The Mexica were the People of the Sun, which had to be 'nurtured' by the blood of human sacrifices in order to prevent or postpone the end of this world.

After the conquest and the Fall of Tenochtitlán, the Nahuas produced so called *tetzáhuitl*, prophecies which foretold the catastrophe (Olivier and Ledesma 2019). In this framing, the Fall of Tenochtitlán was an apocalypse which marked the advent of a new sun, a new world, associated with the Christian God with a new human race: the Spaniards. This ex-post-apocalypse was a way of making sense of an unthinkable catastrophe and the end of the world as they knew it. The apocalyptic events more than half a millennium ago are not simply a remote past; they had a profound impact on Mexican history, identity, and the European view of Mexico. Reading and viewing 'Western' media outlets, it is hard to imagine a country more apocalyptic than Mexico and a city more fraught with apocalyptic fantasies than Mexico-City, the former Tenochtitlán. In the early colonial period, apocalyptic narratives, both of Europeans and indigenous peoples, were instrumental in shaping a Mexican identity, and, at the same time, constituted conflictive sites of colonial domination and indigenous resistance.

Either way, apocalyptic events and narratives have particular temporality that relates a present to an apocalyptic past, which can be seen in the official commemoration of the Fall of Tenochtitlán in Mexico itself, the motto of which was *500 años de resistencia indígena* [500 years of Indigenous Resistance]. From this point of view, the end of Tenochtitlán was not the end but a beginning that shapes the present. At any rate, the

idea that the creation of the 'New World' meant the end of a world, and the awareness of the possibility of an end of a world has proven a factor in Mexican history and politics, not only in the past but also in relation to our current existential threats or imagined existential threats. In Mexico, as elsewhere, culture and art in particular have been a medium to explore the apocalyptic dimension of these very real challenges.

An apocalyptic history of Mexico, then, would require additional chapters on the consolidation of the colonial regime in the seventeenth century, during which Mexican Creoles constructed post-apocalyptic Mexico as an earthly paradise and New Jerusalem (Folger 2019). To remain true to said additional chapters one would need to take a look at the wars of independence that signified both the end and continuity of the colonial world (Folger 2010), and the Mexican Revolution marked by extreme violence and destruction, accompanying Mexico's entry into modernity and a new form of globalization. Instead, however, I invite you to leap into the present, where these layers of the apocalyptic Mexican past continue to resonate both in everyday life and cultural imagination.

3 Imagining the End of Times Today

Imagining the End of Times: Stories of Annihilation, Apocalypse and Extinction, a temporary exhibition at the Museum of Anthropology, organized by CAPAS and its Mexican partners (INAH: Instituto Nacional de Antropología e Historia, INBAL: Instituto Nacional de Bellas Artes y Literatura, and MLN: Museo Nacional de Antropología), and inaugurated in December 2023, focused on the particular temporality of apocalyptic thinking, which relates the present with the past in the view of a possibly catastrophic future (Mantilla Osornio 2024). The exhibition spanned from the early settlement of the Americas approximately 14,000 years ago to the present day, addressing and performing the unique temporality of apocalyptic scenarios. In the remainder of this essay, I want to reflect on four exhibits that illustrate the particularity of apocalyptic temporality against the backdrop of one of today's grand narratives, the Anthropocene, and its relation to the notion of extinction.

Figure 1. José María Veloso, *Escena del periodo Cuaternario Paleolítico Superior: evolución de la vida continental en el globo terrestre, Estudio geológico* (ca. 1905).

3.1 Paleo-Ontology and the Beginning of Human History

The first painting is a work by José María Velasco, one of the most important Mexican painters of his time (Ovando 1998). The work I am interested in was created around 1905. It has the oddly descriptive, elaborate, and 'scientific' title: *Scene from the Superior Paleolithic Quaternary Period: Evolution of Continental Life on the Terrestrial Globe. A Geological Study* (figure 1). Set against a rocky formation with a cave entrance and surrounded by a dense forest enveloped in the darkness of night, we see a group of humans, five in total, gathered around a campfire. This group represents a family or clan with a patriarch positioned above.

Velasco's dating, the Upper Paleolithic period, places this scene roughly 14,000 years ago, at the transition to the Holocene, the current geological period. Although archaeological findings suggest human presence in the Americas long before this date, Velasco's scene refers to the arrival of the so-called Clovis culture in the Americas, which was considered the beginning of human history in the Americas. Velasco, who labels this scene as the "evolution of continental life on the globe," evokes an image of the absolute beginning of the human world; namely, the world or globe that is 'colonized' by humans. Needless to say, the Americas were the last continent to be populated by homo sapiens and thus completing the global reach of our species. Velasco situates his scene within human history, the Paleolithic or Stone Age, but integrated into the geological time of the Quaternary period. He relates said scene to human evolution, namely the migration of modern humans in a process of globalizing humanity.

The painting is suggestive of this staging in terms of the distinction made by the German philosopher Martin Heidegger between *Sein* (Being) and *Dasein* (existence) (Heidegger 1967). *Sein*, everything that exists or is real, is what makes human life possible and yet is not simply accessible to human experience. It is a kind of darkness that envelops us. Human existence, *Dasein*, requires a place of visibility, a clearing in this darkness, that allows us to discern what exists for us, the world that is created for us and by us. Velasco's painting illustrates this dualism by showing the beginning of the world as we know it, not just a world where homo sapiens are one species among others, but a world where we position ourselves as a species and as individuals in relation to an environment. This environment is affected and transformed by human activity and creates a reality that we call our world. In this sense, the scene depicted by the Mexican painter is indeed paleo-ontological, referring to the Greek *palaiós*, meaning ancient, and ontology, the 'science of what exists.'

The scene depicted by Velasco is a primordial scene (*Urszene*) of human existence. It shows the clearing of existence/*Dasein* in the darkness

of Being (*Sein*), the dark natural grounding of the world. The fire creates a place of clarity for human existence, already 'furnished' with what will enable and determine existence. Here we can see rudimentary or fundamental technology in the form of fire, and also an important detail that is easily overlooked: the human figure holding the mammoth tusk is likely using a stone tool to carve or work on the tusk. This primordial scene of existence marks the beginning of human culture, as the tusk will possibly be transformed into a work of art like the famous *Sacro de Tequixquiac* (figure 2), an animal sculpture using a bone from an extinct type of camel or "sacred bone" (Stross 2007), included in the exhibition, which was possibly created around 14,000 BCE (the time imagined by Velasco as the beginning of human culture on the American continent).

Figure 2. *Sacro de Tequixquiac* (20,000–5.500 BCE), Museo Nacional de Antropología. There is no secured dating. I am presenting the time span postulated by Mantilla Osornio (2024).

Figure 3. Juan O'Gorman, *La humanidad: cáncer del mundo orgánico* (1979).

3.2 Humanity as the Cancer of the Organic World: Anthropocenic Apocalypticism

Another painting presented at the exhibition was Juan O'Gorman's 1979 *La humanidad: cáncer del mundo orgánico* [*Humanity: Cancer of the Organic World*] (figure3) (Rodríguez Parampolini 1983). O'Gorman (1905–1982) presents the Earth depicted as barren, a surface almost devoid of color, resembling the moon, devoid of organic life. We see remnants of human architecture: fortifications, a Greek temple, and castle towers transforming into factory buildings. Detached but literally rooted in the Earth and ancient cultural and technological achievements, a ghostly human world unfolds in the sky. The painter created an image of a technosphere, which the geologist Peter Haff defines as an "interconnected set of communication, transportation, bureaucratic, and other systems that act to metabolize fossil fuels and other energy resources," analogous to other spheres like the biosphere or atmosphere (Haff 2013, 301–302).

O'Gorman's technosphere *avant la lettre* is populated by vaguely organic growths and cyborg-like monstrous creatures. Thus, the painting also anticipates the post-humanist or trans-humanist dreams of human evolution through technology. This world, as suggested by the infernal fire in the upper right, will soon face its own end. In an allusion to modern extractivism, the human-posthuman technosphere vampires the Earth. It has destroyed all organic life. Humanity, as the cancer of organic life, has not only exterminated the entire biosphere but also caused its own destruction.

4 Anthropo-scenes

Some visitors of the exhibition contemplating the two paintings might have related them to one of today's great narratives of human destiny: the Anthropocene. In 2000, Paul Crutzen and Eugene Stoermer suggested that impact of human activities on earth and atmosphere on a global scale makes it necessary to emphasize the central role of mankind in geology and ecology by postulating a new geological epoch called the Anthropocene. Mankind had become a geological force. The term was not immediately accepted, and Crutzen's and Stoemer's proposal to set the late eighteenth Century and the onset of industrialization in Europe has provoked numerous counterproposals regarding the beginning of the Anthropocene, and where to set the Golden Spike (a site that captures the epoch's novelty) in order to officially proclaim the new geological epoch.

In the light of this narrative, O'Gorman appears as some kind of a visionary who anticipated the idea of the Anthropocene and his painting can be seen as a premonition and warning against the possibly fateful consequences of human interaction with the natural world. Moreover, also Velasco's vision of human evolution in the Americas and in the world, appears as an anthropo-scene (Lorimer 2017) with somber overtones. The patriarchal setting he depicts has been identified as one of the sources for the destructive forces in human history. His oddly European-looking first settlers of the Americas hint at racialized hierarchies in relation to the claim of evolution. The hand-ax illustrates the interconnection of technology and violence. The mammoth tusk evokes the possible relation of the arrival of humans with the extinction of the American megafauna, and the campfire is the first instant of strictly speaking anthropogenic emission of CO_2. Thus, the primordial scene of human history foreshadows the predicaments and existential risks of our own period.

However, it must be emphasized that the two paintings do not simply illustrate the narrative of the Anthropocene but rather provide a powerful critique. And indeed, scholarship has also criticized the concept for various reasons (Swyngedouw and Ernstson 2018, Yusoff 2018). It gives another spin not only to anthropocentrism but also to Eurocentrism. It postulates instrumental, scientific rationality, linear temporality, and mechanic causality that created the current predicament in the first place as the only or, at least, principal solution to the problem: We have to find out what went wrong and when things went wrong in order to fix the problem. It has been suggested, as such, that we need what has been called "planetary managers" or "planetary engineers," or to find strategies of resilience (Rothe 2020).

Although scientific data on global warming and prognosis of its possible devastating impact are now indisputable and largely undisputed, it must be emphasized that the societal and political impact of the Anthropocene is related to its ideological nature. By ideology I mean an imaginary relationship of individuals to their real conditions of existence (Althusser 1995). Although the Anthropocene is conceived of as an objective scientific notion it functions as an ideologeme in the sense given to the term by Fredric Jameson:

> The ideologeme is an amphibious formation, whose essential structural characteristic may be described as its possibility to manifest itself as a pseudoidea—a conceptual or belief system, an abstract value, an opinion or prejudice—or as protonarrative, a kind of ultimate class fantasy about the 'collective characters' which are the classes in opposition.

> [...] [T]he ideologeme is already given in advance: as a construct it must be susceptible to both a conceptual description and a narrative manifestation (Jameson 1981, 87).

Jameson's notion is important because it emphasizes, in relation to the Anthropocene, not only its conceptual and descriptive value but also its narrative nature. Although the debate among geologists and related empirical scientific disciplines is, at first sight, focused on the determination of the beginning of the Anthropocene the notion is essentially narrative in the sense that thinking of the beginning anticipates the end, similar to the visions of Velasco and O'Gorman. In his classic *The Sense of an Ending,* Frank Kermode (2000), postulates the essentially eschatological nature of narrative: in order to transform a series of chronological events into a story we must have a sense of ending, organize and connect events, not necessarily in a causal relation, to an end.

What is true for smaller narratives, is also true for the grandest of grand narratives, the History of humankind. "Stretched out over the whole of History, the End is present at every moment," as Kermode (2000, 26) phrases it. Global warming is a hyper object, as Timothy Morton (2013) has described them; entities so vastly distributed in time and space that they cannot be grasped by the human gaze or mind, requiring narrations to make them 'real' by anticipating and presentifying the End. While science provides 'tipping points' and catastrophic scenarios as narrative anchors and narrative points of capture, in public debates anthropo-scenic thinking generates end time visions that are commonly labelled as apocalyptic. Dystopian visions of the Anthropocene increasingly focus not only on catastrophic or cataclysmic consequences of global warming (and also other perceived existential risks) but also on the impact of human activities on the "organic world" as O'Gorman has called it, namely the mass extinction of species, which would be the sixth in deep history. In an even more drastic vision, the endpoint of the Anthropocene narrative is the destruction of the whole biosphere; annihilation of life on Earth.

In public discourse, there is an increasing convergence of the Anthropocene with Jameson's concept of apocalypse, namely as "total destruction and the extinction of life on Earth" (Jameson 2005, 199). As I outlined earlier, however, this notion of apocalypse is distinctly Eurocentric-modern, characterized by a peculiar temporality—that of the linear, irreversible time of progress. The fact that Chixin's *Remembrance of Earth's Past* trilogy can only conceive of the end as either extinction or survival is a result of underlying scientism—where good or bad science alone determine existence—under the dictate of Chronos, the relentless ticking

clock. Although modernity's time is always 'end time,' the postponement of the end ultimately results in its repression (also in the psychoanalytic sense). This displacement prevents modern end time from reaching its end, the time that remains, in Agamben's (2005) formulation for messianic end times, the actual temporality of the 'veiled' apocalypse, which appears not as *Chronos*, but as *Kairos* (Hartog 2021), the time of the event, the emergence of the new, in which the past, present, and future coincide.

While from the perspective of *Chronos*, looking back on an already past past, the question thus should be whether Velasco's and O'Gorman's images are harbingers of the Anthropocene, the question from the perspective of *Kairos*, however, is how images of the past challenge current ideologies and open horizons for a future that is not anti-utopian in Jameson's sense; thus, opening up the possibility of radical change and an open future. Looking back with O'Gorman to the primordial scene of globalized humanity as depicted by Velasco we get a perspective different from the Anthropocene. The apocalyptic thinking and temporality of *Kairos* suggest that the fall from grace was the very beginning of human history, the furnishing of the clearing of being in the first place. The purpose is not placing the Golden Spike on the axis of linear time, but questioning the very mode of human being in the world. And yet, there is more to this apocalyptic logic because the two artists in juxtaposition don't provide evidence but open horizons and provoke thought.

Maybe, I have it all wrong with my anthropo-scenic interpretation of Velasco's painting. At any rate, it is not the only possible interpretation. We can also see in his painting a proto-indigenous community who lives, organically embedded into nature, a form of peaceful sociability, and we may witness nascent human creativity, which would be a call from the past not to forget being for the sake of existence. Ultimately, both paintings are *Denkbilder*, thought-images, as Walter Benjamin (2001) has called them, figurations that explore epistemological problems, which are in our case related to apocalypse and post-apocalypse. In particular, O'Gorman's painting poses intriguing questions, if we don't simply see it as an image from a future that is inevitable.

O'Gorman understands the apocalypse not as the end of all life on Earth, but as a threat to all organic life on Earth. The label 'post-apocalyptic' immediately comes to mind, but this intuition requires further substantiation. This raises the question of the nature of the apocalypse as the end of a world ('*mundo*') and, indeed, the question of the concept of the world itself. Finally, it raises the issue of the meaning and form of the post-apocalypse. If we understand the core meaning of apocalypse—not as a definition but as a semantic rhizome—in a very general sense as the

end of the world, and if we do not conceive of the world, in line with O'Gorman and contrary to the naked apocalypse of modernity as "mere annihilation;" the end of all life without any transcendence, that is to say "Kingdom" (Anders 1986, 207), then it becomes possible to characterize the end of the world as the end of a way of life.

This could mean that 'world' does not refer to the entire lifeworld or 'the reality,' but rather to a particular reality among others, namely the paramount reality that is "fraglos gegeben [unquestionably given]" (Luckmann and Schütz 2003, 69) and which makes possible our everyday existence. This concept of lifeworld is borrowed from phenomenological sociology, specifically the work of Alfred Schütz and Thomas Luckmann. Radical changes or collapses of the paramount reality resemble world endings or apocalypses, but they do not only, or not necessarily, mean catastrophe and destruction but may rather open the door to transformations of this reality and new forms of "unquestioned givenness."

Although 'paramount reality' encompasses the cognitive and epistemic dimensions of the concept of world, it has the drawback of presenting a disembodied view of world that does not adequately consider the affective dimension of worlding (Steward 2007). This precise aspect is at the center of the considerations of Mexican philosopher Zenia Yébenes Escardó (2023) regarding the concept of life. Yébenes Escardó understands 'life' beyond biopolitics and necropolitics as a way of life of a community that involves shared "habitus," dispositions, and customs extending beyond the realm of the human into the animate and inanimate nature. Unlike theories of the social contract, 'life' in Yébenes Escardó's understanding does not have a contractual basis but is based on an "acuerdo" (Yébenes Escardó 2023, 97), an agreement and consent. The end of 'life' does not equate to extinction but rather to a termination of the *acuerdo* of life.

O'Gorman's painting represents a kind of ruination of the lifeworld, which does not necessarily cease to exist but does, however, signify the end of life as he sees it, namely organic life. Thus, there is an opportunity to understand the post-apocalypse not as a kind of aftermath of the apocalypse, but as an unfinished end of a world that falls short of annihilation, and the end of 'life,' or *vida* (Yébenes Escardó 2023, 96–107), that is not synonymous with the end of biological life. The cancer of the organic world transforms it into a world devoid of *vida*, 'life,' in the sense of Yébenes Escardó. The post-apocalypse would, then, not simply be the aftermath of a world-ending catastrophe, but a depraved world where, contrary to what is often claimed in research (see McQueen 2018, Kaup 2021), there is not a regression to a state of nature, but rather a termination of the

acuerdo of 'life,' as exemplified in post-apocalyptic imaginings like Netflix's *Fallout* (2024).

O'Gorman allows us to envision various futures and world endings, making them conceivable but offering no certainty except that all things must come to an end. This is the only kind of revelation that apocalypse can offer. Contrary to the linear temporality and the determinism of the Anthropocene, apocalyptic thinking implies a form of revelation different from positive truth and certainty; as such, it takes the shape of a question or mystery. This structure of revelation characterizes the most important source for apocalypticism in the 'Western' world: John's *Book of Revelation* reveals a process of revelation (Landfester 2012). John's vision tells us about how books are opened, but we do not know what's written in them because that is the precondition for a truly new world.

Figure 4. Nadia Osornio, *Más allá del canto apocalíptico* (2022), Estudio Nadia Osornio, México

5 Conclusion: Beyond the Apocalyptic Song

The notion of revelation or unveiling, which constitutes the etymological meaning of apocalypse (the Greek ἀποκάλυψις), is the epistemic and axiological core of the notion of apocalypse. As noted by the French philosopher Paul Ricœur (1977), revelation does not imply the elucidation or clear vision of a positive truth, which he categorizes and dismisses as dogma and ideology. Instead, with apocalypse, an *epoché* is established: a radical rupture. In a recent study, another French philosopher, Jean Vioulac, asserts: "the concept of apocalypse allows for all the epochal determinations previously brought to light to be gathered: it defines the very *essance* of our epoch" (2021, 53). The apocalypse is the lifting of a veil and a confrontation with a 'mystery' that hegemonic instrumental rationality cannot comprehend and control. The 'veiled' apocalypse challenges the epistemological regime related to linear temporality, the dictatorship that the present exercises over both the past, which becomes material subject to hermeneutic violence, and the future, which is merely a linear extension of the present because the possible, as Slovenian philosopher Alenka Zupančič (2017–2018) says, is based on what exists. As I pointed out earlier in this essay, apocalypse as a narrative that makes it possible to grasp incomprehensible radical change and overwhelming emotions is a form of paranoiac worldmaking and thus also a method: it is an approach to and ordering principle of real-life and imagined events. However, apocalypse may also afford an alternative to the paranoiac approach to radical change, which we could call along with Eve Kosofsky Sedgwick "reparative" (2003). While paranoid apocalypse forecloses futures that are not predicated on annihilation or extinction and "dogmatic" (Ricœur 1977) revelation, and must, as such, necessarily "disappoint" (Blanchot 1997, Zupančič 2017–2018, García Düttmann and Quent 2023), reparative apocalypse assembles and superimposes past, present, and futures that are whole rather than ruined.

I have used examples from this exhibition of images of the end of times in Mexico City, a place where worlds ended and were born, to argue that the apocalypse is not necessarily just the end, but a conclusion that folds towards a beginning, and that this end of a world is not only destructive but possibly opens new possibilities beyond the existing. With this in mind, I want to conclude with a thought on another exhibit that was on display at the Museum of Anthropology in 2023/2024. I am referring to a photomontage from 2022, by Nadia Osornio (figure 4), from the series intriguingly titled *Más allá del canto apocalyptic* [Beyond the Apocalyptic Chant] a plea, perhaps, to overcome or transcend Jacques Derrida's (1984) "apocalyptic tone." It illustrates and embodies the particular tem-

porality of apocalypse, the simultaneity of colonial past (ruins of the great pyramid) and present technology (metro trains), of nature (underwater life reminiscent of the lake that surrounded Tenochtitlán) and the technosphere (street life). The future as an open, 'reparative' future is paradoxically evoked by the effect of veiling, of overlapping or montage of images. The truth, beyond the apocalyptic song, beyond the swan song of our own world, takes the form of a temporal and spatial blending, effecting "something like a whole—though […] *not necessarily like any preexisting whole*" (Sedgwick 2003, 128).

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Bibliography

Agamben, Giorgio. 2005. *The Time That Remains: A Commentary on the Letter to the Romans*. Translated by Patricia Dailey. Stanford, CA: Stanford University Press.

Althusser, Louis. 1995. "Idéologie et appareils idéologiques d'état (notes pour une recherche)." In *Sur la Réproduction*, 269–314. Paris: Presses Universitaires de France.

Anders, Günther. 1986. "Apokalypse ohne Reich." In *Die atomare Drohung. Radikale Überlegungen*, 207–221. München: Beck.

Añón, Valeria, ed. 2022. *500 años de la conquista de México: resistencias y apropiaciones*. Buenos Aires: CLACSO.

Baraitser, Lisa. 2017. *Enduring Time*. London: Bloomsbury.

Benjamin, Walter. 2001. *Einbahnstraße*. Frankfurt am Main: Suhrkamp.

Bennassar, Bartolomé and Lucile Bennassar. 1992. *Christophe Colomb*. Paris: Fayard.

Blanchot, Maurice. 1997. "The Apocalypse Is Disappointing." Translated by Elizabeth Rottenberg. In *Friendship*, 101–108. Stanford, CA: Stanford University Press.

Brierley, Chris, Alexander Koch, Mark M. Maslin, and Simon L. Lewis. 2019. "Earth system impacts of the European arrival and Great Dying in the Americas after 1492." *Quaternary Science Reviews* 207: 13–36. https://doi.org/10.1016/j.quascirev.2018.12.004

Chakrabarty, Dipesh. 2021. *The Climate of History in a Planetary Age*. Chicago: University of Chicago Press.

Christensen, Mark Z. 2022. *Aztec and Maya Apocalypses: Old World Tales of Doom in a New World Setting*. Norman, OK: University of Oklahoma Press.

Cline, Eric H. 2000. *The Battles of Armageddon*. Ann Arbor, MI: University of Michigan Press.

Colombo, Cristoforo [Columbus, Christopher]. 1993. *Lettere e scritti*. Vol. 1: *Libro de las profecías*. Roma: Istituto Poligrafico e Zeca dello Stato.

Courtillot, Vincent. 1990. "Deccan volcanism at the Cretaceous-Tertiary boundary: past climatic crises as a key to the future?" *Palaeogeography, Palaeoclimatology, Palaeoecology* 89 (3): 291–299.

Crutzen, Paul, and Eugene Stoermer. 2000. "The 'Anthropocene'." *Global Change Newsletter* 41: 17–18.

Derrida, Jacques. 1984. "Of an Apocalyptic Tone Recently Adopted in Philosophy." *Oxford Literary Review* 6 (2): 3–37.

Dillon, Michael. 2011. "Specters of Biopolitics: Finitude, *Eschaton*, and *Katechon*." *South Atlantic Quarterly* 110 (3): 780–792.
https://doi.org/10.1215/00382876-1275797

Elsaesser, Thomas. 2016. "Black Suns and a Bright Planet: Melancholia *as Thought Experiment*." In *Politics, Theory, and Film: Critical Encounters with Lars von Trier*, edited by Bonnie Honig and Lori J. Marso, 305–335. Oxford: Oxford University Press.

Escape from L.A. 1996. Dir. John Carpenter. Rysher Entertainment.

Fallout. 2024. Amazon Prime.
https://www.amazon.de/Fallout-Staffel-1/dp/B0CN4GZGTQ

Folger, Robert. 2010. "'Mi historia … una novela, y seguramente fingida': Estereotipos (pos)coloniales y alegoría nacional en las *Memorias* de Fray Servando." In *Escribiendo la independencia: Perspectivas postcoloniales sobre literatura hispanoamericana del siglo XIX*, edited by Robert Folger and Stephan Leopold, 21–44. Frankfurt am Main: Vervuert; Madrid: Iberoamericana.

Folger, Robert. 2019. "*El parayso terrenal*: la epopeya y el ideologema de la *translatio imperii et studii* en Pietro Martire d'Anghiera, Carlos de Sigüenza y José Fernández de Lizardi." In *Eneas: la trayectoria transatlántica de un mito fundacional*, edited by Stephan Leopold, Irene M. Weiss and Arturo Álvarez Hernández, 221–245. Göttingen: Vandenhoeck & Ruprecht, Mainz University Press.

Folger, Robert. 2022. "Archaeologies of the Apocalypse: A Preface." *Apocalyptica* 1 (1): 19–35.
https://doi.org/10.17885/heiup.apoc.2022.1.24603

Freud, Sigmund. 1958. "Psycho-analytic notes on an autobiographical account of a case of paranoia (dementia paranoides) (1911)." In *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, Vol. 12 (1911–1913): The Case of Schreber, Papers on Technique, and Other Works, 9–82. London: Hogarth Press and Institute of Psycho-Analysis.

García Düttmann, Alexander and Markus Quent, eds. 2023. *Die Apokalypse enttäuscht: Atomtod, Klimakatastrophe und Kommunismus*. Zürich: Diaphanes.

Haff, Peter K. "Technology as a geological phenomenon: implications for human well-being." *Geological Society London Special Publications* 395, no. 1 (2013): 301–309.

Hartog, François. 2021. "*Chronos*, *Kairos*, *Krisis*: the Genesis of Western Time." *History and Theory* 60 (3): 425–439.
https://doi.org/10.1111/hith.12218

Heidegger, Martin. 1967. *Sein und Zeit*. 11th ed. Tübingen: Max Niemeyer.
Jablonski, David. 1994. "Extinctions in the fossil record (and discussion)." *Philosophical Transactions of the Royal Society of London* 344 (1307): 11–17.
Jameson, Fredric. 1981. *The Political Unconscious: Narrative as a Socially Symbolic Act*. London: Routledge.
Jameson, Fredric. 2005. *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions*. London: Verso Books.
Kaup, Monika. 2021. *New Ecological Realisms: Post-Apocalyptic Fiction and Contemporary Theory*. Edinburgh: Edinburgh University Press.
Kermode, Frank. 2000. *The Sense of an Ending: Studies in the Theory of Fiction*. Kindle. Oxford: Oxford University Press.
L.A. Apocalypse. 2015. Dir. Michael J Sarna. CineTel Films.
Landfester, Ulrike. 2012. *Stichworte: Tätowierung und europäische Schriftkultur*. Berlin: Matthes & Seitz.
Lefebvre, Henri. 1984. *The Production of Space*. Translated by Donald Nicholson-Smith. Malden: Blackwell.
Lienkamp, Christoph. 2001. "Aufhalten der Krisis oder Aufschub des Gerichts: Zwei Denkfiguren Apokalyptischer Zeiterfahrung." *Zeitschrift für Religions- und Geistesgeschichte* 53 (4): 319–329.
Life on Our Planet. 2022. Netflix. https://www.netflix.com/title/80213846
López de Mariscal, Blanca. 1999. "La ejemplaridad en el auto del *El Juicio Final*: una lectura horizóntica." In *El escritor y la escena VIII: estudios sobre teatro español y novohispano de los Siglos de Oro: actas del VIII Congreso de la Asociación Internacional de Teatro Español y Novohispano de los Siglos de Oro (3 al 6 de marzo de 1999, Ciudad Juárez*), edited by Ysla Campell, 83–92. Mexico City: Universidad Autónoma de Ciudad Juárez.
Lorimer, Jamie. 2017. "The Anthropo-scene: a guide for the perplexed." *Social Studies of Science* 47 (1): 117–142.
Luckmann, Thomas and Alfred Schütz. 2003. *Strukturen der Lebenswelt*. Konstanz: UKV.
Mantilla Osornio, Adolfo Felipe. 2024. *Imaginando el fin de los tiempos: Poéticas y figuraciones sobre los mundos y sus extinciones*. Berlin: De Gruyter. https://doi.org/10.1515/9783111081755
McQueen, Alison. 2018. *Political Realism in Apocalyptic Times*. Cambridge: Cambridge University Press.
Milhou, Alain. 1983. *Colón y su mentalidad mesiánica en el ambiente franciscanista español*. Valladolid: Casa-Museo de Colón.
Milhou, Alain. 2003. "Apocalypticism in Central and South American Colonialism." In *The Continuum History of Apocalypticism*, edited by Bernard J. McGinn, John J. Collins and Stephen J. Stein, 417–440. New York: Continuum.
Morton, Timothy. 2013. *Hyperobjects: Philosophy and Ecology after the End of the World*. Minneapolis: University of Minnesota Press.
O'Gorman, Edmundo. 1961. *The Invention of America, an Inquiry into the Historical Nature of the New World and the Meaning of its History*. Bloomington, IN: Indiana University Press.
Olivier, Guilhem and Patricia Ledesma, eds. 2019. *Tetzáhuitl. Los presagios de la Conquista de México*. Mexico City: Instituto Nacional de Antropología e Historia; Museo del Templo Mayor.

Olmos, Andrés de. 2004. "El juicio final." In *Teatro náhuatl I: épocas novohispana y moderna*, edited by Fernando Horacasitas, 695–735. Mexico City: Universidad Nacional Autónoma de México.
Ovando, Claudia. 1998. *José María Velasco*. 2nd ed. Mexico City: Instituto Nacional de Estudios Históricos de la Revolución Mexicana.
Phelan, John Leddy. 1972. *El reino milenario de los Franciscanos en el Nuevo Mundo*. Mexico City: Universidad Nacional Autónoma de México.
Pitetti, Connor. 2017. "Uses of the End of the World: Apocalypse and Postapocalypse as Narrative Modes." *Science Fiction Studies* 44 (3): 437–454.
Ricœur, Paul. 1977. "Toward a Hermeneutic of the Idea of Revelation." *The Harvard Theological Review* 70 (1/2): 1–37.
Rodríguez Parampolini, Ida. 1983. *Juan O'Gorman, arquitecto y pintor*. Mexico City: Universidad Nacional Autónoma de México-Instituto de Investigaciones Estéticas.
Roest, Bert. 2013. "Early Mendicant Mission in the New World: Discourses, Experiments, Realities." *Franciscan Studies* 71: 197–217.
Rothe, Delf. 2020. "Governing the End Times? Planet Politics and the Secular Eschatology of the Anthropocene." *Millennium: Journal of International Studies* 48 (2): 143–164.
Sedgwick, Eve Kosofsky. 2003. "Paranoid Reading and Reparative Reading, or, You're So Paranoid, You Probably Think This Essay is About You." In *Touching Feeling: Affect, Pedagogy, Performativity*, 123–152. Durham, NC: Duke University Press. https://doi.org/10.1215/9780822384786-005
Semo, Enrique. 2021. *500 años de la batalla por México-Tenochtitlan*. Mexico City: Itaca; Universidad Nacional Autónoma de México.
Steward, Kathleen. 2007. *Ordinary Affects*. Durham, NC: Duke University Press.
Stross, Brian. 2007. *The Mesoamerican Sacrum Bone: Doorway to the Otherworld*. Austin: University of Texas Press.
Swyngedouw, Erik and Henrik Ernstson. 2018. "Interrupting the Anthropo-obScene: Immuno-biopolitics and Depoliticizing Ontologies in the Anthropocene." *Theory, Culture & Society* 35 (6): 3–30.
Turner, A. Laurence. 2022. "The Cosmic Week in the History of Seventh-day Adventist Eschatology." *Spes Christiana* 33 (1): 45–68.
Vioulac, Jean. 2021. *Apocalypse of Truth: Heideggerian Meditations*. Translated by Matthew J. Peterson. Chicago: University of Chicago Press.
Wallerstein, Immanuel. 1974. "The Rise and Future Demise of the World Capitalist System: Concepts for Comparative Analysis." *Comparative Studies in Society and History* 16 (4): 387–415.
Weckmann, Luis. 1982. "Las esperanzas milenaristas de los franciscanos de la Nueva España." *Historia Mexicana* 32 (1): 89–105.
West, Delno C. 1989. "Medieval Ideas of Apocalyptic Mission and the Early Franciscans in Mexico." *The Americas* 45 (3): 293–313.
Yébenes Escardó, Zenia. 2023. *Hecho de tiempo*. Mexico City: Herder.
Yusoff, Kathryn. 2018. *A Billion Black Anthropocenes or None.* Minneapolis, MN: University of Minnesota Press.
Zupančič, Alenka. 2017–2018. "The apocalypse is (still) disappointing." *Journal of the Circle for Lacanian Ideology Critique* 10–11: 16–30.
3 Body Problem. 2024. Netflix. https://www.netflix.com/title/81024821

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Undead Return: Japanese Videogames and Nuclear Memory

Abstract: This article examines the origins of the videogame zombie by tracing their appearances in the Japanese videogames *Phantom Fighter* (Marionette 1988), *Sweet Home* (Capcom 1989) and *Biohazard* (Capcom 1996). The nascent versions of interactive zombies in these games offer a distinctively Japanese variation to the mediated figure of the undead. Their monsters draw upon and contribute to traditions of Japanese folklore teeming with *yōkai* (supernatural demons, monsters and ghouls). Through analysis of *Phantom Fighter*, *Sweet Home* and *Biohazard*, I demonstrate how Japan's prototypical videogame zombies build upon their *yōkai* roots to reflect a public consciousness that is grappling with the jarring reanimation of long-unresolved trauma: the tragedies, crimes, and anguish of the Pacific War and its devastating conclusion. The figure of the zombie—trading in abject and uncanny forms of monstrosity, and upending sense and meaning through its impossible terrors—appears to be a natural product of this moment of rupture in Japan's post-war history. The appearance of the zombie in these videogames invites players into the mediation and negotiation of popular cultural memorial anxieties.
Keywords: zombie, Japanese videogames, cultural memory, Yōkai, World War II, Shōwa Era.

Introduction

The figure of the zombie has become a mainstay of videogames over the past three decades, providing players with plentiful virtual targets for righteous forms of violence, terrifying obstacles requiring stealth and courage, and visceral visions of decaying faces and gnashing teeth in moments of

in-game death. I examine the emergence of the now iconic, ludic undead in three Japanese videogames: *Phantom Fighter* (Marionette 1988), *Sweet Home* (Capcom 1989) and *Biohazard* (retitled *Resident Evil* for international distribution) (Capcom 1996).[1] While these games are not the only texts to offer undead encounters over this eight-year period, they have been selected as representative of the key points of development in the early existence of the ludic zombie and for their reflection of contemporaneous underlying apocalyptic anxieties. I set out, in this article, to answer a simple question: why did these videogame zombies emerge when they did? The answer to this question draws together two important foundations of Japanese popular culture in the twentieth century (and today): the folkways and histories of the monstrous *yōkai* (supernatural demons, monsters, and ghouls, including undead creatures), and the bitter traumas of the conclusion of World War II. What comes into view through these three texts is an understanding of the videogame zombie as a hybridised monster, drawing both on *yōkai* traditions and the apocalyptic traumas that are shown to be dislodged from deep within the national cultural memory during this eight-year period.

As Michael Dylan Foster notes, Japan and its cultural landscape continually changes, but each new epoch provides "fertile terrain" for a new generation of weird, mysterious, and terrifying *yōkai* "to develop its own affective, aesthetic role in the story of the Japanese nation" (Foster 2009, 26). The emergence of these videogame zombies between 1988 and 1996 marks the end of an era within which Japanese cultural memory was radically reconfigured to reinforce revisionist accounts of wartime history and to support an age of triumphant economic growth. This carefully cultivated outlook was fractured violently by a combination of catastrophes at the end of the Shōwa era in 1989. Decades of repression of the trauma of the country's wartime experiences faltered, and Japan's apocalyptic scars and ghosts returned to the discursive fore.

In a nation that had lived through apocalyptic wartime experiences and found itself after 1945 in a state of economic, emotional, political and social living death, the ludic zombie appeared as a spectre—as so many *yōkai* do—from the 'other' world of danger, undeath and repressed memory. The mediated appearance, from 1988 onward, of a Japanese-inflected zombie aptly illustrates the regenerative nature of *yōkai*. Slowly, over this eight-year period, the zombie enters Japanese popular culture, its rotting flesh and decay resonating with re-emerging post-war trauma and imagery. Recalling *yōkai* traditions by bridging the gaps between the "intangible and tangible, [and] spiritual and material" and scaring its subjects with its unnatural and impossible "weird corporeality" (Foster 2009, 24), the

1 Both Japanese and English-language versions of all three of these games exist, through a combination of official and unofficial releases. My textual analysis is specifically based upon play of: the North American, English-language release of *Phantom Fighter*, an unofficial English-language fan translation of the Japanese-language release of *Sweet Home*; and the North American, English-language release of *Biohazard* under the name *Resident Evil*. In all three cases, my play has been supplemented by reference to online paratexts (videos and screenshots) depicting playthroughs of the original Japanese-language releases.

videogame zombie proves itself a comfortable fit in the *yōkai* genealogy. By approaching these early ludic zombies through the lens of their *yōkai* heritage, we can see that these monsters afford cultural and memorial engagements that are particular to the post-Shōwa context in Japan.

Japan's Eerie, Mutable Monsters

While the Japanese videogame industry—beginning with the 1996 release of *Biohazard*, one of this article's case studies—is credited with stimulating the modern zombie genre's revival in popularity worldwide (Dendle 2007, 53), zombies appear to be largely absent in Japanese culture prior to this watershed moment. To be more specific, what is absent is the widely known archetype of the zombie popularised from the 1960s onwards by Hollywood film productions: reanimated, shambling, decaying human figures, typically with arms outstretched, green-tinged flesh and gnashing teeth. Kazuhiko Komatsu, Japan's leading expert on the country's monstrous mythologies, confirms this, stating his view that "we do not have such cases in Japan" of the generic zombie trope of "spiritless flesh reanimated" (Vétu 2021, 116). At the same time, an examination of Japanese folklore, teeming with a "plethora of figures—demons and witches, goblins and ghosts" whose stories are interwoven with mythologies of Japan's major religions (Ashkenazi 2003, 55), reveals a long-running cultural fascination with monstrous forms of life beyond death. Japan's three major spiritual traditions (Buddhism, Shinto, and Christianity) have combined to ensure "an inescapable focus on death and life after death" in Japanese society, meaning that in folklore and spiritual traditions "every custom is bound up in every way with relationships between the living and the dead" (Iwasaka and Toelken 1994, 6). Shinto, in particular, evokes the recurring concept of *onnen* [怨念], or the ability for the dead to return to the world of the living, driven by currents of intense emotion (including anger, sorrow and pain) (Pruett 2010).

Life, death, and interstitial states are central to Japanese cultural contexts. Horror-tinged forms of resurrection, liminal states of existence and challenges to biological and ontological certainties all course through *yōkai*—Japan's historical monsters—just as they do through cinematic zombies in the West. In order to address *yōkai* as contributing to the monstrous genealogy of the zombie, I follow a growing tendency among scholars of undead media to embrace more open definitions of undead monsters in which the nature (rather than appearance) of these figures is emphasised. Dunja Opatić, for example, describes a "new (un)dead" that

should be primarily defined by its occupation of a "hymenal space of floating indetermination between life and death" (2014, 2). This kind of undead figure is a "liminal monster, the threshold persona [that] exists in the margins" (Opatić 2014, 2), and Chera Kee elaborates that we might "reconceptualize zombihood as a state existing somewhere between the human and the not quite human, as a state of liminality" (2017, 15). The zombie continually summons such liminality, manifesting an "interzone that makes murky a distinction between the living and the dead, the natural and the unnatural" (Lauro 2011, 55). This figuration of the living dead can also be understood and defined through the threat it poses as it "exerts violence against difference and transgresses the boundaries of individual subjectivity" (Opatić 2014, 2), proving to be thus inexorably deconstructive and driven by the "infectious negation of the individual subject" (Swanson 2014, 385). Defining the living dead requires recognition of the multiplicity and malleability of this monster (Guynes-Vishniac 2018, 912) and, as Vétu notes, a "celebration of heterogeneity" with respect to their physical form (2021, 119).

Yōkai are supernatural entities which are, according to Foster, "the weird and mysterious 'things' that have been a part of Japanese culture […] for as long as history has been recorded" (2009, 2). The word itself is constructed by compounding two *kanji* characters [妖 and 怪] which both carry meanings of mystery, uncanniness and suspicion (Foster 2015, 19; Papp 2010, 8). Fundamentally, *yōkai* are best understood as eerie phenomena (Komatsu 2017, 12), which sometimes manifest in unsettling animal or human figures (Papp 2010, 8). Driven by this underlying inclusiveness, the meaning of '*yōkai*' is remarkably diffuse and can equally account for a "monster, spirit, goblin, ghost, demon, phantom, specter, fantastic being, lower-order deity, or any unexplainable experience or numinous occurrence" (Foster 2013, 135). The term '*yōkai*' also encapsulates a number of other more specific monstrous formulations that have circulated at different points in Japanese cultural history, some of which are no longer commonly invoked by common applications of the label. These include the following: decayed and degraded anthropomorphic forms of *kami*, which is the power of natural entities (mountains, bodies of water, trees, rocks, weather even, and so on) to wilfully influence peoples' lives (Ashkenazi 2003, 27); *mononoke*, a kind of supernatural and primordial energy force (Foster 2009, 6; Papp 2010, 10); and *bakemono*, a broad label for shape-shifting, transformed, disfigured; and otherwise anomalous creatures (Foster 2015, 18).

Yōkai have long been tenants of the Japanese isles and the menagerie of monsters developed over the centuries is myriad. However, a central

characteristic that unites *yōkai* is their inhabitation, and exploitation, of the murky boundary spaces that surround humans and the meanings we construct for ourselves and our world. Foster describes *yōkai* as rooted in ontological margins, in the "contact zone between fact and fiction, between belief and doubt" (2015, 8). This is an uncanny space that brings together *gense* (this world) and the lives of humans with *takai* (the other world) and underlying *kami* energies (Papp 2010, 12). In other accounts these binary zones are known instead as *konoyo* (the world of the living) and *anoyo* (the world of the dead) (Murphy and Ryan 2016, 195). By drawing these two worlds together, *yōkai* perform a relatively simple function: they are able to render what is certain—whether physical, biological, or even ontological—transmutable (Papp 2010, 10) and dangerously unstable (Foster 2009, 13). When *yōkai* manifest, "laws of nature are challenged" (Foster 2015, 8) and states of being that are "unimaginable and word-defying" (Li 2013, 182) are conjured into existence. Consider, for example, one of the more common consequences of the intermingling of worlds by *yōkai*: the return of a monstrous form of life to deceased figures, or the transformation of inanimate entities with a vengeful half-life (Foster 2009, 6). *Yōkai* ply the border between the real and unreal, the possible and impossible, and human and monstrous, and their appearance invites their witnesses to find horror, uncanniness, and mystery in the otherwise everyday. My interest is not merely in the fact that *yōkai* inhabit states between life and death, but that they occupy ontologically deconstructive boundary spaces, directly threatening and destabilising biology and subjectivity. In this way, I argue, *yōkai* have the capacity to invoke zombification. While it is certainly not the case that *yōkai* and zombies should be directly conflated with one another, Japanese folklore's cast of liminal terrors appear to offer an important and distinctive contribution to the mediation of the undead.

Remembering Through *Yōkai*

In the post-war period of the twentieth century, *yōkai* and their myths experienced a significant explosion in popularity and reach through animated television series (*anime*), comics and graphic novels (*manga*), and blockbuster cinematic productions (Papp 2010, 161–62; Foster 2013, 149–50). As Hiroki Azuma observes, the various manga, anime, and videogames popular with local and global audiences are "steeped" in traditional Japanese mythologies and folkways (2009, 9). As new generations and evocations of these "remarkably mutable and resilient" (Foster 2013, 134)

monsters are introduced or reinvigorated *yōkai* continue to be apposite monsters. Foster, for example, invokes Jeffrey Jerome Cohen's widely cited explanation of the critical power of monsters as "an embodiment of a certain cultural moment—of a time, a feeling, and a place" (Cohen 1996, 2), elaborating that *yōkai* bear an allegorical power as "specters haunting the nation," offering "surprisingly lively metaphors for comprehending broader national-cultural paradigms" (Foster 2009, 26). Indeed, in a country where religious, household and national rituals are tightly bound (Ashkenazi 2003, 1), understanding *yōkai* is a prerequisite, as argued by Komatsu, for deeper understandings of contemporary Japanese culture (2017, 6). In Japanese videogames such as *Phantom Fighter*, *Sweet Home* and *Biohazard*, not only do players encounter new iterations of *yōkai*-infused monsters but they also experience first-hand encounters with "deep-seated Japanese attitudes and values" found in the surrounding historical milieus attached to these texts (Hutchinson 2019, 1), as well as the echoes of Japan's earlier apocalyptic trauma.

By turning to these three games, we can uncover the shared histories and anxieties that imbue their undead monsters with powerful allegorical meaning. This requires understanding that memories and narratives "exist not only on an individual level, but also on a collective level" (Seaton 2007, 12), and that popular culture is an increasingly significant site for public memory-making (Morris Suzuki and Rimmer 2002, 147). Media objects, and mediation, are crucial to the formation of popular cultural memory and can be understood "as a kind of switchboard at work between the individual and the collective dimension" of remembering (and forgetting) the past and present (Erll 2011, 113). Cultural memory is thus an evolving body of texts "specific to each society in each epoch," which come together to "stabilize and convey that society's self-image" (J. Assmann 1995, 132), constructing and disseminating specific "versions of past events and persons, cultural values and norms [and] concepts of collective identity" (Erll 2011, 114). An "intimate alliance between affect, memory and identity" (A. Assmann 2003, 18) means that popular culture is a powerful means by which to shape collective identification and action (Sakamoto 2016, 254) and amplifies the immanent power of mediated monsters to reflect, challenge, and otherwise allegorise the national psyche. In the case of *Phantom Fighter*, *Sweet Home* and *Biohazard*, there exists a particularly volatile relationship between a new and ludic type of zombie and a popular cultural memory that has carefully masked many of the apocalyptic anguishes of Japan's recent past. In unpacking different elements of these three games, I extend arguments made already by Guillaume Vétu (2021) and Kayleigh Murphy and Mark Ryan (2016) that challenge us to

understand the zombies found in Japanese cinema as not only influenced by those found in Western filmmaking, but representing new, productive forms of inter-cultural hybridity. I argue that, in the Japanese videogame zombies introduced at the end of the Shōwa period, we can identify not only the obvious influence of Western zombie cinema, but also the powerfully productive influence of the apocalyptic and post-apocalyptic conditions of post-war Japan, and the threads of threads of long-running *yōkai* histories.

Phantom Fighter's Yōkai Traditions

In *Phantom Fighter*, which features some of the earliest zombies in commercial videogames, the player takes on the role of a martial arts master fighting their way through eight different villages infested with *kyonshī*, a type of reanimated corpse which moves around by hopping, with arms outstretched. *Phantom Fighter* illustrates a close entanglement between *yōkai* mythology and Japan's growing videogame development industry in the late-1980s. Released for Nintendo's Family Computer[2] in 1988, the game's graphical style and play experience is in many ways typical of the era. Players observe a two-dimensional world and characters from a side-on perspective, using simple controls to move and interact within the game. An example of the 'beat 'em up' genre of games enormously popular during the 1980s and 1990s, *Phantom Fighter*'s play centres on encountering, fighting and defeating varied (and increasingly powerful) types of *kyonshī* in simple hand-to-hand combat. Defeated zombies drop various items for the player to collect, including a glowing jade orb. Combining three orbs allows a player to summon the 'boss' *kyonshī* in each town, and once this more challenging undead foe is defeated, the player can move on to the next settlement.

The presence of hordes of *kyonshī* within *Phantom Fighter* establishes a bridge between the nascent living dead of videogames and the uncanny monstrosity of their *yōkai* forebears. The figure of the *kyonshī* is derived from the *jiangshi* or *goeng si* (in Mandarin and Cantonese, respectively)—a reanimated corpse originally found in Qing dynasty Chinese folklore, and made popular again in 1980s Hong Kong cinema (Ancuta 2021, 146–47). *Kyonshī* have been identified interchangeably as both 'hopping zombies' and 'hopping vampires' (Vétu 2021, 124–6), with both of these labels ultimately pointing to a *yōkai* monster (albeit shared across numerous Asian folkloric traditions) bearing fundamentally undead characteristics (Ng 2021). The *kyonshī* is, by nature, violent and cannibalistic

2 Known more commonly as the Famicom in Japan, and as the Nintendo Entertainment System internationally.

because the cause of its revival is the persistence of a malevolent version of its former soul, seeking revenge for an untimely passing by extracting and absorbing the life essence (*qi*) of its victims (Ancuta 2021, 146), causing their limbs to be locked in place and their hopping movement a result of the onset of rigor mortis (Vétu 2021, 126). In *Phantom Fighter*, we are witness to the ludic introduction of an iteration of this undead *yōkai* monster. This creature loudly proclaims its zombiism by more closely mirroring the archetypal construction of zombies as undead corpses (with decaying flesh and outstretched arms reaching and grabbing) than any other *yōkai*.

By introducing *kyonshī*, which combine Hong Kong and Chinese cultural traditions alongside Japanese folkways, to videogames, *Phantom Fighter* extends a long tradition of Japanese mythology drawing upon the Daoist and Buddhist folklore of neighbouring Asian cultures. In this process, some tales and characters are imported directly, while others are mutated and localised (Ashkenazi 2003, 6). At first glance, *Phantom Fighter* might appear to locate its *yōkai* in the former category, primarily emphasising the *kyonshī* as a Daoist phenomenon with few distinctive Japanese characteristics. The game's opening cinematic sequences, for example, depict a stone coffin containing a corpse in the process of revival, wearing the garb of a Qing dynasty bureaucrat. The player's own character is introduced as a Daoist priest, and the motions of the character's attacks with arms and feet resemble the Chinese martial art of *wushu* (or *kung fu*, more popularly). The jade orbs the player aims to collect in each village also bear a strong association with Chinese spirituality, referencing a sealing off of the spiritual world of Daoism's supreme god, the Jade Emperor (Ashkenazi 2003, 6), through both their material and their function. Taken together, these design elements might suggest the game's zombies are *yōkai* transplanted with minimal localisation to Japan's particular cultural imaginaries. In order to illustrate the particular kind of Japanese monstrosity that underlies *Phantom Fighter*'s Daoist exterior, however, we must turn briefly to a key moment in Japanese history: World War II and the violence and devastation of its conclusion.

An Undead Nation

The conclusion of World War II was cataclysmic for Japan, and an understanding of the milieu that follows the nation's defeat in 1945 helps to explain the allegorical significance of the appearance of the living dead in late- and post-Shōwa era videogames. In particular, these ludic monsters stand in for the negotiation of the anguished collective memory of the

war's end, the legacy of which, as Azuma reflects, "has determined the entire culture of Japan to a greater extent than we imagine" (2009, 15). The destruction of the cities of Hiroshima and Nagasaki by atomic bombs on 6 and 9 August 1945, respectively, are perhaps the most enduring and widely recognisable images of the end of the fourteen years of war in the Pacific and Asia. The atom bombs rendered an instantaneous form of absolute devastation, where a flash of blinding light preceded the eruption of fireballs burning at four thousand degrees Celsius. Everything in the path of the apocalyptic fury of these new weapons was vitrified or vaporised. And it was not only the atom bombs that brought such devastation to Japan's cities and towns: Allied air forces undertook firebombing campaigns, most notably against Tokyo on 9 and 10 March 1945, destroying one third of the city and taking 100,000 civilian lives. The battle for Okinawa, one of Japan's southernmost significant landmasses, resulted in the death of 100,000 of the civilian population, at the hands of both Allied and Japanese combatants, over eleven horrific weeks. Where accounts and images of apocalypse had previously been confined to folklore and mythological stories (Tanaka 2014, 35), and associated with supernatural powers and entities (Tanaka 2014, 41), the final months of the war gave destruction and monstrosity a decidedly human form.

What remained after these abject exercises in humanity's new-found capacity to destroy itself was a country ruined, with more than 800,000 civilians among Japan's toll of 3.1 million war dead, food supplies exhausted and entire settlements and ways of life erased (Seaton 2007, 34). Surveying the aftermath of the war, science fiction author and screenwriter Sakyō Komatsu recalls "how truly 'nothing' the charred remains of Japan were;" where cities largely built out of wood had "disappeared into the atmosphere without a trace" (quoted in Isozaki and Komatsu 2020, 55). Japan, as a nation state, was, for all intents and purposes, deceased; people, infrastructure, industry, food and more, replaced by ashes, decay, and deprivation. And yet, somehow, Japan managed to continue to eke out life in spite of its apocalyptic state, shambling on as an undead country. The survivors making up this zombified nation state would become known as *yakeato sedai*—the 'generation of the burnt-out ruins' (Rosenbaum 2009, 7), with the primal experience of apocalypse and the blight of undeath during the immediate post-war years forming their foundational mythology (Isozaki and Komatsu 2020, 55). Within this generation of survivors another group experienced an even more acute and tragic version of living death: the *hibakusha* (atomic bomb survivors), who continued to endure and survive nuclear terror through the inexorably damaging effects of radiation-related diseases (Tanaka 2014, 42). The *hibakusha* were, in a sense, sus-

pended in the moments of death and destruction of 6 and 9 August 1945 but were also required to carry on with life, constantly shadowed by the immanence of death (Seaton 2007, 41). These everyday Japanese experiences of all-too-human monstrosity and apocalypse sowed a deep association with states of living death into the country's collective memory which, five decades later, would blossom into spectacularly popular, mediated zombies.

Forgetting Living Death

Despite the forms of undeath proliferating in Japan, almost as soon as Emperor Hirohito's announcement of the nation's surrender had been broadcast by radio on 15 August 1945, acknowledgement of these horrors was quickly repressed. Harsh censorship of journalism and artistic works was immediately introduced by the occupying powers (Suzuki 2009, 27–28), ensuring the atom bomb attacks, Japan's Imperial history and wartime conduct, Allied bombing raids, and even the very occupation of Japan could not be publicly addressed (Hutchinson 2019, 130). Editors and publishers also became well-versed in an enduring form of self-regulation, intensifying the chilling effect of the censors' own black ink and blades (Suzuki 2009, 29). Steadily, the Japanese population was guided toward compliance with a new, imported ideological agenda (Cho 2016, 15). This agenda, a central focus of the Allied occupation of Japan between 1945 and 1952, amounted to an intellectual restructuring of the country's identity as "America's Japan" (Iwabuchi 2002, 10). Japan's recent history—a "false history" to the occupiers—was obliterated from textbooks, classrooms, and public discourse (Gluck 1993, 66), so that the nation could be "reborn" (in the words of the Allied command) with democratic ideals (Gluck 1993, 69–70). The "destruction of the 'good old Japan'" by its occupiers and the determined severing of cultural traditions saw the nation reconstituted using an American cultural, political, and social grammar (Azuma 2009, 13), enacting a "black gap" of radical discontinuity between Japan's past and present (Steinberg 2004, 457).

This discontinuity represents another spectre of living death, one rendered at a national psychic and cultural scale. Japan was brought not only to a physical, emotional, political, and social death by Allied bombing campaigns and nuclear weaponry, but also through the post-war erasure of the histories, culture, and experiences that shape its populace. The Japanese nation state is reanimated by the Allied occupation, but this revival manifests as a compromised and decayed version of its former self, deprived

of identity and self-determination. That 'black gap' in Japan's selfhood is not resolved after the departure of the occupying forces in 1952. Instead, a conservative political class, centred around the Liberal Democratic Party, carefully controlled national discourse in an effort to preserve the nation's new, undead identity (Azuma 2009, 74; Gluck 1993, 71–73; Seaton 2007, 32). These efforts ensured that, through the twentieth century, "memories of the war were repressed and recast in the public imagination" (Allen 2022, 1). At stake was the surging success of the Japanese economic 'miracle' and the country's transformation into the world's second-largest economy (Steinberg 2004, 459; Sakamoto 2016, 244), fuelled by an intimate economic relationship with the United States of America (Sakamoto 2016, 255; Suzuki 2009, 33). In a country revived from death, or the brink of it, and reanimated in the United States' image, the combination of national zeal and the dizzying success of high economic growth drove a determined repression of war-inflected memories, traumas, and critique (Azuma 2009, 18).

Apocalyptic devastation in Hiroshima, Nagasaki, Tokyo, and Okinawa, the tragedy of the *yakeato* and *hibakusha*, and the severing of the threads of continuity with pre-war culture represent a Japanese nation brought to the point of destruction and revived. Lying deep at the heart of Japan's post-war period, as Rachael Hutchinson argues, these cataclysms form a "cultural trauma" that "continues to reverberate through the Japanese arts" (2019, 130). These wartime wounds of the collective psyche are undead in their nature, "absolute and transcendent and precarious and invisible: flickering in and out of phase" (Isozaki and Komatsu 2020, 56), occupying a half-life in the shared consciousness of a country torn between its own simultaneous states of life and death. Over the expanse of what Carol Gluck describes as "the long postwar," a phenomenon whereby Japan spent five decades "still calling and thinking of itself as postwar" (1993, 66), the country's living dead do not disappear; the tensions they embody simmer deep under Japan's cultural surface. At different points during this 'long postwar' these repressed traumas emerge, especially through the 1950s and 1960s, through manga accounts of the depraved tragedy of the Pacific War (Sakamoto 2016, 255), burgeoning anti-nuclear protest movements (Seaton 2007, 41) and a growing clarity of anti-militarist sentiment and activism (Allen 2022, 10). Indeed, such irruptions can also be found in popular media other than videogames: consider the nuclear anxieties expressed in the film *Gojira* (1954), or the apocalyptic imagery that saturates the *anime* film *Akira* (1988). The living dead of videogames in the 1990s represent a new reflection of the traumas of the 'long postwar' period, and confront audiences by pointedly manifesting the very zombification that festers at the centre of Japanese popular cultural memory.

Kyonshī in Japan's Land of the Dead

To return to *Phantom Fighter* and its hopping zombies, I suggest that, beneath the game's obvious Daoist cultural dressing lies an account of Japan's wartime devastation and subsequent undeath. After defeating the first zombified foe to appear in the game, the player rescues a fellow priest, who makes a dramatic declaration to the player: "Kyonshies, [*sic*] the infamous zombie phantoms are back from the land of the dead." The further into the game and through its different villages the player progresses, the more apparent it becomes that this 'land of the dead' is a spectre of the repressed images of the fire-and-atom bombed wasteland of 1945. While the first villages the player visits are filled with gleaming and sturdy buildings and structures, in the final three settlements, temples, homes and other buildings instead show the scars of severe decay and destruction. In these late stages of the game, players are drawn into battle with *kyonshī* in collapsing rooms, strewn with rubble and bones. Lighting is dimmed, and villages are cast in blue and brown hues. Traditional wooden buildings are burnt out, their roofs fractured and a patina of grime clings to walls. These later towns bear an increasing resemblance to the post-war symbols of ruination reflecting fire-bombed Tokyo, atom-bombed Hiroshima and Nagasaki and countless other Japanese cities and towns torn up by aerial bombardment. This spectral connection to 1945 and the undeath invoked in Japan in that year is heightened by other aspects of *Phantom Fighter*'s play experience. The combination of small, burning blue-and-white flames which float in the air near the player, accompanied by the on-screen prompt "there's danger in the air" (warning players of impending *kyonshī* attack) recalls the intense white flashes of the atom bombs and the airborne risk posed by radiation. An almost complete absence of regular citizens throughout the game's eight villages suggests the horrific wasteland left behind by the instantaneous nuclear vaporisation of communities and lives. *Phantom Fighter*'s 'land of the dead' is, it seems, Japan—and its own long-repressed state of war-induced undeath.

At the same time as the game restages a war-ravaged past through its land of the dead, it also becomes evident that players are themselves being drawn further and further into the undead realm. While the player systematically kills off the *kyonshī* they encounter, their descent into increasingly apocalyptic environments suggests that even in individual defeat these monsters are successful as *yōkai* in other ways. Plying the border between possibility and impossibility, and the worlds of the living and the dead, as their *yōkai* forebears have for centuries, the game's *kyonshī* have ensnared their virtual human subjects in an intermingling of

these worlds. With every slain hopping monster and every step forward toward a new village, the player follows the trail laid by these new *yōkai* and descends further into the world of the zombie and the traumas of Japan's past. Indeed, while the bodies of *kyonshī* erupt into flame and vanish upon defeat, death by the player means reanimation back at the start of the village, another symbolic nod to the player's own inhabitation of an undead reality. Referring to the *yakeato sedai* (that generation indelibly grounded in 1945's burnt-out ruins), Sakyō Komatsu suggests post-war Japanese popular culture could be understood as constructing an imagined "space of ruins" in which "things that happened" (*atta koto*), "things that might happen" (*arieru koto*), and "things that could never happen" (*arien ai koto*) co-exist (quoted in Isozaki and Komatsu 2020, 61). *Phantom Fighter* slowly but surely leads its player into such a space of ruins. Apocalyptic images of what *did* happen flicker into view alongside popular cultural memories of the aspirational, prosperous and progressive Japan that *might* exist (which, of course, seemed as if it could *never* happen). Underlying *Phantom Fighter* is a layer of ruined space and the revelation of memories of Japan's own undeath. This trauma-tinged memorial substrate emerges in 1988 with *Phantom Fighter*'s iteration of the zombified *yōkai* and forms a thread that continues to run through Japanese zombie videogames in the early- to mid-1990s.

Cataloguing *Sweet Home's* Frescoes and Frights

Where *Phantom Fighter* uses its undead monsters to lure players into an inexorable confrontation with memories of apocalypse, *Sweet Home* charges players more directly with the task of uncovering and capturing spectres of a cataclysmic past. Released for the same home games console as *Phantom Fighter*—Nintendo's Famicom—and utilising the same 8-bit graphical palette, *Sweet Home* nonetheless diverges significantly from the earlier zombie game in terms of its play style. *Sweet Home* is considered one of the earliest examples of a digital role-playing game (RPG), a genre which emphasises rich narrative detail, identification with characters and the development of characters' skillsets and statistical attributes. In place of *Phantom Fighter*'s lone priest, a figure with minimal characterisation, *Sweet Home* invites players to switch between a cast of five distinct characters, each with their own strengths and weaknesses, as well as controlling one unique item. This party of five—Kazuo, Taguchi, Akiko, Asuka, and Emi—are investigators who set out to explore the secluded and deserted mansion of Ichirō Mamiya, a deceased painter, in order to locate, photo-

graph and restore a number of his hidden frescoes. The expedition quickly takes a dangerous turn, as the investigators become trapped in the mansion and terrorised by the lingering spirit of Lady Mamiya, once wife to the painter, and an array of monstrous creatures allied to her. Players are presented with two related objectives: escape the haunted mansion, but not before finding the hidden frescoes.

The imperative to locate, clean (using Asuka's special item, a handheld vacuum cleaner) and document (using Taguchi's special item, a camera) the twenty-three frescoes scattered around Mamiya mansion requires a methodical approach by players. Such thorough exploration of the building means that the player is required to systematically provoke the various horrors that lurk in every room, hallway and courtyard. The monsters encountered are clearly undead in nature: reanimated skeletons adorned with scraps of hanging green flesh; crawling torsos with entrails dragging behind them; almost-human figures with half their faces torn and skull bone exposed; and stereotypically green-skinned zombies, shambling along, vomiting blood and grasping at the player. Decaying bodies, lost limbs, and poisoned and sickly flesh recall images that have, in 1989, long been shut out of Japanese cultural memory: the disfigured and deceased victims of Allied munitions in the closing months of the war (and, indeed, the victims of Japan's own brutal wartime campaigns in Asia and the Pacific). As the player reveals frescoes and gathers scraps of notepaper near these artworks, they also uncover messages that explain, among other things, the revenant Lady Mamiya's motivations. These discoveries reinforce the game's spectral connections to Japan's traumatic past. Lady Mamiya's ghostly wrath, it is revealed, is steeped in tragedy: her two-year old son fell accidentally into the mansion's furnace and was burned to death, and she kidnapped a number of children to deliberately incinerate, hoping to provide her son with friends in the afterlife. The images offered to the player through these explanations—white-hot flames taking innocent lives, and the vaporisation of bodies for an utterly senseless cause—resonate further with the needless suffering of Japan's atomic tragedies.

While Ichirō Mamiya's frescoes are the ostensible targets of the documentary efforts of the five investigators, the search for these artefacts and the provocation of hidden monsters become inseparable acts. The player, ultimately, undertakes a methodical indexing of undead horrors, discovering every liminal reanimation, mutation, and disfiguration possible within the mansion. By staging these encounters, Mamiya Mansion gestures toward how new and existing *yōkai* come to be created, understood and disseminated. Influential folklore scholar Kunio Yanagita is credited

with ensuring the endurance of *yōkai* culture during the turbulent onset of modernity through his methodical documentation, in the early twentieth century, of individual monsters, their characteristics, and their habitats (Foster 2009, 139–40). Yanagita's encyclopaedic records ensured that *yōkai* continued to be understood, in a rapidly changing age, as important cultural commodities, and his work revealed and "positioned monsters as central to Japan's identity as a modern nation-state" (Foster 2013, 141). While revealing frescoes concealed by decades of dust and grime, players also move purposefully through the mansion in order to reveal, catalogue, and vanquish new, interactive *yōkai*. Just as Yanagita, blurring the boundaries between archaeologist and psychoanalyst, "purposefully dug up the buried monsters of the past in order to heal the trauma of the present" (Foster 2009, 157), *Sweet Home* offers its players a contemporary opportunity at memorial excavation. Using camera and vacuum (and the other unique items: lighter, first aid kit, and lock pick) players expose the game's undead and the abject visual metaphors they provide for an obfuscated and traumatic past.

As in *Phantom Fighter*, the construction of virtual space intensifies *Sweet Home*'s excavations of popular memory. Players view their characters, and the interior spaces of Mamiya Mansion, from a top-down perspective, as if peering down into a doll's house. As characters move around the mansion, its walls and rooms fade in and out of view, as the player is restricted to a narrow viewpoint centred upon the character they are controlling. This type of overhead point-of-view is a typical characteristic of Japanese RPGs, generating a specific sense of affect centred on disorientation and spatial illegibility for RPG players (Hutchinson 2019, 41). The neglected, decaying, and disconcerting spaces that players negotiate in order to find Mamiya's various frescoes, monsters and revelations appear an apt stand-in for the construction of Japan's post-war cultural memory: a memorial structure as deliberately mystifying and misleading as the painter's mansion. As the game reaches its end, the spatial and memorial illegibility is made permanent. Having confronted the mansion's many terrors, and quelled the all-powerful ghost of Lady Mamiya, a cinematic cutscene depicts the mansion crumbling into the ground and the characters being rescued. A heap of rubble and ruins signals that access to the revelations of undeath and the past is again sealed off.

Sweet Home culminates in a conclusion for its characters, and the player, that in many ways typifies the careful memorial calculations of Japan's 'long postwar.' It is possible for each of the five playable characters to die during gameplay, and in such cases their demise is permanent. For players, this results in five possible variations to the game's final scene:

if any of their characters have died during the game, they are witness to glowing blue orbs representing their souls, floating into the sky, and dialogue suggesting that the survivors abandon their documentary and professions in order to begin anew. In the situation where none of the playable characters have died, the triumphant investigators meet with their producer, celebrating the completion of their documentary. "You guys did great!" their employer exclaims, standing with his back to the group. Intoning "...except for one thing...," the man turns to face characters and player directly to reveal that he is zombified, with half the flesh of his face rotted away. In all variations, the game's conclusion appears to suggest that attempts to explore, uncover, and—most importantly—capture and disseminate repressed traumas are futile. The conservative cultivation of Japanese cultural memory will always reassert itself and extinguish accounts that illustrate the horror and undeath at the heart of the postwar Japanese imaginary. The zombified producer scene presents a further, darker commentary, seeming to suggest that even successful enterprises will be undercut by a zombified rot that surrounds those who seek truth and revelation.

The Ruptured Shōwa Era: Undead Return

Sweet Home foretells a lesson Japan would come to learn over the six years following 1989—that the horror, guilt, and tragedy of the past cannot be easily erased. Where *Sweet Home* offers us a view of tentative efforts to excavate collective memory, the final case study—*Biohazard*—illustrates a state of profound rupture, within which undeath and collective trauma run rampant. This shift in the allegorical tone of Japan's videogame living dead reflects the context of the game's release in 1996. By the middle of the 1990s, the slow-burning ramifications of the conclusion of the Shōwa era in 1989, and a series of sharp, traumatic shocks to Japanese life, had come together in a heady social, cultural, and political maelstrom. The Shōwa era, which commenced in 1926 with Emperor Hirohito's ascension to the throne, concluded with his death on 7 January 1989. For Gluck, the 'long postwar' associated with the five decades following Japan's World War II surrender was "awaiting a momentous event to end it" (1993, 93) and Hirohito's passing provided this precise point of disjuncture. The continuation of Hirohito's reign after 1945 required questions around the Emperor's personal responsibility for events during the war be deflected and overlooked, and his death opened the door to a flood of public acknowledgments of the war's brutality (for Japan both as victim

and victimiser) (Seaton 2007, 47–48) and revealed that public sentiment increasingly located responsibility for these tragedies with the former Emperor (Gluck 1993, 90). The end of the Shōwa era did not merely represent a change in calendars and terminology, but Hirohito's passing, in inviting reflection upon wartime trauma, guilt, and responsibility, had ruptured a key barricade which had repressed these matters in the national cultural memory over a nearly fifty-year period.

The sense of loss and revival of trauma brought about by Hirohito's passing was compounded by a cluster of other national convulsions in the first half of the 1990s. Japan's once envied 'miracle' economy derailed as a speculative economic bubble, fuelled between 1986 and 1990 by rampant inflation in real estate, stock, and other asset values, burst dramatically in 1991 and 1992 (Azuma 2009, 118). The event halted more than two decades of uninterrupted economic growth and inaugurated a deep economic recession (Tanaka 2014, 48). The myth of a booming economy and post-war harmony, in this fracturing moment, also gave way to harsh revelations of the true toll of such prosperity, including "widespread environmental destruction, diseases brought on by unfettered pollution, and a populace living in tiny anonymous apartments" (Foster 2009, 163). In a parallel to the bursting of the 'bubble' economy, the Japanese social system also appeared to collapse, with the start of the decade characterised by rising homelessness, widening inequality, alarming suicide statistics and increasing numbers of so-called *hikikomori* (socially withdrawn youth) (Hutchinson 2019, 122–24).

In 1995, the already grim six years that followed the conclusion of the Shōwa era were capped off by two tragedies. On 17 January, the Great Hanshin Earthquake (or Kobe Earthquake) struck in the southern part of Hyōgo Prefecture, killing six thousand people, injuring a further 44,000, and leaving hundreds of thousands homeless. With infrastructure devastated and residential neighbourhoods flattened, the earthquake "shook the image of the stable and safe society of postwar Japan" (Tanaka 2014, 48) and served as a "site of grotesque symbolism," betraying the hollowness and powerlessness that lay at the heart of Japan's post-war sense of confidence and rebirth (Rosenbaum 2009, 291). The earthquake was followed, on 20 March, by five coordinated sarin nerve gas attacks on the Tokyo subway network. Orchestrated by *Aum Shinrikyo*, a doomsday sect, the attacks were determined to be the cult's attempt to bring about apocalypse, and it represented another body blow to a fragile national psyche. Adding the final spark to the simmering trauma of earlier cataclysms of the 1990s, *Aum*'s sarin attack heralds "the ultimate end and collapse of the fictional age" that had stretched since 1945 and established

a wide-reaching mythos of harmony, prosperity and progress in Japan (Tanaka 2014, 46).

Between economic ruin, the devastation of natural disaster and domestic terrorism, the sense of "lightheartedness" that defined earlier decades in Japan, as Azuma observes, well and truly evaporated in the 1990s (2009, 19). A fragile construction of collective memory was shattered, and as the security, social, and economic apparatuses of the state were overwhelmed by concurrent cataclysms, it became apparent in Japan that the "uncanny and unknown" were still lurking in the shadows and threatening total destruction (Tanaka 2014, 51). Philip Seaton uses the metaphor of 'seismic activity' to explain the long-simmering, destructive influence of stifled war memories. During the post-war period, such memories fester and generate "geological rifts" and "divisions deep beneath the surface" (Seaton 2007, 7). The period between 1989 and 1995 sees this seismic activity build to devastating effect, with disorder across the country's social, political, and cultural milieus combining to allow once repressed wartime trauma surge to the surface. The end of the Shōwa era demanded that Japan (re)locate itself, and its collective cultural memory, in relation to historical violence and trauma (Sakamoto 2016, 254). Having failed to face up to contradictions and impossibilities created by wartime defeat and the reanimation of Japan as a zombified entity, this urgent—and violent—fracture charges popular cultural figures of monstrosity and undeath with renewed allegorical power. I argue that this historical moment—a backdrop of fracture, discord, and renewed attention to Japan's apocalyptic and post-apocalyptic experiences—directly informs the images, narratives and gameplay mechanics related to apocalypse, monstrosity, and undeath that appear in all three of my case study texts. The connection between this period of cultural and psychic rupture and the emergence of videogame zombies is established most apparently, however, in the final text I analyse in detail: *Biohazard*.

Biohazard: Hubris and the Limits of Science

Biohazard, and its array of bloodthirsty living dead, emerges as an ideal vessel for the uncertainty, angst, and disorder of 1996. The product of a period of significant technical development in the videogame industry, the game takes advantage of the hardware advances of the Sony PlayStation home console to offer players an early encounter with three-dimensional zombies in three-dimensional environments. This more detailed mode of digital representation granted *Biohazard*'s zombies new horrific licence:

bodies ambulate and swarm toward the player, blood and guts splatter across spaces, corners and shadows demand cautious attention, and weapons require careful aim in the frenzy of combat. Against the backdrop of the visceral scares now afforded by computing hardware, *Biohazard* adapts *Sweet Home*'s plot and gameplay. Again, players confront an ominous mansion setting, infested with undead monsters, littered with puzzles and secrets, and once more the game emphasises exploration and survival. Investigating the disappearance of a team of colleagues (who are in turn probing a series of grisly murders) within the secluded Raccoon Forest, four police officers are forced, after an attack by zombified dogs, to take refuge in the seemingly abandoned Spencer Mansion. Restaging *Sweet Home*'s first dramatic act, the player finds their entrance into the mansion a one-way act and, suddenly trapped in the home, a desperate struggle for survival and escape ensues.

Represented in three dimensions, *Biohazard*'s zombies are a dramatic evolution of the nascent zombies found in the two earlier case studies. Controlling one of the game's two playable characters (Officers Jill Valentine and Chris Redfield), players encounter bloated reanimated corpses tearing through tattered clothing; naked zombies with decaying and glistening flesh; plants with enormous, pulsating, sentient vines; and crows, dogs, giant spiders and snakes in varying states of mutation. *Biohazard*'s zombies take the role of the *yōkai* in moderating the border between possibility and impossibility to a dreadful extreme, viscerally challenging the taken-for-granted individuality and integrity of human and animal biological forms. These are not so much creatures that have returned from the 'other world,' as in *Phantom Fighter*, nor are they infused with the vengeful animism of a spirit such as *Sweet Home*'s Lady Mamiya. Rather, *Biohazard*'s zombies take our own, familiar subjectivities and flesh-and-bone bodies and show that we—and the animal species we share Earth with—can be taken, gruesomely, to the boundary with abject otherness and transformed. In uncovering the causes of these horrific mutations, and the circumstances surrounding the deployment of Valentine and Redfield to the Raccoon Forest, reflections of the chaotic collapse of Japan's post-war mythologies are uncovered.

Spencer Mansion, it transpires for players, is a covert research laboratory for a multinational pharmaceutical firm, the Umbrella Corporation. Under the cover of its day-to-day medical enterprise, Umbrella has been undertaking research into genetic engineering, with a view to developing an undead, humanoid bioweapon. The research, however, has gone awry and a biohazard has erupted on the site, spreading the so-called t-Virus and its infectious mutagens across victims and species. In representing

the horrific possibilities wrought by scientific misadventure, *Biohazard* touches on anxious bioethical and technological discourse circulating in Japan in the 1990s. Scientific endeavours in genetic mutation and bioengineering were popularly cast as centred on a dangerous hubris, borne of a seeming commitment in the national psyche to pursue prosperity and progress at all costs (Hutchinson 2019, 153). In a country that General Douglas MacArthur, arriving to lead the Allied occupation, compared to a 'twelve-year-old child', and where a controversial (to Japanese audiences) contemporaneous American newsreel superimposed the words "the end of a country without science" over images of burnt-out ruins in Japan, science and technological progress was seized upon as a *raison d'être* for the post-war reanimation of Japan (Suzuki 2009, 33). By economically depressed 1996, however, in place of scientific advancement, "disease and pollution became part of the cultural imaginary" and indelibly associated with the post-war economic miracle (Foster 2009, 197). Environmentally induced health problems, including illnesses brought on by pollution and contamination, had been revealed as the cruel flipside of unmitigated economic progress, underpinned by a much-vaunted technological and scientific prowess within Japanese industries.

In a 1996 that appeared to be the nadir of a tumultuous seven years for Japan, during which guilt-infused wartime memories had catapulted back into national discourse, *Biohazard*'s zombies also allegorise the trauma of World War II and its ending. As in *Phantom Fighter* and *Sweet Home*, it is a short leap from the rotting flesh of virtually rendered zombies to the once-repressed memories of incendiary attacks, atom bombs, *hibakusha* survivors and the *yakeato*. *Biohazard*, however, goes further and locates symptom and cause together. Human cell modification echoes the scientific experimentation with a different kind of nucleus that lies at the heart of atomic reactions and weaponry. Umbrella's shadowy research also evokes another set of odious wartime memories: human medical experimentation carried out by the Japanese military, for the purposes of developing biological and chemical warfare techniques, conducted under the auspices of Manshu Detachment 731 (also known as Unit 731). Fighting their way through Spencer Mansion, *Biohazard*'s players' first-hand, three-dimensional encounters with disfigured and zombified monsters recall the revelations of "the limits of our hold on technology and science" experienced in the aftermath of atomic destruction of Nagasaki and Hiroshima (Hutchinson 2019, 171), and also in the laboratories of Unit 731 and other frontlines of a vicious world war. The consequences of an absolute power to create, mutate and destroy are, as players are reminded, abject, self-destructive, and futile symptoms of the pursuit of 'progress.'

The intermingling sensations of trauma and guilt that drove post-war amnesia over the conduct of the conflict are mirrored in *Biohazard*'s zombies. As officers representing state authority, Valentine and Redfield undertake a journey of vivid disillusionment during the game's events. Evidence uncovered by the player through the discovery of memoranda, journals, photographic slides, and computer logs points to a deep conspiracy orchestrated between the state and Umbrella and an active and violent cover-up of the biohazard disaster at Spencer Mansion. Valentine and Redfield's assured faith in their own mission, and the motivations of their masters, disintegrates in an act of symmetry with the unravelling fictions of the post-Shōwa era. *Biohazard*'s zombies and the game's contemporaneous context share similar volatile discursive fuel. Murky American corporate interests, and a hubristic nation state, cooperate in the Raccoon Forest to obfuscate clandestine technological advances and suppress the evidence of disaster, suffering, and undeath. This fiction is directly linked, through the incendiary and allegorical power of the game's living dead, to the collapse of a popular memorial order motivated by the cosy interrelationship of American diplomatic influence, the economic drivers of a miraculous post-war prosperity and a conservative Japanese establishment all too eager to obscure the traumas of 1945 and the wartime years preceding it.

The Ludic Zombie

Surfacing over the eight years between 1988 and 1996 in the videogames I have analysed is a new addition to the centuries-long parade of *yōkai* monsters, infused with the apocalyptic trauma of Japan's twentieth century. This new monster was the ludic zombie—an interactive undead figure for the videogame age—and one that has come to be widely, and internationally, repeated and refined. The living dead creatures in *Phantom Fighter*, *Sweet Home* and *Biohazard* make an important contribution to the broader genealogy of the mediated zombie. Because of the close association between the zombie and its representation in Hollywood cinema from the 1960s onwards, this undead monster is often considered a "fundamentally American creation" (Bishop 2010, 12). Japan has been overlooked by a zombie studies focused on its American cultural influences (Vétu 2021, 116), and the broader milieu of *yōkai* has been largely invisible in scholarly discussions of the monstrous outside of Asia (Foster 2009, 17). This, as Murphy and Ryan observe in one of the few extant studies of Japanese (cinematic) zombies, has meant that an "important case study

of the impurity, hybridity, and diversity of the contemporary zombie" outside Western media traditions has been neglected (2016, 204). The nascent, ludic zombie found at the end of the Shōwa era challenges the primacy of the Caribbean-derived and Hollywood-boosted undead, and demonstrates the 'double inscription' of global and local concerns that underlies the cultural logic of popular culture in Japan and East Asia (Cho 2016, 19). In considering such an example of alterity in the cultural heritage of zombies, the heterogeneity and global relevance of these monsters is illustrated, as is, also, the consistency of their capacity to stand in for deep-seated local anxieties and trauma.

In the games I have analysed, Japanese, Chinese and Western folklore, spiritual traditions, cinematic archetypes, and both recent and distant histories are hybridised together and manifest in the videogame zombie. When addressed through the lens of the *yōkai* traditions that shape these monsters, it is clear that these early videogame zombies afford cultural and memorial engagements that are particular to the post-Shōwa context in Japan. Whether delivering priestly salvation in *Phantom Fighter*'s apocalyptic villages, unearthing and cataloguing Mamiya Mansion's wretched monsters and memories in *Sweet Home*, or confronting the worst excesses of scientific and state hubris in *Biohazard*, the videogame medium's earliest zombies all draw the player into the dark recesses of a national psyche where trauma has festered dangerously since the onset of occupation and censorship. The zombies of *Phantom Fighter*, *Sweet Home* and *Biohazard* are visceral embodiments of the anguish of atom bombs, the discursive disarray of the end-of-Shōwa era, and the traditions of ontological destabilisation found in *yōkai*.

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Bibliography

Allen, Matthew. 2022. "Robots, Kamikaze and War Memory: How a Children's Comic Can Help Us Rethink Postmemory in Postwar Japan." *The Asia-Pacific Journal: Japan Focus* 20 (10).
https://apjjf.org/2022/10/Allen.html

Ancuta, Katarzyna. 2021. "From Revenants to Vampires: The Transmedia Evolution of the *Jiangshi*." In *The Transmedia Vampire: Essays on Technological Convergence and the Undead*, edited by Simon Bacon, 146–61. Jefferson: McFarland & Co.

Ashkenazi, Michael. 2003. *Handbook of Japanese Mythology*. Santa Barbara: ABC-CLIO.

Assmann, Aleida. 2003. "Three Stabilizers of Memory: Affect-Symbol-Trauma." In *Sites of Memory in American Literatures and Cultures*, edited by Udo J. Hebel, 15–30. Heidelberg: Universitätsverlag Winter.

Assmann, Jan. 1995. "Collective Memory and Cultural Identity." Translated by John Czaplicka. *New German Critique* 65: 125–33.
https://doi.org/10.2307/488538

Azuma, Hiroki. 2009. *Otaku: Japan's Database Animals*. Minneapolis: University of Minnesota Press.

Bishop, Kyle William. 2010. *American Zombie Gothic: The Rise and Fall (and Rise) of the Walking Dead in Popular Culture*. Jefferson: McFarland.

Capcom. 1989. *Sweet Home*. Famicom/Nintendo Entertainment System. Osaka: Capcom.

Capcom. 1996. *Biohazard*. Sony PlayStation. Osaka: Capcom.

Cho, Younghan. 2016. "Historicizing East Asian Pop Culture." In *Routledge Handbook of East Asian Popular Culture*, edited by Koichi Iwabuchi, Eva Tsai, and Chris Berry, 13–23. Oxford and New York: Routledge.

Cohen, Jeffrey Jerome. 1996. "Monster Culture (Seven Theses)." In *Monster Theory: Reading Culture*, edited by Jeffrey Jerome Cohen, 3–25. Minneapolis: University of Minnesota Press.

Dendle, Peter. 2007. "The Zombie as Barometer of Cultural Anxiety." In *Monsters and the Monstrous: Myths and Metaphors of Enduring Evil*, edited by Niall Scott, 45–57. Amsterdam, New York: Rodopi.

Erll, Astrid. 2011. *Memory in Culture*. Translated by Sara B. Young. Basingstoke and New York: Palgrave MacMillan.

Foster, Michael Dylan. 2009. *Pandemonium and Parade: Japanese Monsters and the Culture of Yōkai*. Berkeley: University of California Press.

Foster, Michael Dylan. 2013. "Early Modern Past to Postmodern Future: Changing Discourses of Japanese Monsters." In *The Ashgate Research Companion to Monsters and the Monstrous*, edited by Asa Simon Mittman and Peter J. Dendle. Abingdon: Routledge.

Foster, Michael Dylan 2015. *The Book of Yōkai: Mysterious Creatures of Japanese Folklore*. Oakland: University of California Press.

Gluck, Carol. 1993. "The Past in the Present." In *Postwar Japan as History*, edited by Andrew Gordon, 64–95. Berkeley: University of California Press.

Guynes-Vishniac, Sean. 2018. "The Zombie and Its Metaphors." *American Quarterly* 70 (4): 903–12.
https://doi.org/10.1353/aq.2018.0072

Hutchinson, Rachael. 2019. *Japanese Culture Through Videogames*. London: Routledge.

Isozaki, Arata, and Sakyō Komatsu. 2020. "Ruined Cities: Isozaki Arata and Komatsu Sakyō." In *The Metabolist Imagination: Visions of the City in Postwar Japanese Architecture and Science Fiction*, edited by William O. Gardener, 53–68. Minneapolis: University of Minnesota Press.

Iwabuchi, Koichi. 2002. *Recentering Globalization: Popular Culture and Japanese Transnationalism*. Durham: Duke University Press.

Iwasaka, Michiko, and Barre Toelken. 1994. *Ghosts And The Japanese: Cultural Experience in Japanese Death Legends*. Logan: Utah State University Press.

Kee, Chera. 2017. *Not Your Average Zombie: Rehumanizing the Undead from Voodoo to Zombie Walks*. Austin: University of Texas Press. https://doi.org/10.7560/313176

Komatsu, Kazuhiko. 2017. *An Introduction to Yōkai Culture: Monsters, Ghosts, and Outsiders in Japanese History*. Translated by Hiroko Yoda and Matt Alt. Tokyo: Japan Publishing Industry Foundation for Culture.

Lauro, Sarah Juliet. 2011. "The Eco-Zombie: Environmental Critique in Zombie Fiction." In *Generation Zombie: Essays on the Living Dead in Modern Culture*, edited by Stephanie Boluk and Wylie Lenz, 54–66. Jefferson: McFarland.

Li, Michelle Osterfeld. 2013. "Human of the Heart: Pitiful *Oni* in Medieval Japan." In *The Ashgate Research Companion to Monsters and the Monstrous*, edited by Asa Simon Mittman and Peter J. Dendle. 173–196. Abingdon: Routledge.

Marionette. 1988. *Phantom Fighter*. Famicom/Nintendo Entertainment System. Tokyo: Pony Canyon.

Morris Suzuki, Tessa, and Peter Rimmer. 2002. "Virtual Memories: Japanese History Debates in Manga and Cyberspace." *Asian Studies Review* 26 (2): 147–64. https://doi.org/10.1080/10357820208713338

Murphy, Kayleigh, and Mark David Ryan. 2016. "The Japanese Zombie Movie, Cultural Resonance, and Generic Conventions." In *The Supernatural Revamped: From Timeworn Legends to Twenty-First Century Chic*, edited by Barbara Brodman and James E. Doan, 191–206. Madison: Fairleigh Dickinson University Press.

Ng, Andrew Hock Soon. 2021. "A Typological Inquiry into Asian Undead Beings, or, Why There Are No Vampires in the East." *Preternature: Critical and Historical Studies on the Preternatural* 10 (2): 218–48. https://doi.org/10.5325/preternature.10.2.0218

Opatić, Dunja. 2014. "Zombies in Revolt: The Violent Revolution of American Cinematic Monsters." [*Sic*]–*a Journal of Literature, Culture and Literary Translation* 4 (2): 1–20. https://doi.org/10.15291/sic/2.4.lc.2

Papp, Zília. 2010. *Anime and Its Roots in Early Japanese Monster Art*. Folkestone: Global Oriental.

Pruett, Chris. 2010. "The Anthropology of Fear: Learning About Japan Through Horror Games." *Interface: The Journal of Education, Community and Values* 10 (9): 21.

Rosenbaum, Roman. 2009. "Legacies of the Asia-Pacific War: The Yakeato (the Burnt-out Ruins) Generation." In *Legacies of the Asia-Pacific War: The Yakeato Generation*, edited by Roman Rosenbaum and Yasuko Claremont, 3–23. Abingdon: Routledge.

Sakamoto, Rumi. 2016. “Popular Culture and Historical Memories of War in Asia.” In *Routledge Handbook of East Asian Popular Culture*, edited by Koichi Iwabuchi, Eva Tsai, and Chris Berry, 254–64. Oxford: Routledge.

Seaton, Philip A. 2007. *Japan’s Contested War Memories: The ‘Memory Rifts’ in Historical Consciousness of World War II*. London: Routledge.

Steinberg, Marc. 2004. “Otaku Consumption, Superflat Art and the Return to Edo.” *Japan Forum* 16 (3): 449–71. https://doi.org/10.1080/0955580042000257927.

Suzuki, Sadami. 2009. “Nihon Ni Okeru Kyō No Sengoron: Current Post-War Discourse in Japan.” In *Legacies of the Asia-Pacific War: The Yakeato Generation*, edited by Roman Rosenbaum and Yasuko Claremont, translated by Roman Rosenbaum, 24–36. Abingdon: Routledge.

Swanson, Carl Joseph. 2014. “‘The Only Metaphor Left’: Colson Whitehead’s *Zone One* and Zombie Narrative Form.” *Genre* 47 (3): 379–405. https://doi.org/10.1215/00166928-2797225

Tanaka, Motoko. 2014. *Apocalypse in Contemporary Japanese Science Fiction*. New York: Palgrave Macmillan.

Vétu, Guillaume. 2021. “Animist Influence and Immutable Corporeality: Repositioning the Significance of Japanese Cinematic Zombies.” *East Asian Journal of Popular Culture* 7 (1): 115–34. https://doi.org/10.1386/eapc_00042_1

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'Death or Rebirth': Apocalyptic Borderscapes, Topographies of Exception, and Regulating Survival in Zack Snyder's *Army of the Dead* (2021)

Abstract: This contribution offers a critical analysis of Zack Snyder's *Army of the Dead* (2021) and its representation of apocalyptic borderscapes and topographies of exception. It examines how the film portrays the ethical dimensions of survival and death in the context of a zombie apocalypse, in which the border functions as a site of exclusion where subjects are not only excluded from a specific territory or the sphere of the law but also, more importantly, from the sphere of the living. The author analyzes the narrative, aesthetic, and cinematic strategies that *Army of the Dead* employs to shed light on this necropolitical dimension of the border and the ways in which this dimension is intertwined with the imaginary of survival *in* and *of* the apocalypse. In particular, the author argues that the plural and particular apocalypse(s) in the film not only expose patterns of seeming exceptionalism that mask the everydayness of biopolitical exclusion and the topographies of exception they produce but also make visible the territorial dimension of the border as a recurring instrument of bio- and necropolitical control that regulates and structures survival.
Keywords: *Army of the Dead*, Zack Snyder, zombie apocalypse, necropolitics, topographies of exception, cinema and apocalypse.

Introduction

In her "Editor's Note" to *Apocalyptica*'s second issue, Jenny Stümer argues that "apocalyptic imaginaries [...] enable moments of pausing and reflecting or instants of critique and challenge. Apocalypse as a genre of aestheticization thereby reveals itself also as a means of handling an overly complex and often disastrous present still trying to make sense of past and future" (2023, 4). While such apocalyptic imaginaries are part of a longstanding literary and cultural history, at the latest since George Romero's *Night of the Living Dead* (1968), zombie narratives have become one of the most dominant forms of cinematic representations of the end of the world. These narratives primarily unfold their critical potential via the liminal figure of the zombie which not only blurs the boundaries between living and dead, human and non-human, self and Other, but also functions as a transtemporal figure onto which present, past, and future issues can be projected. Popularized by Romero for mainstream audiences in the so-called Global North, the zombie nevertheless remains a marker for a wealth of entangled histories of racial, economic, and colonial exploitation that vastly predate its dominant imagination. In particular, as Marlon Lieber contends with reference to Tim Lanzendörfer's and Sarah Juliet Lauro's work, "[g]iven the zombie myth's historical origin, any contemporary use of the figure will inevitably be connected to the histories of the transatlantic slave trade, plantation slavery, colonialism, and their aftermaths" (Lieber 2023, 182).[1] As such, the zombie trope functions as a "convenient metaphor for any number of contemporary anxieties" (Kee 2017, 2), or even a "barometer of cultural anxiety" (Dendle 2007, 44), which tasks us with understanding these anxieties against the backdrop of the legacies of Empire and the structures of inequality and dehumanization it has produced. Zombie movies and their fictional apocalypses thus "confront us with a scenario where human life is threatened, but the apocalypse should not [only] be understood as a vision of a dystopic future but instead [primarily] as an apocalypse of the here-and-now" (Sigurdson 2017, 94). Zombie-apocalyptic imaginaries, in other words, can be understood as invitations to explore the entanglement of histories of violence and oppression and the manifestations of these histories in the present.

It seems fitting, then, that, despite being shot mostly in 2019, Zack Snyder's film *Army of the Dead* (2021) resonates deeply with the transnational visual inventory of both the COVID-19 pandemic and the various crises of mobility that migrants are facing around the globe; from infra-red thermometers as instruments of biopolitical control to quarantine/refugee camps erected to contain the virus and its potential carriers. So neatly

1 See also Sarah Juliet Lauro (2017, ix).

attuned to contemporary challenges, *Army of the Dead* serves as a spiritual sequel to Snyder's own 2004 re-imagining of George Romero's iconic *Dawn of the Dead* (1978) and presents the first project in a larger transmedia franchise. Apart from the spin-off prequel *Army of Thieves* (2021), several clips from the fictional social media channel *Guzman of the Dead 420* featured on *Netflix: Behind the Streams* on YouTube (2021), the board game *Army of the Dead: A Zombicide Game* (2024), and the immersive VR experience *Viva Las Vengeance* (2021), Netflix is currently producing a sequel called *Planet of the Dead*. Furthermore, as Snyder revealed in an interview, the franchise shares a diegesis with his *Rebel Moon* films (2023; 2024). An interdimensional portal is to play a role in the animated prequel series, *Army of the Dead: Lost Vegas*, which is currently stalled but still in development. *Army of the Dead* itself fits neatly into this playful, genre-bending assortment of transmedia texts: the highly self-reflexive film, which oscillates between comedy, action film, zombie shocker, and heist movie, is a diverting aesthetic spectacle whose carnivalesque depiction of zombified brides, bachelor(ette)s, gamblers, strippers, Elvis impersonators, and tourists playfully engages with clichéd imaginations of Las Vegas' debauchery. Its main action is set six years after the escape of a zombie—Zeus—from a military convoy in the Nevada desert, which has transformed Las Vegas into the epicenter of the zombie pandemic, now walled-off by stacked shipping containers and surrounded by heavily patrolled quarantine camps in its periphery. The film revolves around a group of mercenaries who are hired by billionaire businessman Bly Tanaka (Hiroyuki Sanada) to recover $200 million from a vault in the middle of the fortified city. However, we learn throughout the film that the true mission is the acquisition of one of the heads of one of the zombies to explore the potential of using zombies for the sinister purposes of the military-industrial complex. The team is led by former Las Vegas resident and hero of the zombie war, Scott Ward (Dave Bautista), whose daughter Kate (Ella Purnell) works as an NGO volunteer in one of the quarantine camps and helps them to enter the sealed-off city with the assistance of "The Coyote," Lilly (Nora Arnezeder). Encountering a sentient and socially organized type of zombie, the team is picked off one by one as they make their way to the vault, leaving Kate and the likable 'badass' Vanderohe (Omari Hardwick) as the only confirmed survivors of the heist and the tactical nuclear strike eventually deployed on the city by the U.S. military. Yet, as the final scene suggests, Vanderohe's survival is elusive, too. Having chartered a private plane, he discovers a bite mark on his arm just as the pilot announces their descent onto Mexico City. If other zombie narratives and the consecutive expansion of the outbreak in franchises such as *28*

Days Later or *The Last of Us* are any indication, the film's planned sequel might well confirm that his fate is sealed and that sealing off Las Vegas will not suspend the global zombie apocalypse forever.

Despite this final breach of the quarantine, however, *Army of the Dead* is primarily invested in depicting an apocalypse that is indeed locally contained. The multiple borders in the form of containers, fences, gates, and quarantine camps, erected in concentric circles around Las Vegas, seem to have created intricate structures of control and restriction through which the outbreak temporarily remains a locally specific occurrence. In so doing, the film's apocalypse deviates significantly from popular (mis)conceptions and imaginations of the 'end of the world': while the apocalypse has often been framed as a 'singular and universal' event, Jessica Hurley and Dan Sinykin suggest that apocalypses, in the multiple, are more productively understood as "plural and particular" (2018, 453). They argue that "we must ask not only *when*, but—because it is, among other times, now—*where* is it happening, and to whom, and by whom? We must ask, with regard to the apocalypse, questions posed by slow violence, structural violence, environmental violence, and colonial violence" (Hurley and Sinykin 2018, 453–454; my emphasis). These spatio-temporal dimensions of the plural and particular apocalypse and their relation to structures of violence will be a guiding principle for my analysis. In *Army of the Dead*, the zombie apocalypse is, on the one hand, particular in that it is strictly limited to the city space of Las Vegas. On the other hand, various clues in the film suggest that the characters are caught in a time loop in which the apocalypse and their fight for survival are repeated endlessly.

Taking these considerations as my starting point in this article, I will focus on the film's plural and particular apocalypses to make visible the territorial dimension of the border as a recurring instrument of bio- and necropolitical control that regulates and structures survival. In particular, I will argue that *Army of the Dead*'s depiction of a spatially contained and temporally repeating apocalypse foregrounds both locally, and thus particular, practices of necropolitical bordering as well as the structural, and thus plural, pervasiveness of states of exception as a discursive paradigm which allows for the systemic marginalization of certain populations. In other words, the film's depiction of (endless) encampment and bordering exposes the underlying mechanisms that continue to normalize the unequal distribution of vulnerabilities, life, and death. In light of this pervasiveness and given the film's open ending and its intimation of a transnational trajectory that potentially extends the outreach of the apocalypse into Mexico, Vanderohe's provisional survival, then, is crucial: it is not only a marker of the fragility of bordering's false promise of containment and

security but also of the consequences of structural violence that is not contained but hegemonically displaced onto other(ed) populations. In the following, I am particularly interested in the role that "topographies of exception" play in the production of this violence through their delineation of seemingly clear boundaries between inside and outside, death and survival, and apocalyptic and non-apocalyptic space.

Producing Topographies of Exception in the Apocalyptic Borderland

As Stefanie Fishel and Lauren Wilcox explain, "[b]ecause zombies become forms of not-life to be managed and exterminated outside of the bounds of 'normal life' and law in apocalyptic settings, they provide a way into thinking through the common adoption of 'bare life' produced in a state of exception" (2017, 343). With *Army of the Dead*, I understand this production of 'bare life' as entangled with spatial practices and questions of territoriality. This entanglement of territoriality and the law—or rather, the suspension of the law for certain subjects based on territorialized identity and notions of (non-)belonging during allegedly exceptional moments of crisis—can productively be understood through the lens of what Sylvia Mieszkowski, Birgit Spengler, Julia Wewior, and I have called "topographies of exception" (Espinoza Garrido, *et al*. 2021, 244). These "specific sites of literal or metaphorical inclusive exclusion" (2021, 244) describe the spatial dimension of 'bare life' politics, which Giorgio Agamben defines in *Homo Sacer: Sovereign Power and Bare Life* (1998). For Agamben, what is "inside" the sphere of law, i.e., *bios* as the qualified form of life led by a member of the *polis* or a citizen, is always constituted in relation to the sphere "outside" of the law, i.e., "bare life" (cf. Agamben 1998, 1). In *Homo Sacer*, Agamben draws upon the eponymous figure of Roman law, who is banned from the *polis* and may thus be killed by anybody but who may not be sacrificed in a religious ritual, as the personification of bare life (cf. 1998, 1). While Agamben distinguishes between what is inside the sphere of the law and an outside from which the law withdraws, the territoriality of the law transcends this supposedly clear-cut dichotomy since the *homo sacer* still maintains an exceptional relation to the law precisely by being excluded from it. Agamben describes this mechanism as an "inclusive exclusion" (1998, 8), and a "relation of exception" (1998, 18), which he defines as "the extreme form of relation by which something is included solely through its exclusion" (1998, 18). Such a relation can manifest in different forms, either by denoting what is included in or excluded from a political community

such as a nation-state or by denoting a suspension of the law that occurs *within* a community but that applies only to a part of its population. As a spatial imaginary, topographies of exception draw attention to the ways in which such structures of violence are linked to spatial practices: drawing and enforcing borders, claiming territory, and regulating access to spaces. While we often think about these practices in the context of territorial nation-states, topographies of exception are matters of life and death not only for many undocumented migrants attempting to cross these borders but also for marginalized populations within these states.

Not least since his infamous condemnation of the far-reaching measures taken by many governments in response to the COVID-19 pandemic as an "invention of an epidemic" (Agamben 2020), however, Agamben's work has triggered a wide range of scholarly criticism.[2] In the context of this article, it is not only Agamben's trivialization of the pandemic but also his relative neglect of race and the legacies of colonialism for the conceptualization of bare life that demands careful attention. As Alexander Weheliye contends, "the concepts of bare life and biopolitics [...] are in dire need of recalibration if we want to understand the workings of and abolish our extremely uneven global power structures defined by the intersections of neoliberal capitalism, racism, settler colonialism, immigration, and imperialism, which interact in the creation and maintenance of systems of domination; and dispossession, criminalization, expropriation, exploitation, and violence that are predicated upon hierarchies of racialized, gendered, sexualized, economized, and nationalized social existence" (2014, 1). While I agree with this critique and particularly value Weheliye's notion of "racializing assemblages" (2014, 1) that he puts forward as an important addition *to* and necessary re-framing *of* Agamben's work, I find that Agamben's implicit and explicit focus on space and spatiality is productive for my analysis as it draws attention to the spatial and territorial dynamics of the nation-state.

Against this backdrop, it is crucial that *Army of the Dead* does not depict the fortification of 'national' borders in response to the fictional apocalypse depicted in the film. Instead, it focuses on the establishment of borders *within* the current geographical territory of the United States. The film's primary setting, the McCarran quarantine zone, is situated in the heart of the Mojave Desert in Nevada, enclosing the sealed-off city of Las Vegas. This zone is introduced to the audience through a sign that reads "Warning: Now Entering Quarantine Zone. U.S. Constitutional Law not in effect" as Ward and his team of mercenaries pass a heavily armed military guard with a tank along the roadside on their way to Las Vegas (41:40 min). Both the sign and the familiar military presence at this newly

2 For a more detailed discussion of Agamben's neglect of race and colonialism as well as the Orientalizing tendencies in his works, see Amarasinghe and Rajhans (2020); Basevich (2012); Bignall and Svirsky (2012); Reynolds (2017); Rifkin (2012); Sundberg (2015); Schueller (2009).

established border seem to imply a sense of clarity and definitiveness—a distinct division between inside and outside, and thus between legal protection and its absence. However, the placement of the tank and the sign appears arbitrary. As revealed by the extreme long shot in this scene, they occupy a seemingly random location in the middle of nowhere. There are no visible alterations in the environment that would account for their positioning. Here, the film underscores that the spatial relationship of this border to the land is not enacted due to a preexisting notion of territory bound by a national imagination. On the contrary, the border is drawn to distinguish the U.S. from its imagined 'Other,' which exists—like the *homo sacer*—only in relation to its exclusion. The function of this mismatch between the border and its location is thus twofold: on the one hand, it draws attention to the invisibility of crises that may necessitate the creation of new borders as a means of protection. While the physical consequences of an infection with the zombie virus are clearly visible on the infected human body, the virus itself is not. Hence, the location of the border may seem arbitrary, but may be based on elaborate considerations to ensure human survival. It is geared towards protecting human populations from an invisible threat as it demarcates a specific distance to the quarantined zone that is deemed medically secure. Infection, *Army of the Dead* indicates, is then essentially a crisis of spatial proportions, and survival a spatial operation.

On the other hand, the border in this scene makes visible the fluidity of legal thresholds, highlighting the suspension of the law as a feature of topographies of exception that are, however, not limited to specific geographical limits. The radical suspension of U.S. constitutional law in response to the zombie outbreak portrayed in the film challenges the alleged universality of law and the protection it provides. It is the interpretation of 'reality' and the political designation of legal and extra-legal frameworks in attempts to enforce it, which create topographies of exception in the first place. The drastic transition from supposedly lawful U.S. territory towards a sphere beyond the law—a 'bare life' area if you will—achieved by simply delineating a new border, then, suggests that the regime of 'inclusive exclusion' has existed within the original territorial boundaries of the U.S. from the outset. Where territorial and legal belonging to the nation-state and the survival of its citizens depends on the state's definition of exceptional circumstances, in *Army of the Dead*, the overall U.S. American territorial integrity is portrayed as precarious and provisional at best.

Such volatility affects the film's depiction of governmentality as well. As the government's watchdog, Martin (Garrett Dillahunt), suggests in Las

Vegas, "it's not a free country. We're not in America anymore. Haven't you heard?" Ward then ironically challenges him by pointing out that this "technically makes it an even freer country, right?" (59:54–59:58 min). Resonating distinctly with legal suspensions across territories such as Puerto Rico, Guam, or Guantanamo Bay, which are exempt from many of the U.S.' legal provisions but not its exercise of military, imperial and (settler-) colonial power, Ward points to the 'technical' function of border provisions that can be deployed or withheld. As Mireille Rosello and Stephen F. Wolfe contend, with reference to the works of Chiara Brambilla (2010) and Prem Kumar Rajaram and Carl Grundy-War (2007), each "borderscape is the result of processes of differentiation that are continuously challenged by human interaction […]. These processes of bordering produce spatial effects that do not begin or end at demarcation lines drawn on maps" (2019, 7). These processes, *Army of the Dead* implies, are directly imbricated with lived experiences, both as a structuring device and as an instrument of biopower and necropower. If the border "appears as the intersection between politics and death, as it distinguishes between valuable and disposable lives" (Stümer 2018, 21), Ward's insistence that this distinction to the U.S. government is only 'technically' of concern not only contests the notion of the U.S. as the epitome of freedom but also implicitly raises questions concerning the universality of freedom within the U.S. as well: how do we define freedom? To whom does it apply? Under which circumstances and at which cost? The apocalyptic scenario in *Army of the Dead* brings these questions to the fore without resolving them.

Instead, the film depicts how the government in the fictional diegesis moves the territorial boundaries of the U.S. to legalize the exception, i.e., the suspension of the law, in response to the crisis that the zombie outbreak constitutes. In so doing, it draws attention to borders not as stable entities or fixed lines of demarcation but as practice and performance that can be re-structured and re-negotiated based on the 'perception' of emergencies and threats to public safety. As such, the apocalyptic borderscape in *Army of the Dead* highlights that topographies of exception and mechanisms of inclusive exclusion are not primarily connected to fixed notions of territoriality but to social and political discourses that govern how processes of territorialization are structured. Despite its relational, contested status, however, the movie also emphasizes the border's consequential impact on (humanity's) survival. Hence, in *Army of the Dead,* the border is a site of exclusion where subjects are not only excluded from a specific territory or the sphere of the law but also, more importantly, from the sphere of the living. In the following, I will analyze narrative, aesthetic, and cinematic strategies that *Army of the Dead* employs to shed

light on this necropolitical dimension of the border and the ways in which this dimension is intertwined with the imaginary of survival in and of the apocalypse.

Regulating Survival: The Necropolitics of the Border

Michel Foucault's notion of "biopower," which he introduced in *The History of Sexuality*, is perhaps one of the most influential concepts that scholars have used to describe the workings of governmentality in the modern nation-state. According to Foucault, the introduction of a set of "techniques for achieving the subjugations of bodies and the control of populations" (1990, 140) in the eighteenth century marks the beginning of an era of biopower, and thus of new forms of regulating bodies and (political) subjects. As Michael Hardt and Antonio Negri explain, biopower "refers to a situation in which what is directly at stake in power is the production and reproduction of life itself" (2001, 24). While "biopolitics and biopolitical concerns play into all aspects of the functions of a state" (Byers and Stapleton 2015, 2), their workings are particularly visible at the border as the threshold between different bodies of populations. The border as a biopolitical instrument, then, not only regulates the movement of people but also their survival.

This regulation of life and death can best be understood through Achille Mbembe's concept of necropolitics. Building upon but also challenging Foucault's conceptualization of biopower, Mbembe has proposed "the notion of necropolitics, or necropower, to account for the various ways in which [...] vast populations are subjected to living conditions that confer upon them the status of the *living dead*" (2019, 92).[3] In line with Mbembe's argument, the unspoken function of the border is to determine who survives by assigning value to human life. It repeats what Stümer calls the "symbolic, imaginary, and psychological boundaries that stage spectacular forms of sovereignty and division, firmly anchored in practices of racialization and concerned with the unnerving regulation of life and death" (Stümer 2018, 21). In *Army of the Dead*, this necropolitical dimension of the border as a site where survival is regulated becomes tangible through the encounter with another form of the "*living dead*" (Mbembe 2019, 92): the zombie. As Stefanie Fishel and Lauren Wilcox suggest, zombies can "materialise as racialised objects of extermination and management, subject to biopolitical and necropolitical violence" (2017, 343). The movie parallels these forms of biopolitical and necropolitical violence which not only materialize in the figure of the zombie but also in the

3 I am following Ariadna Estévez's (2018) argument that biopolitics and necropolitics are not mutually exclusive but interlinked concepts.

apocalyptic borderscapes and their negotiation in the film. Before moving to these borderscapes, I briefly want to trace how the film's sentient Zombies are already inherently self-reflexive specimen, bridging any clear distinction between the living and the dead, the human and the nonhuman by default.

The sentient zombies in the film pay homage to Richard Matheson's viral vampires in his novel *I Am Legend* (1954), which helped to popularize the imagination of a global apocalypse caused by the outbreak of a disease. In the novel's later film adaptations, *The Last Man on Earth* (1964), *The Omega Man* (1971), and *I Am Legend* (2007), these vampires become ever more zombie-like but are often depicted as social beings whose community is organized hierarchically but also through kinship structures. Other texts in which we encounter such sentient and occasionally even social zombies are M. R. Carey's novel *The Girl with All the Gifts* (2014) and its 2016 movie adaptation, the comic book series *iZombie* (2010–2012) and its TV show adaptation (2015–2019), or George Romero's *Land of the Dead* (2005), in which the formerly mindless zombies in Romero's 'Dead Series' are shown to have evolved into more organized and socially developed beings. While the variations of sentient zombies on page and screen are countless,[4] they often have in common that they complicate the already complex relation of the liminal zombie figure to questions of identity and Otherness. In the context of the apocalypse, they also offer the potential to imagine "a planet free from violent anthropocentrism" (Hamilton 2021, 290) and negotiate the implications of humanity's (non-)survival in these new interspecies constellations. In his analysis of *The Girl with All the Gifts*, Hamilton introduces the term "anthropocalypse" to describe how such imaginations can expose "the hubris of the phrase 'the end of the world,' typically employed to examine potential apocalypse scenarios. The anthropocalypse is the end of the human elitism as the dominant organism on earth, either through complete eradication or as a casualty of evolution, or a combination of both" (291).

The border as the barrier between life and death, then, is established throughout *Army of the Dead* as the structuring principle, both within the figure of the sentient Zombie, but also spatially and aesthetically. Fences and barriers of all kinds are not only visible as markers of shifting lines of social, political, and geographical demarcation in various scenes. Already in the opening scene, the visual aesthetics of the border are dominant. The very first sentences we hear in the film are a crackling radio message: "Gatekeeper, this is Mothership. The Four Horsemen are on the gallop. You are a go to open the stable door" (00:18–00:25 min). The foreshadowing reference to the biblical horsemen brings forth the cataclysm of the

4 For a detailed discussion of the history and development of the sentient zombie, see also Gardner (2020).

apocalypse in Christian belief. But it is paired not only with the notion of gatekeeping but also with the aesthetics of the border: the first frame we see is the image of a heavily armed soldier with barbed wire and a fence in the blurry background, followed by more barbed wire, boom gates, a watch post, multiple "restricted area" and "no trespassing" signs as well as more heavily armed guards. This familiar aesthetics of the increasingly militarized border and the knowledge viewers bring with them about the genre conventions of zombie movies—secret high-security government facilities hardly remain secret or secure—draw attention to the invisible threat and the apocalyptic potential that seems to be lurking in this scene. Hence, even before we know anything about the (un)deadly cargo of the military convoy that is about to embark from this facility in the infamous Area 51, both audio and visuals instill the tension between spatial borders and the threat of the apocalypse as the overarching impetus of the film. "If there is an allegorical relation at play between [apocalyptic zombie] movies and their historical conditions, it isn't as stand-ins for the limit-case of what already is the case," as Evan Calder Williams suggests. Rather, he argues, these movies "are the closest articulation we can get of the structures of totality underpinning this. Not a mirror but a busy prism" (2011, 214–215). *Army of the Dead*'s foregrounding of the inextricable link between the border as a structuring principle of the film and the cultural imaginaries of the apocalypse, thus, tasks us with examining the systemic structures that underpin the necropolitical workings of border regimes.

According to Scott Schaffer, "underlying and undergirding the necropolitical system described by Mbembe is a *necroethics*, a set of ethical orientations and social relations that empower some individuals in our society to expose others—Others—to death" (2021, 44). This ethical dimension of necropower is represented in *Army of the Dead*'s depiction of the border's material establishment as part of the film's exposition. The long montage following the opening scene depicts the unfolding of the zombie apocalypse in the city of Las Vegas after the predictable escape of the convoy's zombie. In what seems like a conventional post-2000 Hollywood-style exposition, the film introduces us to its main characters and offers a brief visual summary of key events to prepare the film's setting. Among these events is the emotional reunion story of a mother (Danielle Burgio) and her child. While we do not learn anything about the character or her background—as her telling, yet impersonal name "Soccer Mom" indicates—within a few seconds, fast cuts between different scenes show how she heroically fights her way through various zombie hordes all the while searching for her daughter. Viewers are not only invited to become emotionally involved with the fate of these characters but are

led to believe that we meet one of the film's protagonists whose fight for survival will set the tone for her role in the story. Yet, Soccer Mom is stopped only centimeters from the safe zone after being reunited with her child. Trying to escape the city of Las Vegas, we see her approaching the last gap in the newly erected makeshift border wall made out of shipping containers. While it is zombies that attack the mother and thus stop her from moving forward, it is the operator of the crane—the quite literally faceless arm of the Las Vegas border regime—that ultimately decides her and her daughter's fate. The camera briefly zooms in on the mother's and daughter's desperate faces as the over-the-shoulder shot shows the crane operator's hands dropping the deadly containers onto them, and thus closing the last remaining gap in the border wall which seals off the zombified city. Focused entirely on closing the border, he does not differentiate between zombies, humans, or even the child who has not been attacked by the zombies yet. It is obvious that this scene is primarily meant as a playful yet morbid take on the conventional introduction of main characters through montage by misleading us into believing that it introduces one of the film's protagonists. The use of a cover of Elvis Presley's "Viva Las Vegas" which is playing while mother and child are being crushed suggests as much.

In scenes like this, *Army of the Dead* engages most explicitly with zombie narratives' potential to negotiate structures of (hyper)capitalism and their entanglement with histories of racial and colonial exploitation, juxtaposing the flow of goods and capital and the flow of human bodies.[5] By encouraging us to feel empathy and thus eliciting an affective response to the characters' fate, *Army of the Dead* highlights the violence of the border from its start. The film here explicitly uses the trope of the white, innocent child, a powerful tool in hegemonic social, political, and media discourse particularly in a post-9/11 era. As Elizabeth Anker argues in her discussion of literary and political reactions to 9/11 and its aftermath, the innocence of the child stands in as a "metonym for that of the nation" (5). In novels such as Jonathan Safran Foer's *Extremely Loud and Incredibly Close* (2005), Don DeLillo's *Falling Man* (2007), or Cormac McCarthy's *The Road* (2006) and its Hollywood adaptation (2009), the trope of the innocent, and decidedly white child becomes a central figure in imagining the trauma of the nation as it offers ample potential for empathy within the racialized affective economy of the U.S. Within this economy, the white, innocent child is perhaps one of the most poignant examples of a life that is framed as a "grievable life" in Judith Butler's sense. *Army of the Dead* utilizes these connotations to break with Hollywood conventions and to challenge the necroethics of the border. In so doing, it prompts

5 For the use of the zombie as a metaphor for capitalist critique, see, for example, Lauro and Embry (2008); Bang Larsen (2017); Vint (2017); Giroux (2011), or McNally (2011).

us to re-think why border regimes can "empower" (Schaffer 2021, 44) some individuals to determine the survival of other humans. While border regimes in fact disproportionately affect people of color, here, our affective engagement with the white, innocent child is used to exemplify the brutality of the border as well as to expose the necropolitical dimension inherent in the erection of (all) borders.

Throughout the film and, in fact, the whole franchise, this investment in depicting borders as a matter of life and death is continued. As an integral part of the *Army of the Dead*'s heist plot, the penetration of borders that stand between the team and the vault not only drives its action but constantly marks access to (more secure) spaces as a prerequisite for survival. In particular, the necropolitical dimension of impenetrable borders either grants or revokes the possibility of survival. In *Army of the Dead*, for instance, Martin intentionally locks Chambers (Samantha Win) in with a zombie horde, effectively killing her, whereas Vanderohe only survives (for now) because Dieter (Matthias Schweighöfer) sacrifices his own life and locks Vanderohe in the vault to protect him from the oncoming zombies. By contrast, in *Army of Thieves* (2022), the designer of the safes, Hans Wagner, dies precisely because he locks himself in his final creation, an impenetrable safe called *Götterdämmerung*. He chooses his own death through his own containment. While the function of the border is thus shifting throughout the franchise—either ensuring or revoking the possibility of survival—all of these texts establish a close connection between borders and their necropolitical function. Resonating deeply with the paradoxical function of spatial boundaries in the COVID-19 pandemic and contemporary border regimes, the film thus highlights the centrality of borders as a site where protectedness, vulnerability, and survival are regulated by those who control them.

All of this is set against the backdrop of *Army of the Dead*'s allusions to a time loop in which different versions of the movie's *particular* apocalypse are unfolding again and again. When the team members enter the vault, they find a group of skeletons dressed in similar clothes and with similar facial features. Starting to wonder about the significance of these skeletons, Vanderohe suggests that they look like (previous) versions of themselves who have attempted to complete the mission before but failed. While we never find out whether this suggestion bears any truth, the film indulges in Vanderohe's fantasy for a moment, when a brief montage shows the previous versions and their deaths. This implied repetition not only of their deaths but also of the zombie apocalypse for all of Las Vegas is accompanied by frequent intertextual references to Richard Wagner's *Götterdämmerung* which also hint at an eternally repeating and

thus plural apocalypse. *Götterdämmerung* ("Twilight of the Gods") is the last part of Wagner's cycle *Der Ring des Nibelungen*, which is structured around the concept of cyclic time. The story begins with the creation of the magic ring forged by the dwarf Alberich out of gold stolen from the Rhine and ends with the destruction of the gods and the return of the ring to the Rhine. This cyclical narrative structure is mirrored in the predictions of the so-called Norns in the prologue. These mythical figures, similar to the witches in Shakespeare's *Macbeth*, foresee the impending doom and the return of the ring to the Rhine as a cataclysmic event that signifies the end of the divine order. Amid this apocalyptic narrative, the story also offers the possibility of redemption and renewal: at the end of the story, Valhalla, the kingdom of the Gods is destroyed, and Brünnhilde, one of the opera's central characters, not only immolates herself but also returns the ring to the Rhine, thereby breaking the cycle of greed and corruption associated with it. Her death and the ensuing apocalypse hold the promise of a new beginning where renewal can take place against the backdrop of destruction. It is in this paradoxical nexus of apocalyptic potentiality that the film's negotiation of human survival takes place. As a gesture to the plurality of apocalypses currently unfolding outside of the fictional story world—the eco-apocalypse (e.g. Heise 2020), Capitalocene (e.g. Moore 2016), the Plantationocene (e.g. Haraway 2015), the Anthropocene (Crutzen and Stoermer 2000)—the time loop and its implied warning against greed and consumption show that the potential for survival is deeply entangled with the responsibility some humans hold for creating these apocalypses in the first place. Yet, by highlighting the potential for transformation within these cycles of violence and destruction, the film's apocalyptic imaginary also challenges us to rethink what post-apocalyptic futures might look like outside of them.

In *Army of the Dead*, this transformative potential of the apocalypse is paired specifically with a negotiation of the border as an instrument of necropower. As Dieter predicts when he attempts to open the safe: "If I can open it, it will be either destruction or renewal. Death or rebirth" (1:31:17–1:31:30 min). While this binary must be complicated—destruction and renewal, death and rebirth tend to *co*-exist or even depend on each other not only in *Götterdämmerung* but in all apocalyptic fiction— Dieter's statement highlights that access to bordered spaces is indeed a matter of life and death. Moreover, the immediate cut after this scene to a TV broadcast announcing that the President has decided to accelerate the launch of the nuclear bomb onto the city also adds the threat of another impending apocalypse that awaits the characters if they cannot access the safe and leave the quarantine zone in time. Within the apocalyptic

borderscape of Las Vegas, they are thus confronted with two collapsing or overlapping apocalypses: the zombie apocalypse and the nuclear apocalypse. Particularly read against the backdrop of the implied cyclical structure of the film's narrative, the apocalypse then emerges here in its imagined plurality, echoing Hurley's and Sinykin's understanding of the plural and particular apocalypse as a call to interrogate its entanglement with structures of violence. Following this call, we have to conceptualize the film's particular and plural, imagined and implied apocalypses not only as a fictional exploration of the potentialities of the end of the world but also as an expression of the structural pervasiveness of the border's necropolitical violence and the unequal distribution of vulnerability it administers.

Vulnerability, Encampment, and Survival in Crisis

If the film's suggestion of clear-cut borders is from the outset a ruse to outline how practices of bordering translate crises into necropolitical topographies that determine human survival, it follows that the materially sound container wall constructed in the opening montage is—conceptually—no less porous. The wall, as it turns out, consequently becomes the frontline in a wider quarantine zone that brings to the fore the connection to broader issues of migration, encampment, and social justice. A mere minute after Soccer Mom's demise, a fictional show on Scott Ward's TV screen draws these aspects together. In the discussion, infamous former White House Press Secretary and Communications Director under President Donald Trump, Sean Spicer (played by himself), and former Chair of the Democratic National Committee, Donna Brazile (also played by herself) debate whether the people held in the quarantine camps near Las Vegas should be allowed to leave the area. If "[s]urvivors in zombie narratives generally do not empathize with their fellow survivors" (Fhlainn 2011, 141–142), in *Army of the Dead*, survival for humanity as a whole is already secured and thus relegated to a paradoxical position as mere political talking point within the military-capitalist risk society. While Spicer argues that the quarantine camps are "essentially a government-funded health care solution" (16:54 min), Brazile claims that the inhabitants of these camps

> are political prisoners, just people the government doesn't want on the streets. You know as well as I do, if you have questionable immigration status, advocate for gay rights or abortion, the next thing you know,

> they have a temperature gun at your head, are dragging you out of your house or your car under the guise of public safety (17:19 min).

To make her case, she thus invokes images that combine physical violence, medical equipment, as well and struggles for social justice. Although we need to be careful not to equate reasonable and necessary protective measures that governments have to take against the spread of infectious diseases with other forms of physical and state violence, her statement is useful as it draws attention to the underlying biopolitical and social aspects of regulating survival as well as to the unevenly distributed vulnerability to state and biopower that shapes the reality of many marginalized communities and undocumented migrants in particular.

As Judith Butler's work has shown, vulnerability is not an intrinsic characteristic of some human bodies but is discursively constructed and thus shaped by systemic power structures and social relations (2004, 32; see also Madarová, *et al.* 2020, 12). "We are," Butler argues, "never simply vulnerable, but always vulnerable to a situation, a person, a social structure, something upon which we rely and in relation to which we are exposed" (2020, 46). The particular vulnerability to the arbitrariness of state actors and their biopolitical instruments that Spicer and Brazile debate is depicted as closely entangled with the medical discourses and notions of encampment that pervade *Army of the Dead*. In the film, the two different facilities—the Barstow Quarantine Center and the Las Vegas McCarran Quarantine Camp and Detention Facility—emphasize that, despite their local specificity, all camps share similar characteristics as biopolitical hubs. In addition to genre staples such as heavily armed guards, barriers, boom gates, fences, cameras, and other surveillance equipment, in both camps, we also see a wealth of medical instruments, all of which are used to control and regulate the bodies of the encamped population. When we are first introduced to the McCarran Quarantine Camp in an aerial shot, it is covered in darkness, the burnt-out hotels of the Las Vegas strip towering over the perimeter of white tents, and busses rolling in and out of the facility. The depiction evokes common medializations of the border camp as a transit zone, as both a refuge and a detention site for those transgressing borders into presumably safer havens, but the ensuing PA announcements in both camps stress that the detainees' threatening transgression is not only spatial but also medical. Calling for "health clearance cards" (17:31–17:46 min), announcing "a full health inspection," or regulating access to certain areas according to a "green health-clearance sticker on your ID card," *Army of the Dead* directly connects biopolitical enforcement with contemporary politics when it also

designates the camp as a "zero-tolerance facility" (38:30 min). The film here mimics the Trump administration's infamous zero-tolerance policy, which was introduced in April 2018. This deterrent-based policy legalized the detention and criminal prosecution of every migrant, asylum seeker, and refugee attempting to cross the U.S.-Mexican border anywhere other than at an official port of entry, which often resulted in the forceful separation of children from their parents or the detention of entire families. Such forceful separation of children from their parents is mirrored here in the separation of Geeta (Huma Qureshi) from her two children, which is the driving force behind Kate's decision to enter Las Vegas with her father Scott and the other mercenaries. As such, *Army of the Dead* challenges the all too familiar legal and discursive efforts to brand migrants as criminals. The similarities between the visual and acoustic environments in the two camps moreover highlight that they are both part of an elaborate biopolitical network of different facilities that help to direct the flow of (migrant) bodies. While there are local specificities to each site, they are located not only in spatial proximity to each other but, more importantly, within the same biopolitical and discursive framework, establishing encampment as a structuring principle that helps to metastasize these camps into the U.S. American heartland.

Furthermore, the above-mentioned announcements reveal that the workings of biopower in the film function by interweaving access to mobility and space with medical discourses and questions of health as well. While biopower is always concerned with "the administration of bodies and the calculated management of life" (Foucault 1990, 40), the health-clearance card/sticker on the inhabitants' ID cards mentioned in both announcements make the spatio-medical dimension of biopower in the film tangible. As Elizabeth Dauphinee and Cristina Masters argue, a "passport is both disciplinary power and biopower—the constant reminder of the boundary, however precarious and chimerical, between belonging and unbelonging" (2007, xiii). In *Army of the Dead*'s apocalyptic borderscape, the health-clearance card/sticker acts as a quasi-passport by fulfilling the passport's biopolitical functions. Moreover, according to Radhika Viyas Mongia, the passport historically emerged "as a state document that purports to assign a national identity rather than a racial identity—a mechanism that would conceal race and the racist motivations for controlling mobility in the guise of a reciprocal arrangement between states described as national" (2003, 553–554; see also Salter 2003, 21). Taken together, this implies that the inclusive exclusion of U.S.-American borderscapes is tacitly underwritten by biopolitical and racializing concerns for the survival of an imaginary body politic.

As such, the film's medical crisis, in which humanity's survival is weighed against the freedom of movement in the border zone, seems vaguely familiar. Such a crisis in which "existential danger" is invoked, Joseph Masco contends,

> makes a claim on being the ultimate form of crisis—a mode of collective endangerment that has historically worked in the era of nation-states to define the boundaries of the community and focus the responsibilities of government. To evoke an existential danger is to call on the full powers of the state and society in the name of self-preservation" (2017, 66).

If the invocation of existential crisis functions as "a mode of political mobilization" (Masco 2017, 65), then the political responses it mobilizes are undergirded by spatial practices and border regimes which help to delineate the limits of this (imagined) community. As the COVID-19 pandemic has shown, such responses which severely restrict movement in and between a vast number of states based on distinct bio-medical markers have structurally mirrored and expanded biopolitical encampment and border regimes unto "their own" populations which have already been in place for a vast number of refugees and racialized populations around the globe. Indeed, "the coronavirus has fueled already existing debilitating economic and social inequalities" (Nanda 2021, 120) and in doing so exposed "the wildly exaggerated and grotesque disparities in how illness, death, and suffering are unevenly distributed" (De Genova 2021, 239). Border closings have played a crucial part in both amplifying but also making visible these mechanisms of structural inequality, being among the first measures adopted by a range of governments (Ramsari 2021, 102). Consequently, the medical moment of crisis has also produced "desirable subjects of rights [who] are redefined and entitled, based on legal membership in the national community" (Ramsari 2021, 102). As Michael J. Ryan argues, this has produced a form of citizenship that "has taken on an increasingly territorialized identity" (2021, 87), often drawing upon pre-existing institutional mechanisms of Othering, when threatened by a supposedly "foreign" virus whose presence reduces human beings to (potential) carriers. For many racialized communities, and undocumented migrants in particular, the COVID-19 pandemic has intensified but also highlighted the continuous state of exception that governs encampment and migrancy. It is often merely a continuation and intensification of pre-existing biopolitical and racialized exclusions. In other words, as Birgit Spengler, Sylvia Mieszkowski, Julia Wewior, and I summarize, "[t]he contrast between the very visceral

and *exceptional* experience of crisis, which the pandemic presents for much of the population, on the one hand, and the risks to which migrant bodies are exposed *regularly*, on the other, [...] fundamentally complicates our understanding of crisis" (Spengler, *et al*. 2021, 129; my emphasis). In *Army of the Dead*, this tension is mediated via the movie's portrayal of medically manufactured topographies of exception but also through its apocalypse that is both plural and particular. While the fictional crisis in the film—the zombie apocalypse—is spatially contained, it is also plural in its endless repetition in the time loop. It demonstrates that the seemingly exceptional (real and imagined) borderscapes are undergirded by mechanisms of exclusion and marginalization, and that equal protection by "the law," whether national or international, has been fictitious long before the COVID-19 pandemic—and long before the apocalypse the movie imagines. The particular and plural apocalypse(s) in the film, then, expose(s) patterns of seeming exceptionalism that mask the everydayness of biopolitical exclusion and the topographies of exception they produce.

In the broader context of the apocalypse as an exceptional moment of crisis, *Army of the Dead* addresses how crises intersect with and aggravate other forms of vulnerability and structures of marginalization and racialization. As the works of Sarah Juliet Lauro (2017), Chera Kee (2017), and many others have shown, zombie apocalypses are *per se* entangled with structures of racialization as they "repackage the violence of colonial race war" (Canavan 2010, 439). Against this backdrop, the apocalyptic borderscapes in the film also mirror the function of borders within what Ajamu Baraka calls the "racial management process" (2019, 14) of the U.S. The facts that the PA announcements in the quarantine camps are also made in Spanish, and that Burt Cumming, one of the camp security guards and the villainous personification of the state apparatus, uses Spanish phrases and Latinx stereotypes to humiliate the camp's inhabitants, further underwrite the many allusions that the film makes to undocumented migrants from South and Central America and their precarious mobilities. Similarly, the film draws attention to the gendered vulnerabilities and the ways in which these intersect with the medical discourses and border regimes in the film. In a heated conversation between Cummings, camp inhabitant Geeta, and NGO volunteer Kate, Cummings threatens the women for challenging his behavior: "You know," the camp guard tells them provokingly, "the first sign of infection is belligerence and actions outside of social norms" (19:36 min). As the camera moves closer and closer towards the women, intensifying the sense of entrapment that this scene evokes, Cummings draws a thermometer gun—a firearm's medical and equally phallic equivalent—to measure the women's body temperature,

not before 'offering' Kate to use the rectal thermometer instead. While their body temperature is still within the normal limit, after the encounter, Geeta warns Kate that she must be more careful as the guard could easily make her disappear: "All he has to say is that you dropped a degree, and nobody would question it" (20:15–21:06 min). In this scene, Cumming's gendered abuse of power, i.e., the gendered violence with which the medical equipment and the verbal threats penetrate the women's physical and emotional boundaries, is presented as entangled with medical discourses. Echoing Foucault, the movie suggests that medical facts are closely intertwined with mechanisms of knowledge production and power. For the women, they are also a matter of life and death. Through its depiction of this medicalized and gendered apocalyptic borderscape, *Army of the Dead* brings these entanglements to the fore and highlights the unequal distribution of vulnerability that they engender and exacerbate. In these constellations, survival emerges as a radically contingent concept: while human survival is invoked as the ultimate goal, individual human beings are relegated to the most precarious positions by the very systems that claim to protect human lives. For the most vulnerable populations in the film, then, survival is a resource to which access is continuously denied.

Conclusion: Death *and* Rebirth?

The sealed-off city of Las Vegas in the *Army of the Dead* is not only the epicenter of the zombie outbreak but also a metonymic microcosm that revises U.S.-American narratives of exceptional crises: It highlights that exclusionary mechanisms are not merely a response to exceptional moments of crisis but deeply engrained in the structural make-up of the U.S. By juxtaposing a spatially contained and temporally repeating apocalypse, the film exposes the particular practices of necropolitical bordering as well as the structural pervasiveness of states of exception which often obscure the everydayness of bio- and necropolitical exclusions. *Army of the Dead*'s depiction of apocalyptic borderscapes as topographies of exceptions emphasizes that the necroethical dimension of the border is linked to and facilitated by spatial practices that contribute to, normalize, and often mask the differential allocation of vulnerability among different populations far beyond this particular imagined apocalypse. As such, the film uses Las Vegas's spatial arrangements to make visible the historical continuities of U.S. border regimes. Simultaneously, its narrative temporal continuity—the deferment of one apocalypse to the next—draws attention to how mechanisms of exclusion travel across multiple spaces,

narrativizing them as locations of crises in which rigorous protocols of regulation are installed. *Army of the Dead*'s insinuation that its numerous apocalypses will be responsive to spatially distinct forms of oppression opens up the potential to address this seemingly singular world order in its particular manifestations. The envisioned apocalypse of Mexico City evoked by Vanderohe's contingent survival, it implies, may be positioned alternatively to its Las Vegas counterpart, and might well attend to a range of different 'oppressions' that are brought to the fore via the zombie. As such, *Army of the Dead*'s conceptual forward propulsion is an attempt to envision the affordances of its end-of-world mythology.

Ultimately, this continuous cross-referencing, by which cinematic time and space transparently produce each other over and over again, not only functions as a critique of contemporary border regimes but also offers a trajectory for radical change given that the apocalypse as an intellectual and aesthetic project is also endowed with transformative potential: After all, apocalypses allow us "to envision the death of the current capitalist world order—and its attendant forms of white patriarchy [and] could fast-forward radical change and provide a fresh start happening instantly (Kee 2017, 50). Hence, in its critical aesthetic potentiality, the film can encourage us to imagine and create alternative futures that break with the necropolitical regimes dominating the film's fictional—and our real—apocalyptic borderscapes today. These futures, then, could offer the prospect of renewal and rebirth in which survival is also distributed more equally.

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Bibliography

Agamben, Giorgio. "The Invention of an Epidemic." *European Journal of Psychoanalysis*, February 2020. Originally published in Italian on Quodlibet. https://www.journal-psychoanalysis.eu/articles/coronavirus-and-philosophers/

Agamben, Giorgio. 1998. *Homo Sacer: Sovereign Power and Bare Life*. Redwood City: Stanford University Press.

Amarasinghe, Punsara, and Sanjay K. Rajhans. 2020. "Agamben's Two Missing Factors; Understanding State of Emergency through Colonialism and Racial Doctrine." *Open Political Science* 3 (1): 34–46.

Army of the Dead: A Zombicide Game. 2024. Guillotine Games CMON Limited.

Army of the Dead. 2021. Dir. Zack Snyder. The Stone Quarry. Netflix. https://www.netflix.com/de-en/title/81046394

Baraka, Ajamu. 2019. "Foreword: Countering the Violence of Imposed Forgetting." In *American Exceptionalism and American Innocence*, edited by Danny Haiphong and Roberto Sirvent, 12–17. New York: Skyhorse.

Basevich, Elvira. 2012. "Foucauldian Resonances: Agamben on Race, Citizenship, and the Modern State." *Sofia Philosophical Review* 6 (2): 61–79.

Bignall, Simone, and Marcelo Svirsky. 2012. "Introduction: Agamben and Colonialism." In *Agamben and Colonialism*, edited by Marcelo Svirsky and Simone Bignall, 1–14. Edinburgh: Edinburgh University Press.

Brambilla, Chiara. 2010. "'Pluriversal' Citizenship and Borderscapes." In *Transient Spaces: The Tourist Syndrome*, edited by Marina Sorbello and Antje Weitzel, 61–65. Berlin: Argobooks.

Bratton, Benjamin. "Agamben WTF, or How Philosophy Failed the Pandemic." *Verso*. July 28, 2021. https://www.versobooks.com/blogs/5125-agamben-wtf-or-how-philosophy-failed-the-pandemic

Brown, Wendy. 2010. *Walled States: Waning Sovereignty*. New York: Zone.

Butler, Judith. 2004. *Precarious Life: The Powers of Mourning and Violence*. London: Verso.

Butler, Judith. 2020. *The Force of Nonviolence: An Ethico-Political Bind*. London: Verso.

Byers, Andrew, and Patricia Stapleton. 2015. "Introduction." In *Biopolitics and Utopia: An Interdisciplinary Reader*, edited by Patricia Stapleton and Andrew Byers, 1–9. New York: Palgrave Macmillan.

Canavan, Gerry. 2010. "'We Are the Walking Dead': Race, Time, and Survival in Zombie Narrative." *Extrapolation* 51 (3): 431–453.

Carey, M. R. 2014. *The Girl with All the Gifts*. London: Orbit.

Crutzen, Paul, and Eugene Stroemer. 2000. "The 'Anthropocene'." *Global Exchange Newsletter* 41: 17–18.

Dauphinee, Elizabeth, and Cristina Masters. 2007. "Introduction." In *The Logics of Biopower and the War on Terror: Living, Dying, Surviving*, edited by Elizabeth Dauphinee and Cristina Masters, xii-xix. New York: Palgrave Macmillan.

De Genova, Nicholas. 2021. "Life versus Capital: The COVID-19 Pandemic and the Politics of Life." *Cultural Dynamics* 33 (3): 238–245. https://doi.org/10.1177/09213740211014335

DeLillo, Don. 2007. *Falling Man*. New York: Scribner.

Dendle, Peter. 2007. "The Zombie as Barometer of Cultural Anxiety." In *Monsters and the Monstrous Metaphors of Enduring Evil*, edited by Niall Scott, 45–57. Amsterdam: Rodopi/Brill.

Espinoza Garrido, Lea, Sylvia Mieszkowski, Birgit Spengler, and Julia Wewior. 2021. "Migrant Lives in a State of Exception (II): Sovereignty, Mobility and Agency in a Globalised World." *Parallax* 27 (3): 241–249.
https://doi.org/10.1080/13534645.2022.2071202

Estévez, Ariadna. 2018. "Biopolítica y necropolítica. ¿Constitutivos u opuestos?," *Espiralestudios sobre Estado y Sociedad* 25 (3): 9–43.

Fhlainn, Sorcha Ní. 2011. "All Dark Inside: Dehumanization and Zombification in Postmodern Cinema." In *Better off Dead: The Evolution of the Zombie as Post-Human*, edited by Deborah Christie and Sarah Juliet Lauro, 139–157. New York: Fordham University Press.

Fishel, Stefanie, and Lauren Wilcox. 2017. "Politics of the Living Dead: Race and Exceptionalism in the Apocalypse." *Millennium* 45 (3): 335–355.

Foucault, Michel. 1990. *The History of Sexuality Vol. 1: An Introduction*. New York: Vintage Books.

Gardner, Kelly. 2020. "The Sentient Zombie." In *The Palgrave Handbook of Contemporary Gothic*, edited by Clive Bloom, 521–538. Palgrave Handbooks. Cham: Palgrave Macmillan.

Giroux, Henry. 2011. *Zombie Politics and Culture in the Age of Casino Capitalism*. New York: Peter Lang.

Guzman of the Dead 420. 2021. *Netflix: Behind the Streams*. YouTube.
https://www.youtube.com/watch?v=ftVR06eAus0

Hamilton, Scott Eric. 2021. "The Girl with All the Gifts: Eco-Zombiism, the Anthropocalypse, and Critical Lucidity." *Lit: Literature Interpretation Theory* 32 (4): 285–304.

Haraway, Donna. 2015. "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making kin." *Environmental Humanities* 6 (1): 159–165.

Hardt, Michael, and Antonio Negri. 2001. *Empire*. Cambridge, MA: Harvard University Press.

Heise Ursula K. 2020. "The Planetary Futures of Eco-Apocalypse." In *Apocalypse in American Literature and Culture*, edited by John Hay, 268–280. Cambridge, UK: Cambridge University Press.

Hurley, Jessica, and Dan Sinykin. 2018. "Apocalypse: Introduction." *ASAP/Journal* 3 (3): 451–466.
https://doi.org/10.1353/asa.2018.0034

I Am Legend. 2007. Dir. Francis Lawrence. Village Roadshow Pictures. Warner Bros.

iZombie. 2015–2019. Developed by Rob Thomas and Diane Ruggiero-Wright. The CW.

Kee, Chera. 2017. *Not Your Average Zombie: Rehumanizing the Undead from Voodoo to Zombie Walks*. Austin: University of Texas Press.
https://doi.org/10.7560/313176

Land of the Dead. 2005. Dir. George Romero. Atmosphere Entertainment. Universal Pictures.

Larsen, Lars Bang. 2017. "Zombies of Immaterial Labor." In *Zombie Theory: A Reader*, edited by Sarah Juliet Lauro, 157–170. Minneapolis: University of Minnesota Press.

Lauro, Sarah Juliet, and Karen Embry. 2008. "A Zombie Manifesto: The Nonhuman Condition in the Era of Advanced Capitalism." *Boundary 2* 35 (1): 85–108.

Lauro, Sarah Juliet. 2017. "Introduction: Wander and Wonder in Zombieland." In *Zombie Theory: A Reader*, edited by Sarah Juliet Lauro, xii–xxiv. Minneapolis: University of Minnesota Press.

Lieber, Marlon. 2023. *Reading Race Relationally: Embodied Dispositions and Social Structures in Colson Whitehead's Novels*. Bielefeld: transcript.

Mad'arová, Zuzana, Pavol Hardoš, and Alexandra Ostertágová. 2020. "What Makes Life Grievable? Discursive Distribution of Vulnerability in the Pandemic." *Mezinárodní Vztahy/ Czech Journal of International Relations* 55 (4): 11–30.

Masco, Joseph. 2017. "The Crisis in Crisis." *Current Anthropology* 58 (15): 65–76. https://doi.org/10.1086/688695

Matheson, Richard. 1954. *I Am Legend*. New York: Gold Medal Books.

Mbembe, Achille. 2019. *Necropolitics*. Durham: Duke University Press.

McCarthy, Cormac. 2006. *The Road*. New York: Alfred A. Knopf.

McNally, David. 2011. *Monsters of the Market: Zombies, Vampires, and Global Capitalism*. Chicago: Haymarket.

Mongia, Radhika Viyas. 2003. "Race, Nationality, Mobility: A History of the Passport." In *After the Imperial Turn: Thinking with and through the Nation*, edited by Antoinette Burton, 196–214. Durham: Duke University Press.

Moore, Jason W., ed. 2016. *Anthropocene Or Capitalocene?: Nature, History, and the Crisis of Capitalism*. Oakland: Pm Press.

Nanda, Serena. 2021. "Inequalities and COVID-19." In *COVID-19 Volume I: Global Pandemic, Societal Responses, Ideological Solutions*, edited by J. Michael Ryan, 109–123. New York: Routledge.

Rajaram, Prem Kumar, and Carl Grundy-Warr, eds. 2007. *Borderscapes: Hidden Geographies and Politics at Territory's Edge*. Minneapolis: University of Minnesota Press.

Ramsari, Atefeh. 2021. "The Rise of the COVID-19 Pandemic and the Decline of Global Citizenship." In *COVID-19: Global Pandemic, Societal Responses, Ideological Solutions*, edited by J. Michael Ryan, 94–105. New York: Routledge.

Rebel Moon—Part One: A Child of Fire. 2023. Dir. Zack Snyder. The Stone Quarry. Netflix.
www.netflix.com/title/81464239&ved=2ahUKEwj4krDhpeiFAxVM7bsIHR4zB-cQFnoECBsQAQ&usg=AOvVaw2j8rTNz8PWPrVohpHoQ1YH.

Rebel Moon—Part Two: The Scargiver. 2024. Dir. Zack Snyder. The Stone Quarry. Netflix. www.netflix.com/title/81624666&ved=2ahUKEwic_7yDpuiFAxW0gPoHHTtSAHMQFnoECB0QAQ&usg=AOvVaw2d4dRsLwnAWVVngb4Be8_Q.

Reynolds, John. 2017. *Empire, Emergency and International Law*. Cambridge: Cambridge University Press.

Rifkin, Mark. 2012. "Indigenising Agamben: Rethinking Sovereignty in Light of the 'Peculiar' Status of Native Peoples." In *Agamben and Colonialism*, edited by Marcelo Svirsky and Simone Bignall, 77–109. Edinburgh: Edinburgh University Press.

Roberson, Chris, and Michael Allred. 2010–2012. *iZombie*. Vertigo.

Rosello, Mireille, and Stephen F. Wolfe. 2019. "Introduction." In *Border Aesthetics*, edited by Stephen F. Wolfe and Johan Schimanski, 1–24. New York: Berghahn Books.

Ryan, J. Michael. 2021. "The Blessings of Covid-19 for Neoliberalism, Nationalism, and Neoconservative Ideologies." In *COVID-19 Volume I: Global Pandemic, Societal Responses, Ideological Solutions*, edited by J. Michael Ryan, 80–93. New York: Routledge.

Safran Foer, Jonathan. 2005. *Extremely Loud and Incredibly Close*. Boston: Mariner Books.

Salter, Mark B. 2003. *Rights of Passage: The Passport in International Relations*. London: Lynne Rienner.

Schaffer, Scott. 2021. "Necroethics in the Time of Covid-19 and Black Lives Matter." In *COVID-19 Volume I: Global Pandemic, Societal Responses, Ideological Solutions*, edited by J. Michael Ryan, 45–53. New York: Routledge.

Schueller, Malini Johar. 2009. "Decolonizing Global Theories Today: Hardt and Negri, Agamben, Butler." *interventions* 11 (2): 235–254.

Sigurdson, Ola. 2017. "Slavoj Žižek, the Death Drive, and Zombies: A Theological Account." In *Zombie Theory: A Reader*, edited by Sarah Juliet Lauro, 95–101. Minneapolis: University of Minnesota Press.

Spengler, Birgit, Lea Espinoza Garrido, Sylvia Mieszkowski, and Julia Wewior. 2021. "Introduction: Migrant Lives in a State of Exception (Part I)." *Migrant States of Exception I*. Special Issue of *Parallax* 27 (2): 115–158.

Stümer, Jenny. 2018. "The Dead Are Coming: Border Politics and Necropower in Europe." *Cultural Politics* 14 (1): 20–39.

Stümer, Jenny. 2023. "Editor's Note." *Apocalyptica* 2: 4–10. https://doi.org/10.17885/HEIUP.APOC.2022.2.24748

Sundberg, Juanita. 2015. "The State of Exception and the Imperial Way of Life in the United States—Mexico Borderlands." *Environment and Planning D: Society and Space* 33 (2): 209–228.

The Girl with All the Gifts. 2016. Dir. Colm McCarthy. British Film Institute. Warner Bros.

The Last Man on Earth. 1964. Dir. Ubaldo B. Ragona and Sidney Salkow. Associated Producers and Produzioni La Regina. American International Pictures.

The Omega Man. 1971. Dir. Boris Sagal. Walter Seltzer Productions. Warner Bros.

Vint, Sherryl. 2017. "Abject Posthumanism: Neoliberalism, Biopolitics, and Zombies." In *Zombie Theory: A Reader*, edited by Sarah Juliet Lauro, 171–182. Minneapolis: University of Minnesota Press.

Viva Las Vengeance. 2021. Pure Imagination Studios and Netflix. Las Vegas, Los Angeles, London, New York, and Washington.

Weheliye, Alexander G. 2014. *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human*. Durham: Duke University Press.

Williams, Evan Calder. 2011. *Combined and Uneven Apocalypse*. Winchester: Zero books.

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Drago Momcilovic

Foul Waters: Contemporary Zombie Apocalypse Narratives and the Elemental Turn

Abstract: The contemporary American zombie apocalypse narrative engages aspects of the elemental world, and fluid elements in particular, in ways that reshape our views of both the pre-apocalyptic worlds of zombie terror and the post-apocalyptic worlds that emerge from the ruins. Two such shows, the AMC television series *The Walking Dead* (2010–2022) and its first major spinoff, *Fear the Walking Dead* (2015–2023), circulate polyvalent images of three particular fluid substrates—blood, water, and oil—that structure the violent collapse and agonizing rebirth of the contemporary world. I argue that these fluids reshape the zombie apocalypse narrative as an elemental apocalypse that exposes certain forms of ongoing social and ecological violence. They mobilise the material realities and rigid forms that constitute our sense of a shared society and planet and transform them into a set of softened, malleable structures that make us more attentive to the uncertainties, ambiguities, and uncomfortable complicities that characterise the shows' allegorisations of global catastrophe. Contemporary zombie apocalypse narratives like *The Walking Dead* and *Fear the Walking Dead* re-establish the centrality of the fluid elements that have long structured the zombie mythos and its intersecting histories of violence toward human subjects and the nonhuman environment.
Keywords: zombie apocalypse, element, fluid, water, blood, oil.

Introductory Notes: Once More into the Wet

> "Water is the new currency now."
> (*Fear the Walking Dead* 2016)

The modern American zombie is a surprisingly wet creature. For several decades, the ghoulish cannibals, reanimated from death and compelled to roam the world, have been leaking, bleeding, festering, and putrefying before our very eyes. These monsters have also dripped their wet gore everywhere, transforming the earthen terrain into marshy substrates that absorb, release, propel, and even spray all manner of fluids, including water, blood, rot, and toxic runoff, through every crevice of the post-apocalyptic world. The landscapes that these monsters have trampled bear witness to the zombies' unprecedented ability to re-shape both the built and unbuilt environment and degrade it into an uneven and physically unstable terrain. Contemporary zombie shows like *The Walking Dead* (2010–2022) and its first major spinoff series, *Fear the Walking Dead* (2015–2023)—referred to herein as *TWD* and *Fear*, respectively—are particularly attentive to these soggy figures and their squishy grounds. During the most harrowing confrontations between human survivors and the post-human predators pursuing them, zombies have often acted in concert with the forces and movements of the larger nonhuman environment, creating a kind of quicksand of disaster upon which the dramas of human survival are now staged.

As a prolific part of both the narratives and *mise en scène* of these productions, the fluid elements that create these wet worlds—primarily water, blood, and oil—exacerbate much of the violence that leads so often in apocalyptic horror narratives to the dismantling of cultural practices, social hierarchies, institutions and infrastructures of the world we once knew. Their spillage and seepage also mark new forms of environmental devastation that allegorise certain forms of cumulative, ecological degradation that now occupy our current cultural imaginary. Consequently, these shows invite elementally forward critical readings that center the wet elements, in particular, and place them in conversation with more familiar readings of the zombie post-apocalypse genre. In this article, I argue that the zombie apocalypse narrative is, or should be seen as, an elemental apocalypse that opens us onto certain forms of socio-cultural and ecological awareness. To this end, I offer close readings of critical scenes from *TWD* and *Fear* that reveal these elemental fluids as constitutive aspects of the physical world as it appears before, during, and especially after cataclysmic change.

The Zombie Apocalypse as Elemental Apocalypse

In the large corpus of critical readings of the zombie apocalypse narrative, two schools of thought have been particularly influential. The first, inspired by the philosophy of Julia Kristeva (1982), frames the figure of the zombie Other as an allegorical figuration of our own ambivalence about death, disgust, contamination, and taboo. Kristeva's conceptualization of the abject Other as an "immoral, sinister, scheming, and shady" figure of alterity that "disturbs identity, system, [and] order" (4) turns on a dialectical interplay of forces that are unleashed at both the societal and individual levels. She enumerates several social types that are implicated in the larger processes of abjection, including the outlaw and the criminal, but she also grounds her thinking in a discussion of body fluids and their relation to our sense of an embodied and articulated self. For Kristeva, fluids like blood and waste products, which we continue to produce and expel, represent a forceful otherness within the seemingly stable boundaries of our own bodies. In the years following the publication of Kristeva's influential essay, scholars like Kyle William Bishop (2010) have built upon her concept of the abject as well as Sigmund Freud's notion of the uncanny in critical readings of the zombie as a figure of disgusting and irreducible difference that must be purged from the social order altogether (132).

The second school of thought offers the figure of the zombie as a metaphorical expression of the dehumanizing forces of market capitalism and commodity consumption. In writing about the evolution of the American zombie from its folkloric predecessor, the Haitian *zonbi*, David McNally (2017) argues that the monster has come to be associated with "crazed consumers" of contemporary American culture rather than the "zombie-laborer[s]" (128) that appear in the ethnographic account of Haitian folklore and culture by William Seabrook. McNally goes on to suggest that the fluidity of modern capitalism "[invisibilizes] the hidden world of labor and the disparities of class that make all this consumption possible" (128). Camilla Fojas (2017) extends the idea that the zombie offers sharp critiques of commodity capitalism by reinscribing the figure of the monster in contemporary debates about socio-cultural difference and the politics of identity. She describes shows like *TWD*, for instance, as reproducing some of the foundational paradoxes of a neoliberal socio-economic order:

> Zombie stories in the era of neoliberalism […] are all about a diverse group of people who must band together for mutual protection and whose lives are reduced to fighting against ravenous flesh-eating zom-

> bies for survival. Most difference—racial, ethnic, linguistic, and national origin—is subordinated and neutralized to the common cause of defense. Defensive units are based on heteropatriarchal formations and these units, though they function beyond any economic order, reproduce the symbolic equivalencies and hierarchies of capitalism (60).

While these critical accounts of the zombie Other are deeply important in highlighting the links between the rise of the zombie apocalypse narrative, on the one hand, and the turmoil of late-stage capitalism that births such monsters into existence, on the other, they use images of fluids and fluidity only as component elements in their mostly anthropocentric critiques of modernity. If we trace the circulation and vitality of actual fluids and expressions of fluidity, as they appear in *TWD* and *Fear*, we see that these fluid elements retain unprecedented agentic forces unto themselves. They call attention to the simultaneous and overlapping forms of violence that spill into both the human worlds of survivors and the nonhuman environments that individual protagonists are no longer able to master or instrumentalise.

What I propose here, consequently, is an elementally centered reading of the zombie apocalypse narrative. I understand the concept of elementality in two ways, both of which implicate distinct but interrelated dimensions of monstrosity and secular apocalypticism. The first sense of elementality that shapes these shows is through their invocations of the classic quaternity of air, water, fire, and earth. Following the work of Hegel on this topic, David Macauley (2010) proposes a detailed study of these four formative elements—what he calls a "stoicheology" of the elements—that would allow us to see the material components of the physical world as both "quite ordinary—perennial, pervasive, and commonplace to most cultures—and at the same time very extraordinary—belonging to the realm of dream, mythology, and imagination" (3). In reclaiming air, water, earth, and fire as perhaps more potently meaningful categories than nature itself, Macauley points us to an elemental reading of the contemporary zombie narrative in which air, water, earth, and fire are continually detached from their most familiar forms and recombined in unexpected ways in the speculative world to come.

The language that survivors in these shows use to refer to the monster reflects one dimension of this operation. The human protagonists of *TWD* and *Fear* rarely name the zombies as such. Instead, they refer to them by different epithets—including 'walkers,' 'roamers,' and even 'floaters.' While these nicknames do not abandon the central conceit that the monster is a figure of "ontological liminality" (Cohen 1996, 6), they do,

in fact, draw attention to their movements, capabilities, and formative and symbolic associations with the wide range of elemental environments they traverse in their unrelenting pursuits of living flesh. These landscapes include terrains that have been soaked through and rendered pliable by natural and synthetic fluid elements, including water, blood, and even oil. Through their onslaughts, furthermore, the undead harness an unusual fluidity of means as they stir the four elements of the quaternity into dangerous combinations that imperil human life and its very institutions and protective structures.

As they secure their relation to the pervasive fluid elements, the zombies of *TWD* and *Fear* elaborate certain dimensions of the zombie apocalypse as a distinctly secular apocalypse. Elizabeth McAlister (2017), for instance, helps us understand that the contemporary zombie apocalypse narrative is a secular narrative because "it has undermined the opposition of God and human" despite following the "biblical blueprint [that] underlies and informs them" (75). Released from the moral or religious dichotomy between good and evil, she adds, the true power of the zombie lies in its anonymity, its lack of distinctive superpowers, and its ability to gather into large hordes. As a result, they become a "collective of chaos monsters threatening to destroy civilization and order in a secular scenario of world destruction" (2017, 75). I would venture to add to McAlister's reading of the secular zombie apocalypse narrative that these television productions depict post-apocalyptic human life that is continually constrained and threatened not only by the zombies themselves but also by the glaring lack of certain fluid resources, like water and oil, as well as the survivor's menacing proximity to other fluid elements, including blood. Robert Folger (2022) identifies one additional key aspect of the secular apocalypse narrative that these shows reproduce. In his view, the secular apocalypse refuses to draw strict and binding distinctions between the apocalyptic, which portrays "actual or impending cataclysms, catastrophes, and crises", and the postapocalyptic, which focuses on the "aftermath" of such events (23). As serial narratives that explore both the short-term and the long-term effects of the zombie outbreak, *TWD* and *Fear* rely on a representational language of fluid elements that pre-exist the zombie apocalypse and also become the building blocks of a new and more terrifying reorganization of spaces, bodies, and futures in the post-apocalypse.

The second sense of elementality that pervades *TWD* and *Fear* is based on Timothy Morton's (2013) ecological reading of the nonhuman elements of the world, which structure collective concerns about not only the collapse of preapocalyptic socio-cultural institutions and structures,

but also the ongoing degradation of the planetary environments. Morton highlights the given interconnectedness of all objects and creaturely life forms, including the human subject, which co-exist in a delicate balance with one another. The coming perils of the Anthropocene, first announced by Nobel Prize-winning chemist Paul J. Crutzen (2006) and described as a new geological epoch of human-authored planetary changes, highlights this co-existence and also prophesies its disruption. Consequently, Morton argues that

> All humans…are now aware that they have entered a new phase of history in which nonhumans are no longer excluded or merely decorative features of their social, psychic, and philosophical space. From the most vulnerable Pacific Islander to the most hardened eliminative materialist, everyone must reckon with the power of rising waves and ultraviolet light (2013, 22).

Morton's concern about the nonhuman elements of a world in crisis is particularly helpful in exploring the ubiquity and importance of the fluid elements in *TWD* and *Fear.* These contemporary narratives, which allude in multiple ways to the concerns of the Anthropocene, allow us to see in clearer terms the ways human agents become one type of object amongst many other agentic objects in zombie fictions. Moreover, these other objects, which include the physical elements themselves as well as their figurations in zombie bodies, hordes, and threats, retain a certain dynamic power that human agents are no longer able to master or instrumentalise in their own anthropocentric forms of world-building. In this way, elementality becomes an important consideration in the zombie narrative's ability to project images of what Lars Schmeink describes as a "grey ecology" of post-apocalyptic life forms, which he reads "disanthropocentrically" (2022, 74). Like Schmeink, I want to look more closely at key scenes in *TWD* and *Fear* that allow us to read the fluid elements as conditioning forces that shape the creaturely lives of both zombies and human survivors.

In the remainder of this article, I want to chart the moments in *TWD* and *Fear* that envision both societal collapse and worldwide environmental degradation through the narrative, aesthetic, and symbolic language of the fluid elements, especially water, blood, oil, and other fuel sources. As I will demonstrate, these productions imagine a central speculative event, the zombie outbreak, as an event with a uniquely elemental power and agency that allows it to link two interpenetrating temporal realities. The first is an apocalyptic crisis that allows us to imagine the end of the socio-cultural order and the relationships and values enshrined therein.

The second is a postapocalyptic world that becomes susceptible to both engineered and spontaneous forms of ecological disaster, which offer harrowing reminders of the world of cumulative environmental degradation that we have inherited from the industrial revolutions of the 18th and 19th centuries.

Societal Collapse, Environmental Degradation, and the Fluid Elements

TWD and *Fear* reinvent the zombie apocalypse narrative by charting progressively serious forms of deterioration and collapse, not only of living patterns and social rituals, but also of material infrastructure that sustains modern conveniences and standards of living. In this landscape, whose requisite elements persist in defamiliarised form and with unprecedented forms of agency attaching to them, water becomes a resource whose value and meaning are intimately tied to its availability and absence, its purity and contamination, its depletion and misuse. As Marq de Villiers (2000) reminds us, "the trouble with water—and there *is* trouble with water—is that they're not making any more of it" (12). As *TWD* reveals, the potable water that remains behind sparks lingering concerns about uncertain hydro-futures. The episode "Cherokee Rose" (2011) illustrates this concern when a group of survivors encounter a snarling zombie caught at the bottom of a well and attempt in vain to remove it. As the group pulls the bloated corpse out of the well, they accidentally dismember it and send its putrefied legs and belly full of rot. Their failure highlights two simultaneous dangers of living in a post-apocalyptic world: the increasing likelihood that available freshwater sources are more vulnerable to contamination than ever before, as well as the growing gap in public knowledge about the zombie microbe and its modes of transmission. In this way, the image of tainted water at the bottom of the well amplifies the fears of groundwater toxification that Rachel Carson (1962) famously notes in her pioneering work about environmental pollution: "all the running water of the earth's surface was at one time groundwater. And so, in a very real and frightening sense, pollution of the groundwater is pollution of water everywhere" (42). In this scene, and indeed throughout the franchise, water is the elemental medium *par excellence* that potentially expands the scope of apocalyptic breakdown and accelerates the speed of contamination.

Unlike other shows in the franchise, however, *Fear* amplifies this particular anxiety through consistent narrative and thematic engagements

with water and other fluid elements and their implication in both present and looming ecodisaster. In its early seasons, the show frames the zombie apocalypse as an event that exacerbates certain forms of pre-existing hydro-doom, including drought and pollution. Through its various appearances, water, and its associated imagery, amplify a uniquely apocalyptic form of temporal positioning that Maral Attar-Zadeh (2022) identifies as the "already/not yet modality," that bifurcated experience of time in which "the end is already here; the end is yet to come" (55). The scarcity of water in catastrophic times reduces human survivors to desperation and exacerbates profiteering, theft, and even eco-terrorism, which form around the availability and uses of water and other liquid resources. As survivor Victor Strand explains in the third season, "water is the new currency" of this postapocalyptic landscape.

To this end, *Fear* implements narrative strategies like amplification in ways that draw attention to pending environmental collapse. In a poignant scene from the second-season episode "We All Fall Down" (2016), while on board Victor Strand's yacht 'the Abigail,' protagonist Nick Clark points out that the mass depopulation of the world in the wake of the zombie uprising incarnates a shared fantasy of environmental restoration and replenishment: "No planes, no noise pollution, no smog. Just stars." His sister Alicia responds, with affectionate humour, that "we definitely stopped the climate crisis." Their conversation is obviously in jest, but it also alludes to a pre-existing world that is already buckling under the stress of exhaustion and depletion, particularly around supplies of potable water that the zombie uprising will only strain. The show develops this theme by presenting water scarcity initially as an ambient hazard attaching to local *topoi* like the older homestead and the crowded municipality and, eventually, radiating outward into the elemental environment itself. The pilot episode inaugurates this butterfly effect by introducing protagonist Travis Manawa, a high school English teacher, as a domestic homebody whose priority is to fix the kitchen plumbing, which has backed up—not for the first time—in his home in suburban Los Angeles. As the season progresses, however, and a military unit rolls into Travis's neighborhood and imposes martial law in the newly designated safe zone, water becomes an even more critically endangered resource that they must ration and sanitise, particularly after local treatment facilities fall into disrepair. As days turn into weeks and the zombie apocalypse shows no signs of retreat, the only resources available to survivors are compromised structures like the Gonzalez Dam on the Tijuana River. As Travis's partner Madison Clark eventually discovers, the dam's subterranean passageways are plastered with human excrement and zombie bottlenecks, and its available stores of water have

already been hijacked by a local crime syndicate. The dramas of human survival unfolding around decreasing access to clean water reflect a critical nexus point between factional violence, on the one hand, and larger environmental conditions that exacerbate them, on the other.

As *Fear* unfolds, the show manifests in more localised and concrete terms the largesse of drought and climate change. After losing Travis in the third season of the show, Madison finds shelter at a survivalist compound known as Broke Jaw Ranch near San Diego, whose landscape is open, exposed, and bereft of any markers distinguishing it from other settlements save for the people themselves and their makeshift shelters. When water becomes even more dangerously scarce for members of the encampment, Madison consults a series of older ground maps of the area, which reveal that the nearby aquifer had been drying up and groundwater levels had been receding for several years before the apocalypse. This ecological revelation is part of the show's larger attempt to establish a continuum of casual perception that allows survivors within the series—not to mention the viewers of the series—to start seeing the failures of water infrastructure, appearing in local suburban and municipal contexts, as intimately connected to larger and more diffuse entities that Timothy Morton describes as hyperobjects. These objects emerge, Morton explains, when "massive entities become thinkable [...] [but] are so massively distributed we can't directly grasp them empirically" (2016, 11). He enumerates several examples of contemporary environmental hyperobjects, including global warming, climate change, and the Anthropocene itself, but the show's explorations of local manifestations of a more far-reaching, pre-apocalyptic water crisis would likewise appear as one such hyperobject that is, by definition, "real yet inaccessible" (25).

Fear thus offers an ecophobic view of certain aspects of the looming water crisis and its connection to climate stressors. Simon C. Estok (2014) characterises ecophobia as the "generalized fear or contempt for the natural world and its inhabitants" (53). Fear and contempt attach to interactions and expeditions focused around the anxious rationing of and perilous searches for water. These affective states also suffuse certain aspects of film style that the series implements in telling these stories. The notion of an all-seeing eye, for instance, is enshrined in the first season's final cinematographic gesture, as the camera tracks along the Pacific coastline in an overhead crane shot. The lingering shot of the ocean articulates a visual horizon for the characters making their way in a post-apocalyptic world. Their lives will be shaped, it seems, by boundless wandering stretching across open expanses of the elements. This parting shot also captures the painful irony of being cast adrift in an ocean of water that is

both unfit for human consumption and unevenly distributed across the ruined landscapes where they will have to take shelter.

The show's ecophobia inspires another arresting visual image, this time in the sub-nautical space beneath Victor Strand's yacht, where the Clark family takes temporary shelter in the show's second season. While on board, the survivor group discovers that the zombified casualties of a nearby plane crash have drifted along the ocean currents and become entangled in the yacht's filtration system. The series makes particularly potent use of its underwater *mise en scène* when the camera captures Travis diving under the ship and clearing the once-human remains from the craft's intake grate, all while fending off a snapping zombie as a single dollar bill floats in the columns of water nearby. All three figures—Travis, the zombie, and the material currency—appear in the visual field as part of a living tableau of an impossible and incomprehensible new world. The water in this image, rather than flowing freely, surrounds and constrains the mobility of the once-autonomous human subject. Much like the tracking shot over the ocean, this shot also marks the disappearance of liquidity; in this case, economic liquidity, as the floating dollar bill gives way to alternative means of securing goods, services, and cast-offs, including an elementary barter exchange, scavenging, and even theft. In this new world, water replaces money as the exemplary asset. Once used, or consumed, it disappears, and more is needed.

While water signals the earliest stages of an environmental crisis that slowly makes itself available to our perceptions, blood emerges as perhaps one of the most ubiquitous fluids to appear, usually in unrestrained and terrifying excess, in the physical terrains of the post-apocalypse. Modern zombie franchises like *TWD* invoke images of blood—the blood of zombies, and indeed, the blood of survivors—as a fluid element that saturates the world, physically with moisture and rot, and symbolically with evolving and paradoxical meanings. Zombie blood is the archetypal image in the series of sickness and impurity in a collapsing world. As early as the second episode of the first season, appropriately entitled "Guts" (2010), Rick Grimes suggests that zombie blood is the site of a mysterious and possibly communicable disease that he must take great care to avoid. Protecting their faces and skin with shields and coats, Grimes and fellow survivor Glenn Rhee bathe in the blood and entrails of a zombie body and walk amongst the undead, hoping to engineer an escape route back to their encampment in the Atlanta mountains without stirring the monsters' sharpened sense of olfaction. By these and other accounts, the figure of the walker in *TWD* seems just as abject as the impure cadaver that Kristeva (1982) describes. For Kristeva, we recall, the corpse repre-

sents "the utmost of abjection [...] death infecting life [...] something rejected from which one does not part" (4). Furthermore, Kyle William Bishop (2010) extends Kristeva's theory of the abject to his reading of the American zombie film, which he understands as a showcase of the shared fear that "all human subjects strive to ignore or to put off [the abject] [...] in an attempt to defy their own object-ness" (132).

However, the great irony of *TWD* and *Fear* is that the pathological blood element in zombies is even more abject than we might initially realise. The very fluid that human survivors have identified as threatening and have tried to purge from their world is already part of the human corpus and has already begun to soak into the tapestries of human intimacy and interconnection, forever staining them. In "TS-19" (2010), the concluding episode of the first season of *TWD*, Dr. Edwin Jenner at the Centers for Disease Control in Atlanta reveals privately to Grimes that the whole of humanity has already been infected with an unknown microbe that will lead to the reanimation of lower brain function following physical death. This diagnosis famously leads Jeffrey Jerome Cohen (2017) to describe the show's human protagonists as "[inhabiting] the zombie's juvenile form" (385).

The zombie outbreak thus projects two different visions of contaminated blood products. On the one hand, the shows circulate an image of impure zombie blood as a metonymic expression of the figure of the metamorphosed carrier implicated in the global transmission of a poorly understood virus. On the other hand, the shows also circulate an image of compromised human blood that redefines the human subject as a variation of creaturely life that has come to dominate the post-apocalypse. This second vision is particularly arresting, as this bloodborne destiny reshapes the very textures of human life in the series, creating the need for precautions in even the most intimate forms of contact, including falling asleep at night next to a partner or recovering from wounds in a designated space of medical care alongside those that may not fare so well. The latter becomes the site of unprecedented violence in *TWD* when Rick's group takes up arms against an abusive authoritarian named Negan Smith, whose soldiers lace the tips of their projectile weapons with zombie blood. Unbeknownst to them, one of Rick's injured soldiers, a resident of Alexandria named Tobin, dies from his knife wounds in a communal infirmary, reanimates, and wreaks havoc on the rest of the camp in the dead of night.

This scene, taken from the eighth-season episode "Do Not Send Us Astray" (2018), illustrates the show's preoccupation with the sociophobics of both infectious disease and community formation. I use the term

"sociophobics" in the way Douglas E. Cowan (2022) understands the phenomenon: "what we fear, why we fear it, and how we manage that fear [...] is [...] as much an anthropological and sociological phenomenon as it is psychological" (115). He goes on to explain that "while certain fears have kept us alive long enough to evolve, others have evolved through a process of social construction, and often serve far different agendas than mere survival" (115). Using Cowan as a guide, then, both *TWD* and *Fear* present visions of a post-apocalyptic society that conditions its survivors into learning when, how, and why to fear foreign elements capable of breaching borders. The shows' doomsday sociophobics, furthermore, unfold at two levels. As outbreak narratives that turn around the central image of infectious fluid elements, these programmes reimagine a global pandemic from the vantage point of totalizing hopelessness, as resources and cultures of medical expertise and consensus disappear. As parables about community formation in times of collective trauma, however, the shows also present survivors learning painful lessons about the need to practice vigilant forms of self-surveillance and isolation that perhaps border on the extreme. This latter principle also guides, in turn, the shaping of community identity and camp life, whose borders must be steeled during scenarios of actual, pending, or feared attack.

Later seasons of *Fear* seize upon another distinct iteration of blood saturation, as zombie blood comes to absorb the toxic effects of environmental radiation resulting from a power plant meltdown in Texas. Here, I use the term 'saturation' to describe what Melody Jue and Rafico Ruiz (2021) describe as "sticky situations where not all agential substances or actors are known in advance" (4) and, later, as "situations that might be blurred confluences of co-saturating substances" (6). The spinoff's invocation of radiation is a familiar trope already. George A. Romero's 1968 film *Night of the Living Dead*, which rewrites the history of the folkloric *zonbi* of colonised Haiti and presents a new iteration of the zombie as a flesh-eating ghoul that arises from the dead, presents a new origin story for the modern zombie that is shaped by a confluence of saturating environmental elements. A news broadcast, we recall, reports a massive radiation leak from a space probe returning to the Earth's atmosphere following an exploratory mission to Venus. This probe causes a large-scale disaster, common in science-fiction films of the so-called atomic age of the 1950s, and the high-level radiation waves alter the human genome in ways that produce the genetic mutation that now causes bodily reanimation.[1] *Fear* reworks Romero's plot device by mobilizing the invisible threat of radiation waves and concentrating them into the image of an already impure fluid, zombie blood, which then becomes co-saturated with microbes and

1 Romero's film mobilises popular concerns and anxieties about technology gone awry during the contest between Cold War superpowers to colonise the great unknown of outer space. In this way, his film joins a larger tradition within science-fiction cinema that links the activities of the scientific-military-industrial complex in post-war America to the rise of cultural paranoia and fear about "a dangerous world of fall-out, medical experiments [...] potential war [...] [and other] metaphorical embodiments of the frightening thing known as the Bomb" (Hendershot 1999, 21).

pollutants. The character of Grace Mukherjee, an operations manager at the defunct power plant, is instrumental in making ambient radiation a tangible presence on screen, walking amongst the undead and hanging small dosimeters around the necks of irradiated monsters to mark them from the rest of the madding crowd. The vials, however, strain the ability of survivors to effectively deal with the constant threat of invading hordes. The vials are almost imperceptible to the naked eye, often disappearing in a matrix of sudden movements, splattered gore, and tattered rags. As a result, survivors must frequently resort to more creative and sustainable methods of disposal, like tripping, outrunning, or redirecting the monster. The image of irradiated zombie blood, rendered visible but extremely difficult to identify in the rush of action, elicits one of the key fears of the outbreak narrative that Dahlia Schweitzer (2018) describes, namely, "the fear that what you cannot see can kill you" (51). It also restructures the very nature of apocalyptic crisis by presenting it as an entanglement of ongoing, intersecting events or "emergencies without distinct beginnings or ends" (33).

Water and blood are, of course, not the only fluids whose depletion or ubiquity can prevent survivors from securing a place for themselves in the new world. Oil and gasoline, which power the grids and mechanical technologies of the pre-apocalyptic world, are likewise in short supply due to human expenditures, misuses, and the inevitable degradation and oxidation over time of its chemical elements. Beyond its function as a source of power, however, oil is also a multivalent substance that "saturates, [...] bleeds out, gets stuck in, settles and seeps, [and] chokes and escapes containment" (267), as Marija Cetinić and Jeff Diamanti (2021) remind us. Oil possesses other material qualities in these shows as well. It is viscous, murky, slippery, and perhaps most importantly, flammable. These qualities compound the threat of zombie invasion and throw into much sharper relief the growing antagonisms between human survivor communities and the ever-present specter of individual self-interest.

The circulation of oil in the series makes the imperceptible, or slow, violence of environmental degradation, as Rob Nixon (2011) names it, more tangible to both characters and viewers. Oil first appears in *Fear* as a narrative pipe dream nursed by the leader of a criminal organization known as the Proctors. The leader of the syndicate—Proctor John, a name that recalls famous American landowner, John Proctor, who was convicted of and executed for witchcraft in the Salem trials—ignites the show's shift from the arid climes of northern Mexico to the refineries of Texas. He tells a captive Alicia Clark that he wants to grow his drug empire along the southern border of the United States, using the state of Texas, famous for

operating its own privatised electric grid without federal regulation, as a power hub in the post-apocalyptic landscape that would revitalise the world through his ambitious schemes. Madison Clark is also lured by Texas, but for different reasons. She settles in the Dell Diamond Baseball Stadium in Round Rock and implements her vision of a sustainable agrarian survivor cooperative powered by natural resources and human labor. However, Madison soon realises that the specter of oil will stain and ultimately ruin her pastoral fantasy when another rival gang, the territorial 'Vultures' who have designs on the stadium as well, unleash a horde of zombies that were stored inside crude oil tanks. Flammable under gunfire, resistant to precious stores of water, and toxic to the new crops that her community had just replanted, these oil-saturated zombies lead to the collapse of the stadium cooperative. In the episodes immediately following what appeared to have been Madison's death, furthermore, the show manipulates its own visual qualities, and specifically its color and tinting, in ways that recall the lingering effects of the crude-oil assault.[2] The show weaves back and forth in time to tell the story of the stadium society's creation and collapse, and the cinematography marks certain moments in the diegetic timeline with brown and grey tinting. As Madison's children chase the Vultures in the grip of vengeance, they traverse visual landscapes that have been edited in post-production and made to evoke the ambiance and coloration of a toxic oil spill. This is a deliberately artful gesture on the part of the show, inviting us to see the spillage of oil as a symbolic expression of the bloodlust that seeps into their thinking and clouds their vision of the world. It also stands in direct contrast to the sunlit sequences of the show, which rely on natural light sources and only minimal distortions of colour.

Crude oil also compounds its threat when the tanks that continue to store it are unmanaged or mishandled. Oil tanks are material vessels of rusting metal that likewise degrade over time in the post-apocalypse. As vestiges of a defunct fuel-based economy, they hearken back to Cetinić and Diamanti's (2021) description of the oil barrel itself as "more a fiction than a reality" (274). They argue that the image of the oil barrel persists in the petrochemical imaginary despite the rise of various structures that may render it anachronistic, including "pipelines that connected discrete sites of extraction to more centralized refineries" and "oil tankers that by the late 1960s were beginning to dominate sea routes connecting the globe's major ports" (2021, 274). The oil tanks that appear in *Fear* are more than just fictions or throwbacks to a more antique modernity. These tanks are also anachronistic storage units that have rusted into oblivion in the post-petroleum landscape and now pose great risks to both human survivors trying to reinscribe them in a collapsed world, and to the envi-

2 As later seasons of the show reveal, Madison's children believed her to have died inside the stadium, but she escapes the zombie onslaught and returns to the series.

ronment that will run slick upon the inevitable blast and spillage. This is precisely what happens when Madison and Alicia Clark rescue a new community member, a nurse named June, whom they discover in a deserted town whose other inhabitants had apparently died in an industrial oil tank explosion after its bleeder valve rusted shut. Oil's capacity to break down over time, particularly during heat waves and in storage units that are not managed carefully, create an aura of uncertain danger around this mysteriously dark fluid, much like the blood of the zombies that likewise seeps into the landscape. Also, like zombie blood, oil seems capable of leading to both immediate and unforeseen forms of personal and environmental devastation.

Madison's pastoral fantasy of maintaining a sustainable and collective lifestyle inside the protected walls of a baseball stadium is ultimately powerless over the lure of oil and other fuels capable of harnessing great reserves of power. Madison's experiment slowly gives way to a redemption narrative for her daughter Alicia, who creates a family of outcasts following her expulsion from the stadium and lays down new roots in Tank Town, a quarry in Texas where a volunteer named Clayton had set up the mechanical infrastructure to refine crude oil supplies and use it to rebuild and power a more inter-connected world in the post-apocalypse. As they restore Tank Town to its former glory, members of Alicia's network enact on a much smaller scale the mechanical operations of industrial development that lead to what sociologist Saskia Sassen (2014) describes as a systemic "expansion of prosperous and working middle classes, as happened during most of the twentieth century in the Global North, in much of Latin America, and in several African countries" (14). This sense of expansion, Sassen argues, counters the more disturbing trend in the twenty-first century of the rise of global firms and their unprecedented ability to concentrate global wealth in the twenty-first century. Although Alicia's Tank Town emerges as the more industrially oriented blueprint to rebuild the world following widespread collapse, her vision of an energy cooperative is ultimately taken over by a rival group known as the 'Pioneers' whose leader, a woman named Virginia, becomes an allegorical representation of the modern, multinational oil company that takes over supplies and technologies and exploits and divides indigenous groups. Capturing and effectively enslaving members of Alicia's group, and robbing them of their ability to reach out to strangers and grow their own community, Virginia polices the oil refinery and oversees the digging of a new well. Consequently, Virginia transforms Tank Town into what Rob Nixon (2011) might call a "resource enclave [...] embedded in [...] the destitution that surrounds them" (71).

Although Alicia's community resists and ultimately defeats Virginia and her group, this story arc still reflects the persistence of an exploitative tradition of societal self-organization. As Sassen (2014) explains, economic growth and development in the contemporary global landscape "still takes on distinctive formats and contents in the mix of diversely developed countries we refer to as the Global North versus the mix of less or differently developed countries we refer to as the Global South" (13). In the fifth-season episode "Leave What You Don't" (2019), two of the children rescued from the radiation hot zones devise an efficient machine that can harness biopower from the zombie's unrelenting drive to consume living flesh. They suspend a cage of mice within a larger, rotating carousel and use the rodents as bait to entice a group of shackled walkers to power the turn-style of a pump in the refinery. This particular image of zombies walking in circles and generating transferrable kinetic energy—all within the confines of a restored oil refinery—eerily recalls one of the first zombie films to be released in the United States, Victor Halperin's *White Zombie* (1932), which invokes the folkloric figure of the Haitian *zonbi* and both the colonial history from which it emerges and the neocolonial business interests that the industrialised United States has pursued in the decades following the abolition of slavery. Released more than thirty years before Romero's genre-defining film, *White Zombie* features a sugarcane plantation and processing factory in Port-au-Prince that runs on the manual labour of enslaved workers entranced by a local planter and *bokor*, Murder Legendre, played famously by Hungarian-American actor Bela Lugosi. The children's show of industrial efficiency reads, in certain ways, as the humanist expression of a group cohesion necessary to build the reconstruction of the world after apocalypse. However, the scene also presents a self-referential moment in the evolution of the zombie mythos as it migrates from the colonised Global South to the industrialised Global North. In structuring this scene, in which a restored oil refinery literally enfolds a space of enforced (zombie) labour, *Fear* stages a palimpsestic tableau of colonial history and unwittingly reproduces some of that history's forgotten and silenced elements. The institution of slavery and the prospect of neocolonial intervention in the economies of the Global South disappear in the series, and the project of world-building is taken over in the show by human subjects working freely and cooperatively toward a greater good. McAlister (2017) traces this history of erasure back to Romero himself, whose cannibalistic ghoul merely "evokes a *spectral remainder* of the Caribbean *zonbi* by reaching back to this iconic historical figure of barbaric otherness during the age of conquest and colonialism" (77, emphasis added).[3] Virginia's plan of divide-and-conquer likewise

3 Lauro and Embry (2017) remind us that "[i]n its origins and in its folkloric incarnations, the zombi is quite literally a slave, raised by Vodou priests to labor in the fields" (397).

bears only the merest traces of this elided colonial history. After assuming control of the refinery, she sends Alicia Clark and her fellow survivor Victor Strand to the nearby town of Lawton, where they are made to clear human waste from community latrines and, later, forced to clean the undead rot from a sugar processing plant following the explosion of a molasses tank. These additional narrative invocations of indentured servitude, sugar, and power hearken back to a more complicated and pervasive matrix of social, political, and environmental forces that led to the creation of the Haitian *zonbi*, or mesmerised worker subjugated into endless labor, became a cultural archetype of the radically dehumanised subject.

Virginia's tenure as overseer of the refinery, however, is not only a self-defeating enterprise. It is also the occasion for potentially widescale ecological disaster following a final armed standoff between the Pioneers and Alicia's community. Under Virginia's watch, the operations at Tank Town become dramatically inefficient, as she switches out most of the survivors who were responsible for its initial success and leaves Luciana, Nick's girlfriend, to manage an increasing ledger of tasks, to be completed in turn by a shrinking pool of trusted and experienced workers. After another rival group attacks the refinery, the oil tanks finally explode, sending oil mixed with rain whirling through the air. The quarry is soon overrun with fires, thick smoke, and, eventually, hordes of walkers attracted by the pandemonium. This culminating sequence of events brings together the wet elements that I have been tracking throughout this essay—water, blood, and oil—as they facilitate the growing violence and factionalism in the post-apocalyptic world and open both survivors and viewers onto a view of the environment that is even more damaged than ever before. If Sheena Wilson, Adam Carlson, and Imre Szeman (2017) are correct in their assessment that the "importance of fossil fuels in defining modernity has stood in inverse relationship to their presence in our cultural and social imaginaries" (5), then this scene of flooding and mixing illustrates a kind of radical return of the repressed elements. These fluids rain down and create a visual spectacle of dark droplets that signify both societal collapse and environmental degradation for both survivors in the series and viewers of the series.

Conclusion

In this article, I have traced the proliferation of scenes in *TWD* and *Fear* that centre the image of fluid elements that constitute the realities and irrealities of the zombie post-apocalypse. The centrality of water, blood,

and oil in these narratives allows us to reimagine the collapse and reformation of both human societies and environmental terrains as unpredictable, and indeed fluid, operations. Moreover, through close readings of specific scenes from both shows, I model a critical reading practice that centres the elemental world as a site of apocalyptic disaster and an artful vision of our possible responses to it. This elemental world, furthermore, implicates other human and nonhuman forms of risk and peril that we have come to identify in the overlapping ages of late-stage global capitalism and anthropogenic climate change.

In this way, I hope to open the possibility of future critical inquiries into other shows within the franchise that likewise reimagine the known and unknown worlds through a careful consideration of other elements in the quaternity. This might include a critical reading of one of the franchise's more recent spinoff shows, *The Walking Dead: World Beyond* (2020–2021), which follows the movements of a group of college-aged students setting out on a journey across a ruined America for the first time in their lives, espousing many Romantic conceits and literary references along the way and opening themselves up to the world's most mystifying and dangerous aerial elements in the process. Insofar as *TWD* grounds its views of the zombie as a primarily earth-bound monster, and *Fear* projects the image of a more fluid monster, then we might look to the aerial elements of *World Beyond* to lay bare the tensions and continuities holding the various stories of this franchise together. This rings especially true in the first-season episode "The Tyger and the Lamb" (2020), whose titular invocation of William Blake's poems "The Tyger" and "The Lamb" are fitting chronicles of the children's self-appointed task of analysing the plumes of smoke from a long-burning tire fire known as the Blaze of Gory and sounding tornado sirens to relay messages to each other as they pass through such a treacherous industrial wasteland. Elementality may also warrant a second look at *Fear* itself, whose later seasons introduce a nuclear apocalypse plot in which a doomsday cult leader detonates a powerful nuclear warhead that visually obscures the sight of undead monsters and compounds their threat to include not only a mysterious microbe that is transmitted through an exchange of bodily fluids but also a series of invisible radioactivity permeating bodies, grounds, and even wind currents. Although this aerial reading of *Fear* falls outside the scope of this article, the show's continued engagement with the environmental elements, particularly as they are shuffled under the force of human-authored disasters, invite critical attention. Finally, elementality may emerge as a central category of analysis in scholarly accounts of the proliferation of the zombie mythos across

different entertainment media and social ritual, including zombie-themed video games like *Plants vs. Zombies*, which offers immersive digital experiences with other figures of nonhuman otherness, and organized zombie walks, group activities that allow participants to dress, move, and behave like zombies as they traverse public spaces. These texts and traditions center the elements of the quaternity directly and place them in conversation with other material considerations like the physical and bodily mechanics of gameplay. In this way, we become more aware of the zombie's infiltration of what Nicole Starosielski (2019) refers to as "elemental media" and the "material and conditioning substrates" required to engage these texts and traditions.

In addition, an elemental reading of the zombie apocalypse narrative gives us a new set of signifiers with which to trace the violent confrontations between the human, the inhuman, and the nonhuman, not only in canonical American texts but also in contemporary texts from different parts of the world. What, for instance, would an elemental re-reading of Romero's canonical film *Night of the Living Dead* look like? A cursory look at some of the fluid elements shaping the movements of his ghouls, as they swarm the isolated Pennsylvania farmhouse where a group of survivors have taken refuge, might incarnate extended meditations about Romero as a prophet warning us not only about socio-cultural turmoil and political and technological upheaval during the 1960s but also the pace and scale of twentieth-century ecodisaster whose acceleration begins in roughly the same time period of American history. It is hardly a surprise to discover that the rise of the post-Romero zombie coincides roughly with what environmental scientists identify as the beginning of the Great Acceleration, the period of global history in the middle of the twentieth century that is marked by unprecedented rates of industrial development and population growth. These conditions create, in turn, various forms of cumulative environmental degradation, including pollution and toxification, the rise of greenhouse gases, the loss of biodiversity, and global warming. J. R. McNeill and Peter Engelke (2016) remind us that "actions already taken, mainly between 1945 and now, assure a human imprint on the Earth, its climate, its biota, the acidity of its oceans, and much else that will linger for many millennia yet to come" (5–6). Thus, Romero's film, and indeed his entire film franchise, not only rewrites the originating figure of the modern American zombie from entranced worker to undead monster, or from chemically or spiritually compromised to virally contaminated. It also reframes the zombie apocalypse itself as an elemental post-apocalypse with lingering social and environmental aftermaths that become

a central concern in the post-Romero generation, and especially in *The Walking Dead* television franchise and the comic book series on which it is based.[4]

In their speculative visions of the apocalypse, which radically rearranges both human worlds and nonhuman environments, both *TWD* and *Fear* actively search for new representational idioms to portray the slipperiness, the unpredictable movements, and the forms of immediate and long-term contamination that mark our present epoch. The franchise, in total, offers us, in the figure of the elemental zombie, a potential archetypal response to our collective failure to imagine the environmental peril we now face. "It is not surprising," Dipesh Chakrabarty (2009) explains, "that the crisis of climate change should produce anxieties precisely around futures that we cannot visualize" (211). The shows in the franchise use gothic horror, abject, and elementally informed cinematography and references to the fluid elements in order to help us visualise those futures that otherwise fail to excite our collective mind's eye. As any seasoned viewer of either show might indicate, it is next to impossible to forget the images of terror that these shows have released into our collective cultural imaginary, and perhaps for good reason too.

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Bibliography

Attar-Zadeh, Maral. 2022. "Apocalypse When? Two Views from the End-Times." *Apocalyptica* 1: 54–67.
https://doi.org/10.17885/heiup.apoc.2022.1.24605

Barnow, Kate, writer. 2016. *Fear the Walking Dead*. Season 2, episode 2, "We All Fall Down." Directed by Adam Davidson, featuring Frank Dillane and Alycia Debnam-Carey. Aired April 16, 2016, in broadcast syndication. Lionsgate, 2016, DVD.

Bishop, Kyle William. 2010. *American Zombie Gothic: The Rise and Fall (And Rise) of the Walking Dead in Popular Culture*. Jefferson: McFarland & Co., Inc.

4 The original AMC series *The Walking Dead* is an adaptation of the comic book of the same name by Robert Kirkland, Tony Moore, and Charlie Adlard. The comic book ran from 2003–2019.

Cardiff, Ashley and Nick Bernardone, writers. 2020. *Fear the Walking Dead*. Season 5, episode 13, "Leave What You Don't." Directed by Daisy von Scherler Mayer, featuring Alycia Debnam-Carey and Colby Minifie. Aired September 8, 2019, in broadcast syndication. Lionsgate, 2020, DVD.

Carson, Rachel. 1962. *Silent Spring*. Boston: Mariner.

Cetinić, Marija and Jeff Diamanti. 2021. "Oil Barrels: The Aesthetics of Saturation and the Blockage of Politics." In *Saturation: An Elemental Politics*, edited by Melody Jue and Rafico Ruiz, 264–282. Durham, NC: Duke University Press.

Chakrabarty, Dipesh. 2009. "The Climate of History: Four Theses." *Critical Inquiry* 35 (2): 197–222.

Cohen, Jeffrey Jerome. 2017. "Grey: A Zombie Ecology." In *Zombie Theory: A Reader*, edited by Sarah Juliet Lauro, 381–394. Minneapolis: University of Minnesota Press.

Cohen, Jeffrey Jerome. 1996. "Monster Culture (Seven Theses)." In *Monster Theory: Reading Culture*, edited by Jeffrey Jerome Cohen, 3–25. Minneapolis: University of Minnesota Press.

Cohen, Jeffrey Jerome and Lowell Duckert. 2015. "Introduction: Eleven Principles of the Elements." In *Elemental Ecocriticism: Thinking With Earth, Air, Water, and Fire*, edited by Jeffrey Jerome Cohen and Lowell Duckert, 1–26. Minneapolis: University of Minnesota Press.

Cowan, Douglas E. 2022. *The Forbidden Body: Sex, Horror, and the Religious Imagination.* New York: New York University Press.

Crutzen, Paul J. 2006. "The 'Anthropocene'." *Earth System Science in the Anthropocene*, edited by Eckart Ehlers and Thomas Krafft, 13–14. Berlin: Springer.

Darabont, Frank, writer. 2011. *The Walking Dead*. Season 1, episode 2, "Guts." Directed by Michelle MacLaren, featuring Andrew Lincoln and Steven Yeun. Aired November 7, 2010, in broadcast syndication. AMC and Anchor Bay Entertainment, 2011, DVD.

De Villiers, Marq. 2000. *Water: The Fate of Our Most Precious Resource.* Boston: Mariner.

Estok, Simon C. 2014. "Spectators to Future Ruin: Ecological Representations and Their Consumption." In *Culture and Media: Ecocritical Explorations*, edited by Rayson K. Alex, S. Susan Deborah, and Sachindev P. S., 49–65. Newcastle upon Tyne: Cambridge Scholars Publishing.

Farahani, Dana and Siavash Farahani, writers. 2021. *The Walking Dead: World Beyond*. Season 1, episode 3, "The Tyger and the Lamb." Directed by Sharat Raju, featuring Aliyah Royale and Alexa Mansour. Aired October 18, 2020, in broadcast syndication. AMC, 2021, DVD.

Fierro, Adam and Frank Darabont, writers. 2011. *The Walking Dead*. Season 1, episode 6, "TS-19." Directed by Guy Ferland, featuring Andrew Lincoln and Noah Emmerich. Aired December 5, 2010, in broadcast syndication. AMC and Anchor Bay Entertainment, 2011, DVD.

Folger, Robert. 2022. "Archaeologies of Apocalypse: A Preface." *Apocalyptica* 1: 19–35. https://doi.org/10.17885/heiup.apoc.2022.1.24603

Fojas, Camilla. 2017. *Zombies, Migrants, and Queers: Race and Crisis Capitalism in Pop Culture.* Urbana: University of Illinois Press.

Hendershot, Cyndy. 1999. *Paranoia, the Bomb, and 1950s Science Fiction Films.* Bowling Green: Bowling Green State University Popular Press.

Jue, Melody and Rafico Ruiz. 2021. "Thinking with Saturation Beyond Water: Thresholds, Phase Change, and the Precipitate." In *Saturation: An Elemental Politics*, edited by Melody Jue and Rafico Ruiz, 1–26. Durham, NC: Duke University Press.

Kang, Angela and Matthew Negrete, writers. 2018. *The Walking Dead*. Season 8, episode 13, "Do Not Send Us Astray." Directed by Jeffrey J. January, featuring Andrew Lincoln, Jeffrey Dean Morgan, and Jason Douglas. Aired March 25, 2018, in broadcast syndication. Lionsgate, 2018, DVD.

Kristeva, Julia. 1982. *Powers of Horror: An Essay on Abjection*. Translated by Leon S. Roudiez. New York City: Columbia University Press.

Lauro, Sarah Juliet and Karen Embry. 2017. "A Zombie Manifesto: The Nonhuman Condition in the Era of Advanced Capitalism." In *Zombie Theory: A Reader*, edited by Sarah Juliet Lauro, 395–412. Minneapolis: University of Minnesota Press.

Macauley, David. 2010. *Elemental Philosophy: Earth, Air, Fire, and Water as Environmental Ideas.* Albany: State University of New York Press.

McAlister, Elizabeth. 2017. "Slaves, Cannibals, and Infected Hyper-Whites: The Race and Religion of Zombies." In *Zombie Theory: A Reader*, edited by Sarah Juliet Lauro, 63–84. Minneapolis: University of Minnesota Press.

McLuhan, Marshall. 1964. *Understanding Media: The Extensions of Man*. New York City: McGraw-Hill.

McNally, David. 2017. "Ugly Beauty: Monstrous Dreams of Utopia." In *Zombie Theory: A Reader*, edited by Sarah Juliet Lauro, 124–136. Minneapolis: University of Minnesota Press.

McNeill, J. R. and Peter Engelke. 2016. *The Great Acceleration: An Environmental History of the Anthropocene Since 1945*. Cambridge, MA: Harvard University Press.

Morton, Timothy. 2016. *Dark Ecology: For a Logic of Future Coexistence*. New York City: Columbia University Press.

Morton, Timothy. 2013. *Hyperobjects: Philosophy and Ecology after the End of the World*. Minneapolis: University of Minnesota Press.

Night of the Living Dead. 1994 [1968]. Dir. George A. Romero. New York City: Elite Entertainment. DVD.

Nixon, Rob. 2011. *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA: Harvard University Press.

Plants vs. Zombies. 2009. PopCap Games. Mac OS X. PopCap Games.

Reilly, Evan, writer. 2012. *The Walking Dead*. Season 2, episode 4, "Cherokee Rose." Directed by Billy Gierhart, featuring Steven Yeun and Brian Keith Hillard. Aired November 6, 2011, in broadcast syndication. Lionsgate, 2012, DVD.

Sassen, Saskia. 2014. *Expulsions: Brutality and Complexity in the Global Economy.* Cambridge, MA: Harvard University Press.

Schmeink, Lars. 2022. "The Grey Ecology of Zombie Fiction." In *The Bloomsbury Handbook to the Medical-Environmental Humanities*, edited by Scott Slovic, Swarnalatha Rangarajan, and Vidya Sarveswaran, 73–82. London: Bloomsbury Academic.

Schweitzer, Dahlia. 2018. *Going Viral: Zombies, Viruses, and the End of the World*. New Brunswick, NJ: Rutgers University Press.

Starosielski, Nicole. 2019. "The Elements of Media Studies." *States of Media+Environment* 1 (1). https://doi.org/10.1525/001c.10780

White Zombie. 2022 [1932]. Dir. Victor Halperin. West Conshohocken, PA: Alpha Video. DVD.

Wilson, Sheena, Imre Szeman, and Adam Carlson. 2017. "On Petrocultures: Or, Why We Need to Understand Oil to Understand Everything Else. In *Petrocultures: Oil, Politics, Culture*, edited by Sheena Wilson, Imre Szeman, and Adam Carlson, 3–20. Montreal: McGill-Queen's University Press.

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Teresa Heffernan

Orga is not Mecha: How Literal Readings of Fiction are Damaging the World

Abstract: This paper traces the fictional roots of recent claims by those in the AI industry that superintelligent machines pose an existential risk. This irrational anxiety, given that fiction is not science, that grants AI agency is not only a distraction from real concerns, but a psychological displacement, an unconscious defense that substitutes a new object, autonomous machines, in place of one that cannot be acknowledged: responsibility for the environmental and societal damage caused by a resource-intensive industry that persists, despite the climate catastrophe, with a mechanistic worldview, one that treats nature, including humans, as a lucrative commodity. Initially seduced by the story of AI evolution, Stanley Kubrick consulted computer scientists when he was making *2001: A Space Odyssey*, which was released a year before the moon landing. In the problematic cycle of fiction directing science, the film's depiction of AI has, in turn, shaped research in the field. Yet, if at first Kubrick embraced the scientists' vision of evolving, intelligent, immortal machines, by the time he was working on *A.I. Artificial Intelligence* in the 1980s, the field was entering one of its many winters and environmental concerns had dampened faith in technological progress. Kubrick again consulted AI scientists, but this time he returned the field to its fictional roots and presented AI as a dark fairy tale about a corporation that persists with the myth that it can turn 'mecha' into 'orga' despite the climate crisis.
Keywords: AI industry, environmental crisis, A.I. Artificial Intelligence, *2001: A Space Odyssey*, fiction versus myth.

Many prominent figures in the AI industry, including two of the "godfathers" of AI, Geoffrey Hinton and Yoshua Bengio; and the CEOs of Open AI, Sam Altman, and Google's Deep Mind, Demis Hassabis, have made headline news with their public pronouncements on the existential risk of AI. Along with others, they signed a short open letter published in May 2023 by the Center for AI Safety (CAIS) warning that a superintelligent AI might evolve, outsmart humans, and turn against us. "It would be difficult to tell if an AI had a goal different from our own because it could potentially conceal it," the executive director of CAIS, Dan Hendrycks, said (CBC News 2023). On its website of AI threats, CAIS includes the example of rogue AIs: "We risk losing control over AIs as they become more capable. AIs could optimise flawed objectives, drift from their original goals, become power-seeking, resist shutdown, and engage in deception" (Center for AI Safety). Politicians around the globe have invited Altman—a "prepper," who has stockpiled gas masks, guns, and gold; who has been funded by both Peter Thiel and Elon Musk; and who dropped out of Stanford after two years of computer science to work on a social mobile application—to discuss the risk of human extinction by machines that the AI industry argues is on the same scale as nuclear war and pandemics (Sweet 2023).

These claims have been met with an equal amount of skepticism and have been dismissed as the product of over-inflated egos. Invoking the threat of autonomous machines, critics argue, deflects attention from a resource-intensive industry that, while lucrative for some, continues to inflict harm on society at large and fails to address a myriad of problems, including the concentration of wealth and power in the hands of a few, copyright violation, biased data, intrusive surveillance, ghost work, deep fakes, and the dissemination of disinformation (Heaven 2023). Moreover, at the very heart of these claims of rogue machines is a mythic story about AI as an evolving, autonomous entity, which originates in fiction not science, and belies the reality of an industry that persists with a mechanistic worldview despite the climate catastrophe. If, in *2001: A Space Odyssey* (1968), Stanely Kubrick was seduced by a narrative spun by AI scientists, he returns the field to its fictional origins in *A.I. Artificial Intelligence* (2001), a film about a corporation that continues to spin a fairy-tale about turning fiction into science and 'mecha' into 'orga' amidst rising sea levels and flooded cities.

When Fiction Becomes Myth: The Fictional Origins of AI as an Existential Risk

Seo-Young Chu, in *Do Metaphors Dream of Literal Sheep?,* defines science fiction as "counterfigurative literalization," arguing that it engages in representations of cognitively estranging aspects of post-twentieth century life, like financial derivatives or globalization, that are both real and elusive (2010, 68; 80). Yet the argument falters in her chapter about robot rights that assumes that we will, at some future point, share the earth with "sentient robots" that deserve empathy, an argument that, as we will see, circles back to fiction and the figurative and not science and the literal (2010, 214; 216). Stephen Cave and Kanta Dihal organize the hopes and fears of AI under four broad categories, with reference to 300 both fictional and non-fictional narratives of AI, that they argue have inspired the development, interpretation, and regulation of the technology. Their goal is to offer a "more balanced discussion of AI's potential" (2019, 78). As they focus on the reception of the technology and group these narratives under general categories, the cultural and historical nuances of these narratives are necessarily lost. Furthermore, combining fictional with nonfictional narratives fails to acknowledge the differences between the two.

In the twenty-first century, a google search offers up scores of media headlines announcing that fiction is coming true, encouraging this collapse of nonfiction and fiction. Yet what is at stake when fiction is collapsed with science and literal readings of stories dominate?[1] When narratives abound, what happens to scientific evidence, facts, charts, statistics, balance sheets and other ways of knowing? In a "world taken over by narrative," Peter Brooks argues, the recent embrace of stories as explanations of reality have culminated in "political cant and corporate branding" about "lost elections" or "impending great wealth" (2022, 77; 8). We need to resist stories that seduce us into accepting "dominant ideologies," he maintains, and shining "an analytic light" on them will help prevent us from mistaking the map for the territory (21; 152). "Unanalysed stories, those that are propagated and accepted as true and necessary myths," he speculates, "may kill us yet" (152). Hence, this paper analyses the story the AI industry has been spinning about the inevitability of this technology, which purports it will either save or destroy humanity, a narrative that has long exploited fiction, in lieu of scientific evidence, to support its claims.

Alan Turing and Irving John Good, mathematicians who worked together at Bletchley Park, were the first in the AI field to speculate about the possibility of superintelligent machines usurping humans, but the source of Turing's and Good's speculations is fiction not science. Samuel

1 Isabella Hermann also discusses the problems of literal readings of fiction, with reference to the films *Ex Machina* and *A.I*, arguing that "it can be problematic when science communication resorts to typical SF tropes in order to educate or raise awareness about critical aspects" of AI technology (2023). I have also pointed to the problems of literal readings of fiction and their influence on science in an earlier article, "Fiction Meets Science: *Ex Machina*, Artificial Intelligence, and the Robotics Industry" (2019).

Butler's *Erewhon*, a nineteenth-century novel, is listed in the bibliography of "Computing Machinery and Intelligence," a paper where Turing discusses birthing a "child" machine that will evolve and "eventually compete with men in all purely intellectual fields" (Turing 1950, 460). This novel is also referenced in the body of his "Intelligent Machinery, A Heretical Theory," where Turing, writing in 1951, concludes:

> It seems probable that once the machine thinking method had started, it would not take long to outstrip our feeble powers. There would be no question of the machines dying, and they would be able to converse with each other to sharpen their wits. At some stage therefore we should have to expect the machines to take control, in the way that is mentioned in Samuel Butler's 'Erewhon' (Turing 2020, 75).

Erewhon (1872) is a satiric novel whose title spelt backward, save one letter, is "nowhere." After engaging in a debate that playfully riffs on Darwin's theory of evolution as applied to machines, the Erewhonians destroy all machines dating back almost 300 years out of fear that they will take over. Even the mangle, a board with rollers that had long been used to wring out water from clothes and to press and smooth laundry and which operated with a hand crank until it was mechanized in the second half of the nineteenth century, falls under suspicion, requiring a discussion that persists for several years:

> In the end [they] succeeded in destroying all the inventions that had been discovered for the preceding 271 years, a period which was agreed upon by all parties after several years of wrangling as to whether a certain kind of mangle which was much in use among washerwomen should be saved or no. It was at last ruled to be dangerous, and was just excluded by the limit of 271 years (Butler 2020, chapter 24).

In the preface to the second edition of the novel, Butler, responding to those who thought his novel was being critical of Darwin, protested that the debate in fact exemplified a "specious misuse of analogy." In other words, he was not mocking Darwin, but humorously applying the recent Darwinian theory of the evolution of living things to machines as an erroneous analogy, one that has the allure of truth but is utterly fallacious. The debate over the mangle foregrounds the absurdity of the society's fear of evolving machines.

Yet, while Butler employed literary tropes to critique Victorian society, Turing, known for being overly literal, took the argument about machines

evolving into an autonomous immortal "they" that would outstrip humans seriously (Hodges 1992, see especially 232 and 243). If Turing's literal reading of Butler has, in turn, sparked anxiety about evolving machines and given rise to theories of AI as an existential risk, his substitution of thinking for imitation and intelligence for "the machine thinking method," a computational process that depends on deception within the parameters of a game, has also spawned a host of problems.[2]

In the sixties, Irving John Good, also referencing fiction, speculated that "the first ultraintelligent machine is the last invention that man need ever make, provided that the machine is docile enough to tell us how to keep it under control. It is curious that this point is made so seldom outside of science fiction. It is sometimes worthwhile to take science fiction seriously" (1966, 33). Fiction should be taken seriously, but as Butler had pointed out, figurative language and literary tropes should not be taken literally. In response to the question a pianist poses about whether literature is true or not, a novelist in Olga Tokarczuk's *The Books of Jacob* responds: "'I would expect you, being an artist yourself, not to think in a manner more suited to simple people. Literature is a particular type of knowledge, it is'—he sought the right words, and suddenly a phrase came ready to his lips—'the perfection of imprecise forms'" (Tokarczuk 2022, 14).

Fiction differs from science as it embraces the complexity of the world; it is expansive not reductive (which any good scientific model or algorithm needs to be); it makes no claim to facts or precision and instead foregrounds literary tropes and figurative language. When the openness of fiction is shut down and it is read literally and mistaken for the real, it gets redeployed as a totalizing myth, in the tradition of Plato, that, as such, serves the interests of a ruling elite. While fiction is often exploited by the AI industry, the type of intelligence that produces fiction, which requires extensive and careful reading, is undervalued. The AI industry lauds speed, calculation, strategy, games with a winner, and the correct answer; the chess prodigy is the model of a genius in the tech world, from John von Neumann to Demis Hassabis. It is not rogue machines or evolving mecha that we need to fear, but the imposition of this useful but limited version of intelligence on the world at large.

In the latter part of the twentieth century, the extropians and the singularitarians were, like Turing and Good, inspired by literal readings of fiction to place their faith in the power of machines. Male-dominated, these groups practiced secret handshakes, adopted new names as a sort of rebirth, and used psychedelic drugs; they believed in cryogenics, resurrection, immortality and held a religious-like faith in the transformative

2 I expand on these problems in Heffernan (2022).

potential of technology to enhance evolution. Dismissed as cultish, these groups had a hard time gaining mainstream legitimacy. In 1994, there were only about 300 members in the Extropy Institute (Regis 1994).

In 1998, Nick Bostrom broke from the extropians and founded the World Transhumanist Association, seeking to gain recognition for transhumanism as a subject for serious scientific study and policy. In 2005, he rebranded himself as an "existential risk" theorist and founded the Future of Humanity Institute at Oxford, which closed in April 2024. Funded by the futurist, the late James Martin with further backing from Facebook co-founder Dustin Moskovitz and Elon Musk, the Institute also hosted the transhumanist Anders Sandberg. With support from donors, including Peter Thiel and Elon Musk, the Centre for the Study of Existential Risk at Cambridge and the Future of Life Institute at MIT soon followed, lending academic legitimacy to the idea of transhumanism. The Singularity University (co-founded by Ray Kurzweil and Peter Diamandis), which, despite its name, is not a degree-granting institute but a Silicon Valley company that sells expensive seminars and events, opened in June 2009 with the financial backing of corporations, including Google. In short, since the days of the Extropy Institute, with the support and funding of tech billionaires with lots of access to media, a relatively small group of men have exerted a great deal of influence over narratives about AI that have long cited fiction not science as evidence.

Artificial Intelligence and the Environmental Crisis

Bostrom, who has signed up for cryogenics, enthused that transhumanism embraces "a gung-ho techno-cheerleading, bring it on now, where are my life-extension pills" attitude (Khatchadourian 2015). His fellow transhumanist James Hughes, the Executive Director of the Institute for Ethics and Emerging Technologies, which he founded with Bostrom, writes about science fiction stables, such as "uplifted animals" and "sentient robots," as if they were a soon-to-be-realised reality: "Simple extrapolations of our early 21st century one-human-one-quanta will almost certainly be complicated by a growing diversity of robots and uplifted animals alongside our myriad forms of descendants. What if humanity being eclipsed by our animal and robot descendants is the best future for sentient life?" (Sennesh and Hughes 2023).

While AI science mimics scientific argumentation, as we have seen, fiction often stands in place of any proof. In contrast, for decades, climate science has been gathering empirical evidence about the impact of the

fossil-fuel industry, including plastics and petrochemicals. The scientific method involves the rigorous and reproducible testing of a hypothesis, based on observations, to find causal connections and to predict future patterns. Species loss, environmental degradation, and extreme weather can all be traced to the rapid industrialization and urbanization that has been enabled by petroleum products, climate scientists have found. Over the same decades that transhumanists have been mobilizing, instead of investing in the low-hanging fruit of proven technologies to address this escalating ecological crisis (to name a few: bicycles, renewable energy, affordable public transportation, electric trains, heat pumps, tree planting, habitat restoration, repairable electronics, and environmentally responsible materials) venture capital has financed high-tech sectors, with considerable support from tax dollars, the military, and heavily lobbied governments, and invested in resource-intensive "superintelligent" machines, from autonomous cars to robot soldiers. Billions of dollars have backed AI and the immortality industry with their fiction-fueled dreams of sentient robots, space colonies, uplifted animals, and downloaded brains while science-based climate research has met resistance, deferral, and denial as the world burns.

Perpetuating the worst aspects of Enlightenment philosophy, transhumanism subscribes to the myth of the autonomous liberal subject that understands itself apart from nature, which is there only to be mastered and overcome. In his discussion of the sublime, for instance, Immanuel Kant writes that the power of reason allows us "to judge ourselves independent of nature and reveals in us a superiority over nature" (2018 [1790], 453). The legacy of that thinking has led global industries to treat nature, on which economies depend, as an inert resource, a dead thing. As Ben Ehrenreich writes: "Only once we imagined it [nature] as dead could we dedicate ourselves to making it so" (2020, 76). Transhumanists and the AI industry, the culmination of centuries of colonialism, imperialism, and unprecedented industrial expansion, treat life, including humans, as a machine to be hacked, manipulated, and controlled instead of something to respect, nurture, and work with collaboratively. Fantasising about birthing a digital intelligence and colonizing barren planets, Silicon Valley tech elites exemplify the very thinking that has brought us to a global ecological collapse even as they now imagine being manipulated and enslaved in turn. In lieu of taking responsibility, the source of the problem, they argue, is not corporate-owned technology and the damage it has done but, instead, rogue machines.

"If it gets to be much smarter than us, it will be very good at manipulation, because it will have learned that from us, and there are very few exam-

ples of a more intelligent thing being controlled by a less intelligent thing," Hinton said in an interview on CNN (Kagubare 2023). The AI industry fears that just as humans have endangered mountain gorillas and other animals, so a superintelligent machine would not hesitate to wipe out humans. Rather than acknowledging that trying to dominate nature has come at our own expense as we continue to pollute the planet and wipe out our only known biological companions in the universe at an alarming rate, Hinton views violence and manipulation as signs of advanced intelligence and projects these traits onto machines. Beyond purely cynical motives, the anxiety on the part of true believers that a malevolent super AI will arise and wipe out humanity is a psychological displacement, an unconscious defense that substitutes a new object, autonomous machines, in place of disavowed knowledge: the societal and ecological damage inflicted by the AI industry that perpetuates a mechanistic worldview even in the face of climate catastrophe.

Instead of reading fictional accounts about the manufacturing of humanoid machines as a literal roadmap for the future, Turing, Good, the transhumanists, and the AI industry might have better approached fiction analytically. For instance, Karel Čapek's play *R.U.R* (*Rossum's Universal Robots*), first published in 1921, invents the term "robot" in order to expose the problematic logic of automation, production, and profit as a version of "progress." Old Rossum, a "frightful materialist," sets about to "scientifically dethrone God" and create humans, but he only produces short-lived monstrosities (7). The young Rossum, an engineer of the new "age of production," has no metaphysical aspirations but rather wants to create simplified artificial persons to work in factories as "the cheapest labour" (3). Organic rather than mechanical, these factory-produced robots are designed to serve rapid industrial expansion. As Čapek puts it, Young Rossum "chucked everything not related to work, and in so doing he pretty much discarded the human being and created the Robot" (9). Harry Domin, the play's central director, proclaims that: "It is great progress to give birth by machine. It's faster and more convenient. Any acceleration constitutes progress [...]. Nature had no grasp of the modern rate of work" (Čapek 2004, 18).

Like many in the AI industry, Domin promises that machines will usher in a return to paradise, where humans will be "free and supreme," humanity will emerge as the "master of creation," and there will be "so much of everything" for everyone that there will be no poverty and no need to work. One of his modern-day equivalents, Altman, sees a future with AGI (artificial general intelligence, which does not exist) as "increasing abundance and turbocharging the economy" (Altman 2023). In *R.U.R,* however,

this promise turns sour as the small group of robot factory owners accumulate enormous power and wealth while workers lose their jobs, governments use robots as soldiers, the robots kill humans that rebel, and the world meets its end. Only in the final moments of the play, when love, tears, and laughter return, none of which can be mechanically computed, is there hope that "life shall not perish" (Čapek 2004, 84). Despite Čapek's early critique, however, the mechanistic worldview persisted unabated, exemplified by Turing wanting to build a mechanical brain, envisioning human intelligence as nothing more than a mechanical process and fantasising about birthing an evolving "child machine" (1950, 456).

From *2001: A Space Odyssey* to *A. I. Artificial Intelligence*

While working on *2001: A Space Odyssey*, Kubrick consulted both Good, the Bletchley mathematician; and Marvin Minsky, the co-founder of the Massachusetts Institute of Technology's AI laboratory, who was also predicting the evolution of superintelligent machines that might one day harness the earth's resources in service of their goals. Trusting and embracing these predictions, Kubrick discussed the development of his character, the sentient supercomputer HAL 9000:

> One of the things we were trying to convey in this part of the film is the reality of a world populated—as ours soon will be—by machine entities who have as much, or more, intelligence as human beings, and who have the same emotional potentialities in their personalities as human beings. We wanted to stimulate people to think what it would be like to share a planet with such creatures [...]. Most advanced computer theorists believe that once you have a computer which is more intelligent than man and capable of learning by experience, it's inevitable that it will develop an equivalent range of emotional reactions—fear, love, hate, envy, etc. (Kubrick 1970, 307).

In the circle of fiction-inspired AI 'science' inspiring fiction that it is in turn inspired by, HAL continues to animate the AI industry, serving as a holy grail. Over fifty years after the film's release, the question—"Would it be possible to design a computer today that could reach or outreach HAL's capabilities?"—continues to motivate researchers (Stork 2018).

Shaped by the speculations of the 1960s AI industry, the film opens with the famous scene of an ape, who after encountering an extraterres-

trial monolith, throws a bone up in the air in triumph after he has used it as a tool to beat another ape; the next image is of an orbiting satellite four million years later. Alien life, technological progress, and super machine intelligence lie at the heart of this narrative, which is infused with a transhumanist faith that the mortal biological body will be cast off and be replaced by a machine and eventually intelligence will escape matter altogether, emerging as pure energy. Kubrick enthused:

> When you think of the giant technological strides that man has made in a few millennia—less than a microsecond in the chronology of the universe—can you imagine the evolutionary development that much older life forms have taken? They may have progressed from biological species, which are fragile shells for the mind at best, into immortal machine entities—and then, over innumerable eons, they could emerge from the chrysalis of matter transformed into beings of pure energy and spirit. Their potentialities would be limitless and their intelligence ungraspable by humans (Kubrick n.d.).

The MGM studios marketing campaign for the film emphasised the 'realism' of the film, promising that "everything in *2001: A Space Odyssey* can happen within the next three decades, and…most of the picture will happen by the beginning of the next millennium" (Castle 2005). Believing it would serve as a great advertisement for actual space technology, many corporations offered expertise and props in exchange for product placements in the film including Honeywell, Boeing, General Dynamics, Grumman, Bell Telephone, and General Electric. Kubrick also hired space consultants to ensure technical accuracy, and the film, although poetic and enigmatic, continues to be lauded for the realism of its representation of space travel.

Some critics have read the film as an indictment of technological progress, given the warring apes, the murderous computer (IBM retracted its support of the project when it heard about the plotline for the 'character' of Hal), nuclear satellites, and corporate-branded space, while others have read it as the triumph of quasi-religious technological advancements that foster evolutionary intelligence; from apes to humans to sentient machines to star children. Does technology produce us as dehumanised, sterile, inarticulate, and cold or does it facilitate our connection to awe-inspiring cosmic transformations? A deeply ambiguous allegory that is full of leaps and ruptures, the Kubrick-directed film privileges music, visuals, subjective impressions, and aesthetics over literalism despite the marketing hype that describes it as a soon-to-be realised future.

Kubrick collaborated with author Arthur C. Clarke (1917–2008) on the script and concurrently worked on a novel that was published after the release of the film, with Clarke listed as the sole author. Clarke was a tech optimist who had grown up on a mix of science and fiction, including a November 1928 issue of A*mazing Stories,* the first science fiction magazine; and David Lasser's self-published 1931 non-fiction work, *The Conquest of Space*, which featured a fictional representation of space travel that Clarke cited as a major influence on his life. In keeping with transhumanism, Clarke's novel holds that humanity is not an end, but only one stage in evolution and that humans will migrate to robot bodies. James Randi, the magician, science skeptic, and investigator of pseudoscience, recounted that Clarke, at the premiere screening of *2001*, left in tears at the intermission, following an eleven-minute scene of an astronaut jogging inside the spaceship (Randi 2008). The scene was cut before the general release of the film, but its point was to convey the tedium of space travel. Clarke's prescriptive novel, full of concrete detail, plot exposition, and technical explanations, mimics a "scientific" style that foregrounds precision, objectivity, and a cause and effect logic. In sharp contrast, Kubrick, with his enigmatic style, valued the inconclusiveness, imprecision, and openness of artistic renderings of the world and welcomed the critical debates about the film, refusing to offer a definitive guide.

By the time Kubrick was working on *A.I. Artificial Intelligence*, the pre-moon landing dreams of space travel and intelligent cosmic machines had receded, and computers had become a lucrative business. In the eighties, scientific consensus about the greenhouse effect had solidified while the grandiose promises of AI had not been realised, and the industry was headed into one of its many winters. In 1984, Minsky, the computer scientist whom Kubrick had consulted when he was working on *2001*, was warning of the impending collapse of the field. Kubrick again invited AI researchers to consult on his new project. Among them were Cynthia Breazeal, director of the Personal Robots group at the Media Lab at MIT who works on military-funded 'emotional' robots inspired by the *Star Wars* franchise and discusses AI, in the tradition of Turing, as like a 'child'; as well as Hans Moravec, the transhumanist, computer scientist, and cofounder of the Institute of Robotics at Carnegie Mellon University.

Kubrick had read Moravec's *Mind Children: The Future of Robot and Human Intelligence* (1988) about human brains transferred to super-intelligent self-improving immortal robots that could thrive in a post-biological universe long after humans and other life had disappeared. Based on many highly questionable premises, including that electronic constructs can be substituted for brain neurons and that consciousness, understood

as a computable process, can be downloaded into a computer, Moravec's book fantasises about giving birth to machines that would transcend nature. Moravec was part of John Brockman's Edge Foundation, which, despite its penchant for promoting fiction-inspired 'science,' had begun as the 'Reality Club' in 1981.

Ten years later, Brockman published his "The Third Culture," referencing C. P. Snow's 1959 work "Two Cultures," which was about the gulf between scientists and literary intellectuals. Snow was irritated that in the 1930s, literary intellectuals and "men of letters" had, in his view, excluded the most influential scientists of the early twentieth century from their ranks, and he wanted to encourage a dialogue between the two cultures to create a third culture. While readers of modernist fiction might challenge Snow's divide, Brockman argued that scientists and tech elites, backed by billionaires, should simply dethrone literary intellectuals and, as the new 'public intellectuals,' bypass peer review and take scientific ideas straight to the public. The 'digerati' were to dethrone the 'literati.' Nerds rebranded as 'cool'—all big ideas, big money, big egos—and proffering headline-grabbing ideas about the future were disseminated to media outlets like Wired Magazine, Ted Talks, and the Edge, that have been so influential in pushing the idea that technology can engineer its way out of any limit, even death. As Kevin Kelly wrote about the Third Culture movement: "Publishers [...] discovered that cool nerds and cool science can sell magazines to a jaded and weary audience" (Kelly 1998).

Brockman describes the contributors to the Edge as "third-culture thinkers or intellectuals...focused on science-minded pursuits based on evidence and empiricism." While interesting discussions have taken place on the Edge, not much evidence-based and empirical research grounds its authors from the tech elite, like Moravec. Kelly points out that:

> The purpose of science is to pursue the truth of the universe. Likewise, the aim of the arts is to express the human condition. (Yes, there's plenty of overlap.) Nerd culture strays from both of these. While nerd culture deeply honors the rigor of the scientific method, its thrust is not pursuing truth, but pursuing novelty. 'New,' 'improved,' 'different' are key attributes for this technological culture (1998).

The pursuit of 'new' and 'improved' technology has more in common with selling lucrative products to address manufactured problems than with truth-orientated science and has enabled what Evgeny Morozov has described as the "third culture" takeover, the "perfect shield for pursuing entrepreneurial activities under the banner of intellectualism" (Morozov

2019). Pushing a corporate-driven story about the future, the tech elite market 'science' by rendering fiction literal, emptying it of its non-teleological symbolic power that keeps the discussion of what it means to be human open.

Fiction is not Science and Mecha is Not Orga

In the early seventies, Stanley Kubrick had bought the rights to a short story called *Super–Toys Last All Summer Long* by Brian Aldiss, the inspiration for *A.I.* Over the decades, the filmmaker invited a number of writers to adapt the story for the screen and decided in the mid-eighties that Spielberg would make the ideal director. After Kubrick's death in 1999, Spielberg started working on the film based on the notes and artwork of the late director. It was released in 2001, a tribute to *2001: A Space Odyssey*.

The difference between the two films rendering of technology is stark. *2001: A Space Odyssey* treats machine evolution seriously, while *A.I.* treats technological evolution as a fairy tale that meets the reality of climate change. Having drunk the AI Kool-Aid in the 60s, had Kubrick grown skeptical about its claims? If *2001* is inspired by the potential of space travel, immortality, and a disembodied cosmic consciousness, *A.I.* returns to earth and corporate power. In 1992, Clarke, the tech optimist, was once again approached as one of the many screenwriters invited to write a treatment of the film. He told the *New York Times* that his treatment was "'rejected instantly!' Kubrick 'hated it and asked me to tear it up'" (Greiving 2021).

A.I. follows the sentimental story of a robot yearning to be a real boy that unfolds in a brutal stunted world of robot factories and climate change. Emotionally arrested humans, incapable of accepting death, live in an uneasy relationship with factory-built humanoid machines, referred to as "mecha," which are designed for service. In the arc of the story, David, a mecha child model programmed to love, is first adopted and then rejected and abandoned by its owners, the couple Monica and Henry Swinton. Hoping to gain Monica's love, the mecha child sets out with his faithful teddy bear, an old model of a "super" toy, on a quest to be "orga," a real boy, only to find that his maker cannot make his wish come true. Centuries later, long after humans have gone extinct, super mecha find this earlier model and are also unable to grant David's wish though they do stage a simulation for him.[3]

3 This analysis of the film *A.I.* builds on earlier published work (Heffernan 2018).

While *2001* is often considered to be Kubrick's most "realistic" film for its technically accurate portrayal of space, Kubrick envisioned *A.I.* as "sentimental, dream-like—a fable" (Baxter 1997, 355). He insisted on referring to *A.I.* as a fairy tale and wanted to call it Pinocchio after Carlo Collodi's nineteenth-century children's story about a fairy with turquoise hair who helps transform a wooden puppet into a boy. "Kubrick always wanted to include global warming, the eventual triumph of the robots, and one other factor: the Blue Fairy," said Aldiss, one of the invited script writers. "It was fucking Pinocchio! The Blue Fairy! I worked with him for about six weeks, and I couldn't get rid of that Blue Fairy," Aldiss complained (Baxter 1997, 356). Unlike *2001,* where Kubrick takes seriously the claims of computer scientists with their predictions of evolving machines, *A.I* draws on fairy tales, which revolve around magic and enchanted worlds; and fables, which tell stories of anthropomorphised animals or inanimate objects to illustrate a moral.

Echoing the findings of scientists, who had been documenting rising sea levels and the climate catastrophe caused by human interference since the early 90s, the film's prologue imagines a future where melting polar icecaps and rising seas, caused by greenhouse gasses, have already spelled the end of coastal cities from Amsterdam to New York to Venice. As millions are displaced by brutal weather and people in poorer countries starve, wealthier countries close their borders and restrict pregnancies. To address the much-diminished labour force, the elite build single-tasked androids that do not require food or sleep—nannies, chauffeurs, chefs, secretaries, security guards, and sex models. Described as the essential "economic link," the mecha keep the corporate machine churning and free-market logic alive in the ruins of the world. The action opens in a flooded New York City, where Dr. Hobby, the head of Cybertronics, is seemingly oblivious to the irony of announcing to his employees that he is proud of "how far" they have come and proposes they now explore the still untapped market of a mecha model that "loves." Recalling Rossum's Universal Robots with its focus on industrial production and Harry Domin's mantra that "any acceleration constitutes progress," the corporation in *A.I.* perseveres even as the world succumbs to climate chaos.

Like Mary Shelley's grieving Dr. Frankenstein, who sets out to discover the secret of life and builds his man/monster after the sudden death of his mother, Hobby embarks on his project to defeat death after he loses his son. His arrested grief, Godlike aspirations ("didn't God create Adam to love him," he queries), and unwavering belief in corporate capitalism lead him to dream of building a little mecha for a "completely new market." He wants to manufacture "a perfect child caught in a freeze–frame;

always loving, never ill, never changing," that, when its program is activated, would bind unconditionally and eternally to a human. His plan succeeds and Hobby's nightmarish warehouse fills up with boxes of identical Davids (and Darlenes, the girl version) ready to be shipped to childless couples and grieving parents.

Monica and Henry Swinton are one such couple. Targeted by Hobby's corporation, which scrapes data about its employees' private lives, Henry meets the criteria for testing a prototype of a mecha child: lifestyle, loyalty to the firm, and a family tragedy. The couple have a sick child, Martin, who has been suspended in a cryogenic tank for the past five years. On a visit to see Martin, the hopeful father asks the attending doctor about the latest "cutting edge" research involving "virus locators" and "microscopic synthetic hunter killers." The doctor's jaded response suggests that he is familiar with the hype about "break-through cures" trotted out by a profit-hungry technoscience industry. The doctor tries to gently shift the discussion from Henry's questions about cures to helping Monica mourn her son, even as he acknowledges that the medical industry deems mourning "inappropriate." Echoing the doctor's skepticism, the paintings on the wall that serve as a background for this conversation about technological miracles depict various fairy tales. Most prominently and tellingly is the tale of *The Emperor's New Clothes*, a tale by Hans Christian Andersen about vanity, deception, fraud, and speaking truth to power: the crowds watching the royal procession see that the emperor is wearing no clothes, and yet, despite the evidence, they disavow this knowledge until a little boy exposes the obvious.

The first part of the film unfolds from Monica's point of view as she struggles with the disturbing mecha, David, which follows her around the house, mimicking her behaviour. Distressed, she locks it in a cupboard. One evening, however, while remembering her son suspended in his tank, she, with all her undigested grief and depression, launches David's imprinting algorithm. Doing so activates the attachment program, prompting the mecha to call her "mommy" and to hug her. Henry, who opts out of the imprinting program, reminds Monica that the mecha is only a toy. She responds, but he looks "so real on the outside" and continues her uncomfortable relationship with the mecha. At least she does until her less than "perfect" Martin returns home.

After an incident at the swimming pool involving David, where Martin almost drowns, the father convinces his wife that David is dangerous and must be returned to the factory to be destroyed as the corporate contract stipulates. Monica cannot follow through with the contract and instead abandons David in the woods. David clings to Monica and begs her

not to leave him, reminding her of Pinocchio and crying after her "if you let me, I will be so real for you." Monica had read David the tale of Pinocchio, yet David, not understanding the difference between fiction and reality, continues to hope that the blue fairy will turn him into a real boy. The mecha insists, against the protests of Monica, that "stories are real" only to discover in the course of his quest that she was right, they are not.

Read as a fable, David's tale is part of a long tradition of stories about artificial people who function as liminal figures that help negotiate the ever-shifting boundaries of what it means to be human. Teddy, David's faithful toy companion, is much more kind-hearted and compassionate than any of the emotionally stunted humans in the film and more emotionally sophisticated and clever than any of the most advanced mechas. In the generic conventions of fantasy, the old model super toy plays the role of the wise guide to the young hero, offering a corrective model to a world gone wrong. Like the robots in *R.U.R*, David and the other mecha might well be read as representatives of a dehumanised underclass produced at the intersection of global capital and the climate crisis. While a depressed Monica and her husband Henry live a luxurious existence in a retro suburban house with a swimming pool, access to the latest in high-tech gadgets and medical care, David joins the ranks of the masses of poor "illegals" that are hunted down in the wastelands and sent to the "Flesh Fair," where mecha are shot out of cannons, strung up, torn apart, and set on fire for the amusement of humans. The brutality of the jeering human crowds with their lust for violence sharply contrasts with the gentle caged machines and the innocence of the mecha boy. These scenes recall a dark legacy—from gladiator fights to the burning of witches to the lynching of slaves to the holocaust—of one group of humans claiming an imagined purity or authenticity while abusing other humans whom they designate as less than human. The mecha hunters with their metallic masks, helmets, and bikes are fully integrated with their machines, just as Martin is, who returns from the hospital in a motorised chair, exposing the faulty logic of purity and autonomy. "History repeats itself," one of the caged mecha bemoans.

Yet, the film might also be read as a comment on the AI industry and its belief in evolving machines, corporate-driven technological progress, and its inability to distinguish, like David, between fact and fiction. The film audience is encouraged to side with the crippled humanoid robots at the Flesh Fair, but the reality that they are machines that do not feel as they are blown up or melted down punctures the dramatic tension. In the opening sequence Professor Hobby stabs the hand of Sheila, a secretary mecha model, and she shrieks. Hobby asks her how she feels, to which she

responds, "I don't understand." He then asks her to undress, and Sheila begins to strip. Hobby stops her and opens the human–like mask, exposing a metal frame, removes a computer chip, and reveals Sheila to be no more than a "sensory toy." It is then that the Professor proposes the next level of mecha: "a robot, who can love."

For-sale models built with simulators that use "neurone sequencing technology" that perform 'love' as a widening of the eyes, a quickening of the breath, and a warming of the skin are replaced by mecha boys and girls that are built by "mapping the impulse pathways in a single neurone" that perform 'love' as never-ending attachment. Dr. Hobby not only proposes a dark dysfunctional version of love but claims he can turn "mecha into orga."

The redneck show runner at the "Flesh Fair" warns the audience not to be manipulated by the mecha boy that is, following Turing, designed to "imitate our emotions." When David pleads with the crowd "don't burn me;" "don't make me die," he wins their support, convincing them he is human. Yet when David tries to eat in order to imitate his human brother, who eggs him on, the child facade melts exposing mechanical parts. As he undergoes repairs, his hardware is exposed as the technicians clean the spinach from the circuits. Monica holds his hand, but David tells her, "It's ok mommy. It doesn't hurt," which causes her to momentarily step back in distress as the illusion is shattered by the realization that David can perform but not feel. So too, when Martin, trapped in David's grasp, struggles at the bottom of the pool on the verge of drowning, the mecha lies calmly with unblinking eyes that are always open.

The film audience, like Monica and the Flesh Fair crowd, watch the emotionally charged scenes of Martin tormenting David, Monica abandoning David in the woods, David crying out at the Flesh Fair, and David in despair at finding that nothing can make him real; and we are also forcefully interrupted with reminders that the child we are watching is a programmed machine. We know David does not feel, but we suspend that knowledge as we follow David on his fairy-tale quest to be a real boy, with his companions Teddy and Gigolo Joe, the mecha escort who is also an illegal. On a meta-level this is the nature of film, which requires the suspension of disbelief—the audience both know actors are performing parts (in this case a stuffed toy, robots, a mother, and various other characters) at the same time they emotionally respond to the characters as if they were real.

While there has been a long history of theories about the function of fiction—dating back to Plato, who decried fiction as lies and as emotionally manipulative, and Aristotle, who valued fiction for its cathartic

effect—none mistake fiction for reality. Fiction opens a space for imagining the impossible. Fiction that refuses to acknowledge itself as fiction is myth or, as Frank Kermode argues in *The Sense of the Ending*, the difference between myth and fiction is that the former is "a fiction not consciously held to be fictive" and "dangerous for that reason" (Kermode 2000, 190). Where fiction is open, myth is totalizing, and from Plato's "noble lie" on, myth has often been propagated by an elite in the interests of power.

Dr. Hobby, the head of Cybertronics, profits from myth with his promise to turn mecha into orga and fiction into fact. In the Vegas-like Rouge City, David and Gigolo Joe find Dr. Know, a gimmicky holographic information machine run by a corporation, "where fast-food for thought is served up 24 hours a day, in 40,000 locations nationwide" for a price: David asks the holograph how he can find the blue fairy. When a digital image of the blue fairy appears, David lurches at it, mistaking it for the real thing, asking "but if a fairy tale is real wouldn't it be a fact, a flat fact?" That is when Professor Hobby takes over control of the answer machine, advertising his book "How Can a Robot Become Human" and lures David, with the promise of making him real, back to his shiny corporate headquarters at the top of the Rockefeller Centre, which looms out of the ruins of a desolate, flooded, and uninhabitable Manhattan.

There, David encounters another David, an exact replica of himself. In his first act of violence, reminiscent of the humans at the Flesh Fair who attack the mechas, David destroys the android that resembles him. David flies into a rage insisting he is "unique" and "special," yelling at his rival "you can't have her; she is mine." Trying to calm him, the professor, who has made David in the image of his dead son, tells the mecha that he is his "blue fairy'" and that David is "real" because, like humans, he has chased a dream beyond logic and reason. Yet having encountered the other David, the mecha rejects the doctor's explanation, responding: "I thought I was one of a kind," to which the Doctor responds glumly: "my son was one of a kind." The mecha then wanders into the nightmarish factory that produces identical David and Darlene models, row upon row in boxes or hanging from hooks, awaiting shipment. The curtain is pulled back and Dr. Hobby, like Dr. Know, is exposed as a charlatan who is incapable of making David real and turning mecha into orga, even as his corporation continues to rake in profits in "the lost city in the sea at the end of the world."

The irony at the heart of the film revolves around a "never changing" machine, built by those who never learned to accept death as part of life, that yearns to be mortal. Unable to terminate his program, David waits with Teddy before a lifeless statue of the blue fairy that lies beneath the

vestiges of a theme park on Coney Island, praying in vain to her to make him a real boy. The narrator recounts the passing of time as the world slowly fades and freezes over:

> Eventually the flood lights dimmed and died, but David could still see her, paley by day, and he still addressed her, in hope. He prayed until all the sea anemones had shriveled and died. He prayed as the ocean froze, and the ice encased the caged Amphibicopter and the Blue Fairy too, locking them together where he could still make her out—a blue ghost in ice. Always there. Always smiling. Always awaiting him. Eventually he never moved at all. But his eyes always stayed open, staring ahead forever all through the darkness of each night. And the next day. And the next day.

In Shelley's novel, Dr. Frankenstein pursues the secret of life and immortality only to spend his final days trying to kill his creation in order to restore mortality to the world and save humanity. In contrast, a grieving Dr. Hobby persists with the pursuit of a "perfect child caught in a freeze–frame…never changing," and his project concludes with the end of all life.

After the passage of two thousand years, the super mecha discover David beneath the ice and reboot him on a now barren planet where humans have long been extinct. The mecha approaches the statue of the blue fairy, and it shatters before him. Curious about this last connection to the human race, the mecha read David's memories and stage a drama for him. Appearing as a blue fairy hologram, a super mecha explains to David that despite his wish, she cannot make him a real boy and that his mother can never come home as she is long dead. Teddy, his faithful companion, arrives to supply a strand of Monica's hair so that she can be cloned via DNA, another fantasy technology popular with the cryogenics and transhumanist crowd.[4]

Nothing like the enigmatic AI and iconic monolith with "ungraspable" intelligence in *2001*, the super mecha in *A.I.* all have a generic Hollywood humanoid look—big heads, long limbs, and small waists, while Ben Kingsley supplies the voice of the lead specialist. The super mecha direct a fantasy for a corporate-built robot that is the last connection to the now extinct human race in order to make him "happy," just as the Hollywood entertainment industry produces this film, full of CGI and special effects with a "happy" ending, where the super mecha recover enough of David's memory to create a simulation that reassembles his first home. Long dead, Monica is revived as the gentle happy *ersatz* mother that she never was and David, "never changing," still remembers what Monica likes in her

4 See for instance George Church who founded the bioscience company, Colossal: https://colossal.com/george-church-the-future-without-limit/.

coffee after several millennia. The narrator tells us that "there was no Henry, there was no Martin, there was no grief, there was only David," and Monica tells David that she has always loved him. This "perfect day" ends with Monica and David (for the first and last time) falling asleep never to wake again as Teddy sits on the edge of the bed.

The specialist explains that Monica's "return" can only be temporary and that while the mecha were able to clone humans from DNA samples, their experiment to discover the "meaning of existence" from humans was a failure. They discovered that humans "had created a million explanations of the meaning of life…in art, in poetry, in mathematical formulas," but with the disappearance of humans, so too went this ongoing conversation. The mecha find the space–time continuum stored all the "information" of the past, but once "the individual space–time pattern had been used," it could not be reused. Uniqueness—the trait that humans and David, the last link to humans, had so valued—has vanished. The very precarity, uniqueness and irreplaceability of life on the planet, the very thing that the AI industry is trying to replicate and render immortal, is destroyed in the attempt, throwing a wrench in the AI engineers dreams of turning mecha into orga.

The narrator concludes this fable with a moral about a mecha boy who finally gets "the everlasting moment he had been waiting for," and when that paradoxical "everlasting moment" passes, David goes to that place "where dreams are born." The fairy-tale of a robot who believes that stories are real and longs to be mortal is punctured by a dark world of corporate-driven mechanization that treats death as something that can be overcome and life as something that can be manufactured for profit even in the face of an ecological crisis. If the roboticists Kubrick invited to consult on his film were convinced that they could make fiction come true just as David believes that the blue fairy will make him human, the film is here to remind us that the blue fairy shatters, life without death is not life, and fiction remains fiction.

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Bibliography

A.I. Artificial Intelligence. 2001. Dir. Steven Spielberg. Warner Brothers. DVD.

Altman, Sam. 2023. "Planning for AGI and Beyond." *OpenAI* February 24, 2023. https://openai.com/blog/planning-for-agi-and-beyond

Baxter, John. 1997. *Stanley Kubrick: A Biography*. New York: Carroll & Graf.

Brooks, Peter. 2022. *Seduced by Story: The Use and Abuse of Narrative*. New York: The New York Review of Books.

Butler, Samuel. 2020. *Erewhon*. Urbana, Illinois: Project Gutenberg. https://gutenberg.org/files/1906/1906-h/1906-h.htm

Čapek, Karel. 2004. *R.U.R.* (*Rossum's Universal Robots*). Translated by Claudia Novack. New York: Penguin Books.

Castle, Alison, ed. 2005. "MGM Studios. Facts for Editorial Reference, 1968." In *The Stanley Kubrick Archives*. Cologne: Taschen.

Cave, Stephen and Kanta Dihal. 2019. "Hopes and fears for intelligent machines in fiction and reality." *Nat Mach Intell* 1: 74–78. https://doi.org/10.1038/s42256-019-0020-9

CBC News. 2023. "Artificial Intelligence Poses 'Risk of Extinction,' Tech Execs and Experts Warn." May 30, 2023. https://www.cbc.ca/news/world/artificial-intelligence-extinction-risk-1.6859118

Center for AI Safety. n.d. "An Overview of Catastrophic AI Risks." *AI Risk, CAIS website*. Accessed August 12, 2023. https://www.safe.ai/ai-risk

Chu, Seo-Young. 2010. *Do Metaphors Dream of Literal Sleep?: A Science-Fictional Theory of Representation*. Cambridge, MA: Harvard University Press.

Ehrenreich, Ben. 2020. *Desert Notebooks: A Road Map for the End of Time*. Berkeley: Counterpoint Press.

Good, Irving John. 1966. "Speculations Concerning the First Ultraintelligent Machine." *Advances in Computers* 6: 31–88.

Greiving, Tim. 2021. "From Kubrick to Spielberg: The Story of 'A.I.'" *The Ringer*, June 29, 2021. https://www.theringer.com/movies/2021/6/29/22553929/ai-artificial-intelligence-steven-spielberg-stanley-kubrick

Heaven, Douglas. 2023. "How Existential Risk Became the Biggest Meme in AI." *MIT Technology Review*, June 19, 2023. https://www.technologyreview.com/2023/06/19/1075140/how-existential-risk-became-biggest-meme-in-ai/

Heffernan, Teresa. 2018. "*A.I. Artificial Intelligence*: Science, Fiction and Fairy
Heffernan, Teresa. 2019. "Fiction Meets Science: Ex Machina, Artificial Intelligence, and the Robotics Industry." In *Cyborg Futures. Social and Cultural Studies of Robots and AI*, edited by Teresa Heffernan, 127–140. Cham: Palgrave Macmillan. https://doi.org/10.1007/978-3-030-21836-2_7
Heffernan, Teresa. 2022. "The Imitation Game, The 'Child Machine,' and the Fathers of AI." *AI & Society*, June 25, 2022. https://doi.org/10.1007/s00146-022-01512-0
Tales," *English Studies in Africa*, 61 (1): 10–15. https://doi.org/10.1080/00138398.2018.1512192
Hermann, Isabella. 2023. "Artificial intelligence in fiction: between narratives and metaphors." *AI & Society* 38: 319–329. https://doi.org/10.1007/s00146-021-01299-6
Hodges, Andrew. 1992. *Alan Turing: The Enigma.* London: Vintage.
Kagubare, Ines. 2023. "Leading Scientist Says He Had to 'Blow the Whistle' on Dangers of AI." *The Hill,* May 3, 2023. https://thehill.com/policy/technology/3985783-leading-scientist-says-he-had-to-blow-the-whistle-on-dangers-of-ai/
Kant, Immanuel. 2018 [1790]. "On Nature as Might," from *The Critique of Judgment*. In *The Norton Anthology of Theory and Criticism,* edited by Vincent B. Leitch, 453–4. 3rd ed. New York City: W. W. Norton.
Kelly, Kevin. 1998. "The Third Culture." *Science* 279 (5353): 992–3. https://www.science.org/doi/10.1126/science.279.5353.992
Kermode, Frank. 2000. *The Sense of an Ending: Studies in the Theory of Fiction with a New Epilogue*. Oxford: Oxford University Press.
Khatchadourian, Raffi. 2015. "The Doomsday Invention: Will Artificial Intelligence Bring Us Utopia or Destruction?" *New Yorker*, November 23, 2015. https://www.newyorker.com/magazine/2015/11/23/doomsday-invention-artificial-intelligence-nick-bostrom
Kubrick, Stanley. n.d. "What Did Kubrick Have to Say about What 2001 'Means?'" Excerpt from *Playboy Magazine* interview reproduced online. *The Alt.Movies.Kubrick FAQ (Web Version)*, 2012. Accessed August 10, 2023. https://www.krusch.com/kubrick/Q12.html
Kubrick, Stanley. 1970. "Stanley Kubrick." In *The Film Director as Superstar*, by Joseph Gelmis, 293–316. Garden City: Doubleday & Co.
Morozov, Evgeny. 2019. "The Epstein Scandal at MIT Shows the Moral Bankruptcy of Techno-elites." *The Guardian*, September 7, 2019. https://www.theguardian.com/commentisfree/2019/sep/07/jeffrey-epstein-mit-funding-tech-intellectuals
Randi, James. 2008. "James Randi's Podcast Talks about Arthur C. Clarke." The Amazing Show, March 24, 2008. Podcast, 18:41. https://www.sffaudio.com/james-randis-podcast-talks-about-arthur-c-clarke/
Regis, Ed. 1994. "Meet the Extropians." *Wired*, October 1, 1994. https://www.wired.com/1994/10/extropians/
Sennesh, Eli and James J Hughes. 2023. "Conspiracy Theories, Left Futurism, and the Attack on TESCREAL." *Institute for Ethics and Emerging Technologies. Medium*, June 12, 2023. https://medium.com/institute-for-ethics-and-emerging-technologies/conspiracy-theories-left-futurism-and-the-attack-on-tescreal-456972fe02aa

Stork, David. 2018. "Hal's Legacy: 2001's Computer as Dream and Reality Presented by Dr. David G. Stork." *SETI Institute*. Jun 28, 2018, YouTube. https://www.youtube.com/watch?v=Pasp2nRaTY8

Sweet, Jacob. 2023. "It's a Weird Time to Be a Doomsday Prepper," *The Atlantic*, May 18, 2023. https://www.theatlantic.com/technology/archive/2023/05/ai-doomsday-threat-scenario-silicon-valley/674091/

Tokarczuk, Olga. 2022. *The Books of Jacob*. New York City: Riverhead Books.

Turing, Alan. 1950. "Computing Machinery and Intelligence." *Mind* 59 (236): 433–60.

Turing, Alan. 2020 [1951]. "Intelligent Machinery, A Heretical Theory (c.1951)." In *The Essential Turing*, edited by B. J. Copeland, 465–75. Oxford: Oxford Academic. Accessed November 12, 2023. https://doi.org/10.1093/oso/9780198250791.003.0018

2001: A Space Odyssey.1968. Dir. Stanley Kubrick. Metro Goldwyn Mayer. DVD.

Commentary
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Alessandro Sbordoni

The Coming Apocalypse

Something unforeseeable and incomprehensible […]
Come.
Radically other […]
Come.
Let every one say,
Come.
— Fragment from the apocryphal *Book of Élie*
(cited in Caputo 1997, 69)[1]

The Coming Apocalypse: this is the title of a text that I have not written yet.

"There is only one alternative to the coming apocalypse" (The Invisible Committee 2009, 68). Seventeen years after The Invisible Committee's *The Coming Insurrection*, the apocalypse has not taken place. It is always yet to come.

According to Jacques Derrida, the apocalypse itself is nothing but this "coming" (Derrida 1984).

The Derridean phrase "the coming apocalypse" is an example of rhetorical tautology, similar to the phrase 'the fire burns.' The 'apocalypse' is always to come. 'Fire' is always what is burning. The presence of the former is always returning to the latter.

Logical tautology is defined by Ludwig Wittgenstein as a true statement produced by means of logical deduction. In contrast, rhetorical tautology is a repetition, even a redundancy, that is not by all means 'always' true. According to the *Tractatus*, the logical tautology "say[s] nothing" (Wittgenstein 2002, 47) and is always "certain" (42). The rhetorical tautology, on the other hand, says more than nothing: it says it twice.

1 The word 'come' in the *Book of Èlie* translates the French word '*viens*' in the original quote; the phrase 'radically other' in the epigraph translates the French phrase '*tout autre*.' The same criterion also applies to the Derridean phrase "come, come, yes, yes" cited below, which John D. Caputo reproduces in French as "*viens, oui, oui*" (1997, xxiii).

"The coming," repeats *Of an Apocalyptic Tone*, "is always to come" (Derrida 1984, 25). That is the meaning of the revelation, if there is one.

*

Jacques Derrida writes, again, in his texts about the end of all things: "come, come, yes, yes" (see Caputo 1997; Derrida 1984, 2010, 2014). It is according to this epizeuxis, this grammatical repetition, that the sign of whatever is yet to come is differentiated from the saying as such.

Friedrich Nietzsche is the philosopher who showed that grammar is the metaphysics of the common people. There is no such thing as fire before the burning of the flame, except in grammar. To rephrase *On the Genealogy of Morals* (see Nietzsche 1989, 45), such is the truth of the common people who reduplicate the noun ('fire'), and its rhetoric, into the verb ('burns'). In the phrase 'the fire burns,' the same is written *twice*. This is its tautology as well as its grammatical law.

Burn, burn. This is to tell the truth, the whole truth, and nothing but the truth.

The word 'repetition' is etymologically retraced from the Latin prefix *re-* ('again') and the verb *petere* ('to speak'), literally then 'to say something twice.' Tautology is a kind of repetition in which 'nothing more' is said the second time. The second time is always like the first.

The fire is returned to what it *was*, like in the French homonyms *feu* and *fut* ('fire' and 'was'). The Algerian-French philosopher writes in *Cinders*: "I will say nothing but this rough sketch obviously in order to say that nothing will have had to annul what is said in its saying, to give it to the fire [*feu*], to destroy it in the flame, and not otherwise. No cinder without fire [*feu*]" (Derrida 2014, 19).

Jacques Derrida (whose middle name is Élie) scrawls in his notebook in 1981 that the *Book of Élie* had not been written "yet" (Bennington and Derrida 1999, 281). It never was. In the next century, it is always yet to come. The apocryphal *Book of Élie*, forged by John D. Caputo from two different sources by Jacques Derrida (that is, *Parages* and *Points…*), is the repetition of the same revelation. The meaning is deferred.

In the French language, there are two words to signify the future. The word *futur*, representing the future as the development of the present time, and the word *avenir*, representing a difference from the present itself (another day, another century, another time). According to the Derridean grammar, it is only what is *à venir*, 'to come,' that represents the future as such. Again, it is a question of grammatical structure. Yet, what if there was no *other* day, no *other* century, no *other* time but the present

one and its contradiction? What if there was no more time to wait on? The future is always impossible, except as a word.

*

The formulaic language of "come, come, yes, yes" first appeared in Jacques Derrida's 1982 book on Friedrich Nietzsche, whose second part was edited from a roundtable discussion at the University of Montreal, where he says that the eternal recurrence of the same, too, "repeats an affirmation (yes, yes), since it affirms the return, the rebeginning, and a certain kind of reproduction that preserves whatever comes back" (Derrida 1985, 20). According to Jacques Derrida (after Maurice Blanchot), the return as such already produces the law of identity (Blanchot 1992; Derrida 1985). Then, the sign of the past returns to haunt the future.

What if some day or night a demon were to come to you...

In contrast with the "*Dämon*" of Zarathustra (see Nietzsche 1974, 273), the Derridean demon is nothing more than a succubus, a spirit of fire who repeats the words "come, come, yes, yes" for the purpose of reproduction alone. The spirit is always returning to reproduce itself after the textual act. Notwithstanding, there is 'nothing else' beside the return. This is the structure of the tautology, if it is not the nightmare of the same.

*

The coming is always yet to come. Two thousand years later, the most certain thing is no longer the end but its endlessness. The impossibility of the end is what is always present, again and again.

And yet, the apocalypse disappoints. "Nothing is older than the end of the world. The apocalyptic passion has always been favored by the powerless since earliest antiquity. What is new in our epoch [and otherwise than in the epoch of Jacques Derrida and Maurice Blanchot] is that the apocalyptic has been totally absorbed by capital, and placed in its service. The horizon of catastrophe is what we are currently being governed by. Now, if there is one thing destined to remain unfulfilled, it's the apocalyptic prophecy, be it economic, climatic, terrorist, or nuclear. "It is pronounced only in order to summon the means of averting it" (The Invisible Committee 2015, 36, my addition). Therefore, the *nom de plume* that signed *The Coming Insurrection* concludes, in their second official communiqué, "the purpose of prophecy is never to be right about the future, but to *act upon the present*: to impose a waiting mode, passivity, submission, here and now" (2015, 36). The rhetoric of the end is never in the active form.

'Burn, burn, yes, yes' is restated with another significance by the anonymous authors. Destruction is also an affirmation. The question is no longer about the invocation of what is coming but the revocation of *what has not come*. The text is only the beginning. And, to misquote from the first book published by The Invisible Committee (see 2009, 34), everywhere the law of identity is starting to crack.

Alessandro Sbordoni is the author of *The Shadow of Being: Symbolic / Diabolic* (2nd edition, Miskatonic Virtual University Press, 2023) and *Semiotics of the End: On Capitalism and the Apocalypse* (Institute of Network Cultures, 2023). He is an Editor of the British magazine Blue Labyrinths and the Italian magazine Charta Sporca. He lives in London and works for the open access publisher Frontiers.

Bibliography

Bennington, Geoffrey, and Derrida, Jacques. 1999. *Jacques Derrida*. Translated by Geoffrey Bennington. Chicago: University of Chicago Press.

Blanchot, Maurice. 1992. *The Step Not Beyond*. Translated by Lycette Nelson. Albany: SUNY Press.

Caputo, John D. 1997. *The Prayers and Tears of Jacques Derrida: Religion Without Religion*. Indianapolis: Indiana University Press.

Derrida, Jacques. 1984. "Of an Apocalyptic Tone Recently Adopted in Philosophy." Translated by John P. Leavey. *Oxford Literary Review* 6 (2): 3–37.

Derrida, Jacques. 1985. *The Ear of the Other: Otobiography, Transference, Translation*. Translated by Avital Ronell and Peggy Kamuf. New York City: Schocken Books.

Derrida, Jacques. 1995. *Points...: Interviews, 1974–1994*. Translated by Peggy Kamuf *et al.* Stanford: Stanford University Press.

Derrida, Jacques. 2010. *Parages*. Edited by John P. Leavey. Translated by Tom Conley, James Hulbert, John P. Leavey, and Avital Ronell. Stanford: Stanford University Press.

Derrida, Jacques. 2014. *Cinders*. Translated by Ned Lukacher. Minneapolis: University of Minnesota Press.

Nietzsche, Friedrich. 1974. *The Gay Science: With a Prelude in Rhymes and an Appendix of Songs*. Translated by Walter Kaufmann. London: Vintage Books.

Nietzsche, Friedrich. 1989. "On the Genealogy of Morals." Translated by Walter Kaufmann and R. J. Hollingdale. In *On the Genealogy of Morals and Ecce Homo*, edited by Walter Kaufmann, 1–198. New York: Vintage.

The Invisible Committee. 2009. *The Coming Insurrection*. Los Angeles: Semiotext(e).

The Invisible Committee. 2015. *To Our Friends*. Los Angeles: Semiotext(e).

The Invisible Committee. 2017. *Now*, Los Angeles: Semiotext(e).
Wittgenstein, Ludwig. 2002. *Tractatus Logico-Philosophicus*. Translated by David F. Pears and Brian F. McGuinness. London: Routledge.

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Florian Mussgnug

Affordances of Apocalyptic Environmentalism: Reviewing *The Environmental Apocalypse* (2023)

Thirty years ago, pioneering ecocritic Lawrence Buell observed that apocalypse is "the single most powerful master metaphor that the contemporary environmental imagination has at its disposal" (Buell 1995, 285). Since then, apocalyptic environmentalism has come under repeated and multipronged attack, not only from climate change sceptics, but also from environmentalists, who have questioned the political efficacy of eschatological thinking. Inquiries into the behavioural and psychological effects of proleptic fear have suggested that apocalyptic framings of climate change produce apathy and hopelessness (Fagan 2017). Cultural theorists have queried the appeal of apocalyptic and post-apocalyptic narratives, in literature, film and popular culture (Morton 2018; Benedetti 2021). Narratologists have argued that apocalyptic storytelling is hampered by a shortfall of the human imagination and by an inability to conceive and represent non-anthropocentric geological and climactic timescales (Bracke 2018; Caracciolo 2021). Posthumanists have critiqued the politics of "a flourishing genre of popular culture that imagines that the world could end, and yet 'we' would survive and emerge as better and truer versions of ourselves" (Colebrook 2023, 4). This 'anti-apocalyptic turn' in the environmental arts and humanities has left researchers in a seemingly paradoxical situation. On the one hand, fears over planetary inhabitability, mass extinction, and civilizational collapse have taken a firm hold of scholarly debates across national and disciplinary boundaries. On the other hand, apocalypticism is widely perceived as an obstacle to emancipatory political

movements that seek to disrupt humanistic and anthropocentric perspectives. In the words of historian of consciousness Donna J. Haraway, “there is a fine line between acknowledging the extent and seriousness of the troubles and succumbing to abstract futurism and its affects of sublime despair and its politics of sublime indifference” (Haraway 2016, 4). Hence, discussions about the role of the arts on a heating planet have become both apprehensive and curiously repetitive: a routinization of apocalyptic demeanour, by writers who seem reluctant to reflect on their habitual disposition towards apocalyptic despair. According to political theorist Mathias Thaler, the “two horns of the dilemma—lazy inaction and nervous fatalism—expose that the apocalyptic imaginary has manoeuvred itself into a dead end” (Thaler 2022, 229–230).

A recent edited collection, *The Environmental Apocalypse: Interdisciplinary Reflections on the Climate Crisis* (2023), offers a fresh perspective on this dilemma and has the potential to move debates in a more productive direction. As the editor, Jakub Kowalewski, makes clear in his introduction, apocalyptic thinking has come to dominate the environmental humanities, in a manner that calls for robust theoretical analysis. We live in an age of apocalyptic apprehension, writes Kowalewski. In affluent communities, lifestyles that would have seemed normal and unproblematic twenty years ago are beginning to look untenable. Social arrangements that were taken for granted by earlier generations appear insufficient, inadequate, or unsustainable. In many parts of the world, growing numbers of people live in irrational fear of hidden, dark forces that operate conspiratorially, and whose indestructible tentacles, for them, appear to extend everywhere. Apocalypse—the “ancient script that has somehow not exhausted itself, even after century upon century of false end time predictions” (Keller 2021, 3)—resonates powerfully in our post-secular lives. It would be misleading, however, to read this widespread fascination with apocalypse as a sign of universal political or affective alignment. Kowalewski remarks that “the concept of environmental apocalypse [...] is not fixed” and that “the polysemy of the term ‘climate apocalypse’” constitutes “the only adequate way of grasping the complexity of the eco-apocalyptic situation” (Kowalewski 2023, xvii). In other words, *The Environmental Apocalypse* argues that references to apocalypse have functioned, in the environmental humanities, as what anthropologist Marilyn Strathern calls an ‘attractor’: they remain underdetermined and, for this reason, can engage other terms and concepts, draw in values, and disseminate feelings “exactly as though everyone knew what was meant” (Strathern 2020, 2).

Kowalewski explores eschatology as a rich plurality of diverse political, cognitive, aesthetic, and affective orientations. His programmatic interest in plurality finds expression in the structure of the volume, which consists of fifteen chapters by scholars with related but distinct disciplinary backgrounds: political and environmental history, religious studies, visual culture, philosophy, theology, and literary studies. Instead of championing a single idea of apocalypse, the contributors emphasize the positive ambivalence of the concept and the interdependence of arguments, attitudes, and styles that are at play. They write with attention to different research objects and methodologies, but agree on some key assumptions. First, all contributors affirm the vital importance of political urgency in the arts and humanities. As Stefan Skrimshire puts it in his contribution, arguments about apocalyptic culture "matter a great deal when considering our very real concerns of catastrophic climate change [and] can be the basis of our moral deliberation" (Skrimshire 2023, 176). Secondly, all chapters highlight the irreducible complexity of political, social, and cultural situations that will not be settled by neat solutions or by a single, definitive understanding of apocalypse. Such attention to situated knowledge practice is underpinned by Kowalewki's background as a scholar of phenomenology and ethics, and is motivated by his current interest in political theology. Moreover, Kowalewski's understanding of apocalypse bears significant similarities with the work of Biblical scholars Catherine Keller, Judith Kovacs, Christopher Rowland, and John J. Collins, who have similarly argued that apocalyptic thinking coheres around a set of recurrent and recognisable motifs, but cannot be reduced to a single cultural expression or political expectation. Apocalyptic thinkers, according to Keller, urge us to see the world as a transient precursor to a different, more meaningful reality. In this way, they invite us to imagine afresh what it means to be human and encourage us to re-think all aspects of our public and private lives, in anticipation of a promised reversal of *all* current circumstances (Keller 1996). For Keller, this emphasis on rupture and renewal is historically rooted in John of Patmos's discursive resistance against Empire. Politically and aesthetically, it can take a variety of different forms: evangelical Christianity, ethnonationalism, far-right conspiracy belief, but also, at the other end of the political spectrum, liberation theology, anti-colonialism, radical environmentalism. Needless to say, these groups operate on the basis of different belief systems. From a philosophical or theological perspective, however, their political disagreement weighs less heavily, according to Keller, than formal similarities. In the same vein, Kovacs and Rowland have suggested that apocalyptic environmentalism (and other forms of political activism with a focus on exis-

tential risk) may be read as 'actualizations' of religious apocalyptic eschatology, even where their advocates appear suspicious of religious belief systems (Kovacs and Rowland 2004, 7–11). The diversity and versatility of apocalyptic interventions has also been stressed by biblical scholar John J. Collins, who writes, in his introduction to the *Oxford Handbook of Apocalyptic Literature* (2014), that "it is perhaps unfortunate that apocalyptic literature is so often invested with theological authority, with an eye to coded messages and instructions, rather than being read as an exuberant product of the human imagination" (Collins 2014, 13).

The Environmental Apocalypse sheds light on this exuberance and describes it as a vital prerequisite for the survival and wellbeing of human and more-than-human communities. The contributors collective effort to unlock and explore new actualizations of apocalypse takes an impressive variety of forms, from Elizabeth Pyne's empowered demand for queer apocalyptic mindfulness to Jonathon Catlin's sophisticated critique of crisis optimism, and from Stefan Skrimshire's chapter on apocalyptic time and the ethics of human extinction to Andrew Patrizio's intriguing remarks about the immanence of planetary eco-apocalypse. The volume also includes chapters with an emphasis on different regions, languages, and genres. For example, Marita Furehaug aptly explores the similarities and differences between Christian and Islamic eschatology and considers their implications for the emergence of a planetary, eco-theological environmentalist movement. Kowalewski's chapter challenges the broadly European focus and attention to linear time in Jacob Taubes' *Occidental Eschatology* (1947) by exploring spiralic historiographies and decolonial methods. In a similar vein, Robert Seymour pays tribute to the environmental ethics of Hans Jonas, while Simon Thornton highlights the topicality of Søren Kierkegaard's reflections on tragic guilt in a fossil-fuelled social world on the brink of collapse. *The Environmental Apocalypse* also considers a range of genres, including post-secular fictional rewritings of religious apocalypse as "spiritual reality" (Lindsay Atnip), literary and filmic explorations of "pre-extinction" lifeworlds (Sarah France) and, most originally, Francesca Laura Cavallo's analysis of How-To-Guide's as forms of apocalyptic orientation. Paleobiologist Omar Rafael Regalado Fernandez contributes with an opening chapter on the apocalyptic theme in modern scientific discourse. As a result of this broad and diverse range of perspectives, *The Environmental Apocalypse* challenges the relatively narrow geographical and linguistic focus of many internationally influential scholarly publications in the environmental humanities, i. e. their preponderant attention to anglophone texts and contexts and to particular periods and genres (English Romanticism; North American nature writing; Twenty-First

Century anglophone Climate Fiction). By contrast, *The Environmental Apocalypse* is predicated upon a differential perspective, which considers patterns of global connectedness (of genres, markets, ecosystems, and so on), but equally acknowledges the importance of regionally-focused debates about environmental justice and sustainability.

In brief, *The Environmental Apocalypse* describes apocalyptic thinking as a transhistorically influential, situated, and contextually versatile cultural form, which 'affords' radical environmentalist politics. In her 2015 monograph, *Forms,* literary scholar Caroline Levine employed the concept of 'affordance' to define the relation between aesthetic and social arrangements. In design theory, affordance is a term that describes the potential uses or actions latent in materials and designs. Similarly, Levine's study examines cultural forms beyond mimetic representation. Patterns and shapes, she explains, are both situated and portable. They remain surprisingly stable across different historical and cultural circumstances, but are employed in response to specific conditions. For Levine, this relation between cultural form and social context can be described as a field of affordances. *The Environmental Apocalypse* ends with three contributions by Timothy Secret, Agata Bielik-Robson, and Vinita Damodara, which appear to question the affordance of eschatological thinking by shifting the focus to vitalism, reconciliation, and collective action. Despite their position, however, these final chapters are intended neither as a critique of the other parts of the volume, nor as an authoritative final word. Indeed, *The Environmental Apocalypse* resist expectations of closure. Instead of expounding a single meaning of environmental apocalypse, the volume offers an invitation to dwell, with sensitivity and judgement, on the many complicated stories and imbalances that surround us. Each contribution marks the unique efforts of a situated thinker to make sense of a world that is shot through with uncertainty and that demands to be revealed.

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Bibliography

Benedetti, Carla. 2021. *La letteratura ci salverà dall'estinzione*. Turin: Einaudi.

Bracke, Astrid. 2018. *Climate Crisis and the 21st-Century British Novel*. London: Bloomsbury.

Buell, Lawrence. 1995. *The Environmental Imagination: Thoreau, Nature Writing and the Formation of American Culture*. Princeton, NJ: Princeton University Press.

Caracciolo, Marco. 2021. *Narrating the Mesh: Form and Story in the Anthropocene*. Charlottesville, VA: University of Virginia Press.

Colebrook, Claire. 2023. *Who Would You Kill to Save the World?* Lincoln, NE: University of Nebraska Press.

Collins, John J. 2014. "What is Apocalyptic Literature?" In *The Oxford Handbook of Apocalyptic Literature*, edited by John J. Collins, 1–18. Oxford: Oxford University Press.

Fagan, Madeleine. 2017 "Who's Afraid of the Ecological Apocalypse? Climate Change and the Production of the Ethical Subject". *The British Journal of Politics and International Relations,* 19 (2): 225–244. https://doi.org/10.1177/1369148116687534

Haraway, Donna J. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham, NC: Duke University Press.

Keller, Catherine. 1996. *Apocalypse Now and Then: A Feminist Guide to the End of the World*. Boston, MA: Beacon Press.

Keller, Catherine. 2021. *Facing Apocalypse: Climate, Democracy, and Other Last Chances*. New York: Orbis Books.

Kovacs, Judith and Christopher Rowland. 2004. *Revelation: The Apocalypse of Jesus Christ*. Oxford: Blackwell.

Kowalewski, Jakub, ed. 2023. *The Environmental Apocalypse: Interdisciplinary Reflections on the Climate Crisis.* London: Routledge.

Levine, Caroline. 2015. *Forms: Whole, Rhythm, Hierarchy, Network*. Princeton, NJ: Princeton University Press.

Morton, Timothy. 2018. *Being Ecological*. Cambridge, MA: MIT Press

Skrimshire, Stefan. 2023. "Apocalyptic Time and the Ethics of Human Extinction." In *The Environmental Apocalypse: Interdisciplinary Reflections on the Climate Crisis*, edited by Jakub Kowalewski, 172–186. London: Routledge.

Strathern, Marilyn. 2020. *Relations: An Anthropological Account*. Durham, NC: Duke University Press.

Thaler, Mathias. 2022. *No Other Planet: Utopian Visions for a Climate-Changed World*. Cambridge: Cambridge University Press.

Book Review
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Aanchal Saraf

Reviewing Anaïs Maurer's *The Ocean On Fire: Pacific Stories from Nuclear Survivors and Climate Activists* (2024)

What scientists predict as the future consequences of climate collapse, Pacific people have already experienced. Over the course of her stunning monograph, Anaïs Maurer contends that these experiences—with nothing less than apocalypse—offer lessons we desperately need in the face of ongoing environmental ruin. Pacific encounters with forced migration, mass species extinction, and the proliferation of diseases have generated what Maurer calls 'Pacific (post)apocalyptic stories': an assemblage of print, oral, digital, embodied, and visual literature that describe nuclear imperialism and climate change as the consequence of racism, militarism, and carbon-fueled industrialization. These stories, Maurer argues, help us apprehend climate collapse on a global scale. Eschewing affective stances of despair and inaction, Pacific (post)apocalypse stories instead narrate examples of radical political change and the power of collective action. As Maurer so movingly states, "[t]hey teach how to mourn for what has been lost and how to find the strength to keep fighting for that which remains" (2024, 10).

The analytical framework of Maurer's monograph is transnational, examining works in English, French, Hawaiian, Spanish, Tahitian, and Uvean as well as visual arts by painters from across the region. This tremendous archive is accompanied by heretofore untranslated stories from the French-occupied Pacific. Maurer's English translations, in response to Pacific Francophone authors' expressed desires, are no small feat. The tremendous and careful work of translation across the monograph breaks

down linguistic boundaries, encouraging the transnational solidarity characteristic of the Pacific antinuclear movement.

Maurer's theoretical contributions animate the decolonial potential already present in her translations. *The Ocean On Fire* is, as such, effectively split into two parts: the first half introduces these key theoretical concepts, which the second half of the book then mobilizes to close read a variety of Pacific stories. In her introduction, Maurer differentiates post-1945 colonialism and nuclear imperialism from the systems of domination that preceded them. Under international pressures to relinquish their colonial possessions, imperial countries replaced large scale colonialism by instead acquiring small areas of militarized lands in independent countries that allowed them to develop their nuclear strike capacity. Nuclear colonizers located many of their 'testing' sites on low-lying atolls, which means that the archipelagoes most threatened by climate change also forged solidarities across decades fighting for a nuclear-free and independent Pacific. In her focus on nuclear imperialism and climate change as related cataclysms, Maurer convincingly argues that these processes inflict not a slow violence, but a *slowed* violence: a violence that slows down as it travels through space. The devastation is both immediate and part of a much longer durée of environmental racism, but its recognition as violence takes much longer to reach the academic centers of nuclearized nations.

The other key terms Maurer introduces us to are also the titles of her first and second chapters: "Isletism" and "Oceanitude." Maurer describes Isletism as a subset of Orientalism through which the West ideologically constructs tropical island cultures. Isletism places the 'islander' outside of historical time and civilization altogether, which, in turn, enables an 'annihilation racism' that presupposes the inevitable disappearance of Pacific people as a supposedly 'prehistoric' race. In her elucidation of Isletism, Maurer stages an extended discussion on the applicability of the term 'genocide' to describe the colonization of the Pacific. While epidemics were the primary cause of mortality, Maurer contends that Western indifference to the Pacific epidemiological crisis was undergirded by Isletist narratives and an annihilation racism that, together, had genocidal outcomes. Intent was eclipsed by the deadly consequences of passivity. In a moment where doubt surrounding the applicability of the term 'genocide' to describe Israel's siege on Gaza has obscured widespread death and disablement, Maurer offers necessary clarity on the meaningfulness of the term outside its international legal definitions. That her theoretical framework so powerfully pulls on the work of Edward Said only serves to underscore the usefulness of her argument in the fight for a free Palestine.

In their own struggles for freedom, Pacific writers and artists have produced what Maurer calls the literature of Oceanitude. Oceanitude was first coined in 2015 by ni-Vanuatu novelist Paul Tavo as a collective Pacific identity that is rooted in a shared genealogical relationship with the ocean. While Maurer writes beautifully of Oceanitude as a philosophy that venerates a radical interdependence, she argues that Oceanitude "goes farther" than Negritude in dismantling Cartesian ways of ordering the world: Oceanitude understands other-than-human life as totally entangled with human life, whereas Negritude still maintains a separation between the human and other-than-human even while embracing the other-than-human's undeniable vitality. While there is value in parsing out the distinctions between these differing oceanic philosophies, recent scholarship in Caribbean Studies on Black diasporic entanglements with the ocean suggests that these distinctions may not be ecological, but genealogical. For example, in 1982, Aimé Césaire (one of the preeminent philosophers of Negritude along with Léopold Sédar Senghor) published a collection of poems titled *moi, luminaire* [I, laminaria]. Black studies scholar Jessica Marion Modi has argued that Césaire's serial poetry articulates a uniquely Antillean sovereignty that does not depend on "French departmental laws that encircle the island" of Martinique (2024), but rather connects the islands of the Caribbean through coral, algae, volcanoes, and lava flow. Modi's reading of *moi, laminaire* reveals Césaire's genealogical relationship to the ocean, which is nonetheless distinct from the genealogical relationships Maurer argues are expressed through Oceanitude. These two oceanic geographies are not in a teleological relationship, but instead encompass specific histories which in turn produce specific relationalities between humans, other-than-humans, and the oceans and islands they call home.

The second half of *The Ocean On Fire* close reads Pacific stories that tackle mass extinction, death and disease, and mass migration. In "Atomic Animals," Maurer focuses on alienation from biodiversity, not just through climate collapse but also through the irradiation of marine life under nuclear imperialism. Maurer shows how stories by Mā'ohi writer Ra'i Chaze, Māori author Witi Ihimaera, and CHamoru poet Craig Santos Perez illustrate the new solidarities that are possible amidst the collapse of multispecies relationships; underscoring Maurer's argument that Pacific (post)apocalyptic stories are not speculative. These writers mourn the apocalypses Pacific peoples have endured and imbue their writing with righteous anger for their other-than-human kin, reconstruct multispecies relations, and provide refuge for the vibrant memory of all that has been lost. Particularly striking is the rage that pulses through Chaze's work and

Maurer's reading of it: a poetics connecting the contamination of fish, seashells, and Pacific women's bodies as scenes of psychological horror that, within them, contain a moral imperative to act.

"The H-Bomb and Humor," is perhaps the strongest section of the monograph. Maurer analyzes visual arts and fiction by Bobby Holcomb, André Marere, Cronos, THS!, Alexandre Moeva Ata, and Albert Wendt. These antinuclear works approach the death and disease wrought by nuclear imperialism with humor, parody, and caricature. They make use of traditional forms of Indigenous humoristic genres such as Ar'oi theater in Tahiti and fale aitu in Samoa to destabilize power and suggest the "cultural vitality of traditional clowning in the face of the apocalypse" (30). The visual artists lampoon a series of Isletist tropes, prominent among them the 'sexually available South Seas woman.' They portray wahine as smiling skulls, emphasize the mushroom cloud's phallic appearance, and ridicule French presidents who initiated and resumed nuclear weapons testing in Tahiti. Maurer places Wendt's novel *Black Rainbow* in this shared lineage of Pacific humor, framing the work as a satire that tackles the presumed absolute authority of science, medicine, and nuclear technology. Though the embodied and performative aspects of Ar'oi theatre and fale aitu are notably absent, their shared affinities for lampooning and absurdity are clear. The crux of this chapter lies in its close, where Maurer reemphasizes the use of traditional artforms to ridicule colonial mythmaking. The intervention of these stories is not just a critique, but a creation of new images and narratives that continue the age-old practice of clowning the imperial world order.

"Radiation Refugees," finally, explores performances by ri-M̧ajeļ spoken-word artist Kathy Jetñil-Kijiner, a novel by Mā'ohi writer Chantal Spitz, and songs by Teresia Teaiwa, who traces her lineage back to Fijian, Banaban, Tabiteuean, and African-American heritages. Maurer considers how these three artists build home away from homeland, as they come from peoples who have already experienced nuclear imperial displacement and permanent exile. These artists bring emotion back to conversations about climate collapse, pushing people to feel the scope of its wreckage. They also touch upon the complexities of the colonial present, such as with Spitz offering critiques of her people's complicity in their own displacement. Maurer also writes generously of the absence of Kiribati in Teaiwa's work, articulating the silences as reflecting unspeakable loss. It is evident in this chapter not just the carefulness with which Maurer approaches her texts and their makers, but also how their poetics inform her own thinking, which leads with an empathetic refusal of a Cartesian world order that devalues emotion and reveres distanced objectivity.

Ultimately, *The Ocean on Fire* suggests that the stories contained in its pages cultivate "arts of living on a damaged planet" (169), encouraging the pursuit of love and beauty amidst nuclear ruin. Maurer does not purport to offer any solutions; in fact, she restates her feelings of loss and desperation in what feels like a losing battle against climate catastrophe. Her work continues to route me back to Gaza. How do we grapple with the insurmountable loss of life in present genocidal conditions? How do we provide true refuge to those (human and other-than-human) fleeing from unspeakable violence? How do we tear down ecocidal infrastructures and build instead a world that affirms life itself? Like Maurer, I am often without answers. But such is the work of the Pacific (post)apocalyptic stories Maurer has so carefully curated. They dislodge us from despair, direct us back into our broken world, and inspire us to keep fighting for what is left.

Aanchal Saraf is an Assistant Professor of comparative American studies at Oberlin College and Conservatory. She researches and teaches about entangled geographies and cultures of war, empire, and knowledge. Her current project, *Atomic Afterlives, Pacific Archives*, theorizes the 'colonial fallout' of U.S. nuclear weapons testing in the Marshall Islands as an ongoing logic that shapes dominant spatiotemporal, geopolitical, and disciplinary imaginaries of the Pacific. Her project engages official archives, Asian American and Pacific Islander cultural production and performance, and ethnography with nuclear-displaced ri-M̧ajeļ on the Big Island of Hawai'i.

Bibliography

Césaire, Aimé. 1982. *moi, laminaire...Poémes.* Paris: Éditions du Seuil.
Chaze, Ra'i. 1990. *Vai: La Rivière au ciel sans nuages.* Pape'ete, Tahiti: Self-published, CreateSpace..
Maurer, Anaïs. 2024. *The Ocean On Fire: Pacific Stories from Nuclear Survivors and Climate Activists.* Durham: Duke University Press.
Modi, Jessica Marion. 2024. "Declarations of Dependence." Paper presented as part of a collective presentation by the *Working Group on Globalization and Culture Dartmouth College, Hanover, NH, 16 May 2024*.
Spitz, Chantal T. 1991. *L'Île des rêves écrasés.* Pīra'e, Tahiti: Au vent des îles.
Tavo, Paul. 2015. *Quand le cannibale ricane.* Port Vila: Alliance française du Vanuatu.
Tsing, Anna Lowenhaupt, Nils Bubandt, Elaine Gan, and Heather Anne Swanson, eds. 2017. *Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene.* Minneapolis: University of Minnesota Press.
Wendt, Albert. 1995. *Black Rainbow*. Honolulu: University of Hawai'i Press.

Preface
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Robert Folger

Introduction

Dossier: Imagining the End of Times

On December 14th 2024 the special pop-up exhibition *Imagining the End of Times: Stories of Annihilation, Apocalypse, and Extinction* [*Imaginar el fin de los tiempos: historias de aniquilación, apocalipsis y extinción*] opened in the National Museum of Anthropology [Museo Nacional de Antropología, MNA] in Mexico City, one of the most important museums of its kind in the world.

The exhibition was a joint project of the Mexican National Institute of Anthropology and History [Instituto Nacional de Antropología e Historia, INAH], the MNA, the National Institute for the Fine Arts and Literature [Instituto Nacional de Bellas Artes y Literatura, INBAL], and the Käte Hamburger Centre for Apocalyptic and Postapocalyptic Studies (CAPAS) at Heidelberg University, Germany. Curated and conceived of by Adolfo F. Mantilla Osornio, ex-fellow of CAPAS and associated researcher, the exhibition juxtaposed and brought into dialogue archaeological artifacts and works of art from Mexico that reflect on the key concepts of annihilation, apocalypse, and extinction; spanning a range from 12,000 BCE to the present day. The exhibition was accompanied by a monograph by Mantilla, a collection of essays of researchers of the INAH also edited by Mantilla, and an academic programme including multiple events from December 2023 to April 2024, which took place in a discussion space situated at the centre of the exhibition.

The first of these events was a series of lectures on the day after the inauguration organised by CAPAS and performed by curator Adolfo Mantilla (Academia de Artes, INAH), CAPAS director Robert Folger, and CAPAS ex-fellows Patricia Murrieta-Flores (University of Lancaster, UK),

Alejandra Bottinelli Wolleter (Universidad de Chile), Emily Ray (Sonoma State University, USA), and Robert Kirsch (Arizona State University, USA). The starting point was Mantilla's monograph with the selfsame title as the exhibition which provided the organising principle and theoretical framework for the exhibition. From the perspective of their individual disciplines and distinct research interests, each participant presented their thoughts on the exhibition and their own 'stories' of the end of times. Although the programme followed the lines of chronology, from the late Pleistocene or early Holocene to our present, the particular temporality of end times, the entanglement of past, present, and future, was one of the guiding principles.

The focus on apocalyptic mass extinctions and the possibility or fantasy of total destruction of not only human but of all life on earth necessarily addresses a problem of global or planetary dimension that requires a transdisciplinary approach which is at the heart of CAPAS' research agenda. Transdisciplinarity goes beyond the collaboration between often siloed academic disciplines by seeking a dialogue between academia and the public. Dialogue implies the recognition of the validity and importance of non-scientific epistemologies as their underpinnings, for instance in activism, in indigenous cosmologies, and in the arts, while also reflecting the positionally and ideological framing of knowledge production. The comprehensive project "Imagining the End of Times" exemplified and performed this notion of transdisciplinarity. Although backed and informed by scholarly programmes and publications, the exhibition acknowledges the power of artistic expression in opening horizons and possibilities to establish the kind of temporality required for thinking and overcoming the end of times. The exhibition was open to a broader public, free of charge, and it generated a considerable interest from various media outlets on issues usually confined to academia. Made possible by a collaboration of institutions and researchers from the so-called Global South and Global North, the exhibition took place in Mexico which perfectly illustrates, due to its often apocalyptically framed colonial past and postcolonial aftermath but also the vitality and creativity of its culture, that the end of times is something to be feared and, at the same time, the precondition of the emergence of a new world.

In this dossier of *Apocalyptica*, we highlight the contributions of the lecture series on the topic *Imagining the End of Times: Stories of Annihilation, Apocalypse, and Extinction*, providing an abbreviated compendium of the presentations held on December 15th 2023 at the MNA.

Robert Folger is Director of the Käte Hamburger Centre for Apocalyptic and Post-Apocalyptic Studies (CAPAS) and Professor in Romance Literature at the Department of Romance Studies, Heidelberg University. His research interests include apocalyptic and post-apocalyptic studies, medieval Spanish literature (historiography, literature, and science), Spanish Golden Age literature and culture (the picaresque novel), Latin American literatures and cultures (of Mexico and the Southern Cone), the history and theory of subjectivity, and cultural theory.

Bibliography

Mantilla Osornio, Adolfo Felipe, ed. 2023. *Imaginar el fin de los tiempos: historias de anquilación, apocalipsis y extinción*. México City: Instituto Nacional de Antropología e Historia; CAPAS.

Mantilla Osornio, Adolfo Felipe. 2024. *Imaginando el fin de los tiempos: Poéticas y figuraciones sobre los mundos y sus extinciones*. Berlin: De Gruyter.

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Adolfo F. Mantilla Osornio

Imagining the End of times: Poetics of Annihilation, Apocalypse, and Extinction[1]

Temporal Consciousnesses and their Modulations within Cosmopoetic Dimensions

Part One

The study of cosmologies seems to have become an unnecessary, useless, or perhaps even impertinent practice, as if the complexity that defines current cultural practices has exempted human groups from acting in correspondence with a given cosmology. Although contemporary individual and collective consciousnesses no longer seem to be determined by a unified system, the apparently diffuse presence of these patterns is supposed to continue to influence the narratives and figurations of all human groups to this day.

Within anthropological narratives, the study of cosmologies was largely limited by the idea that these entities responded to a totality that determined the axiological systems of human groups. Conceived as a totality in itself, these worlds were supposed to operate as impermeable and static entities. Consequently, the human world would have been conceptualised as the sum of each of its cosmological dimensions, which expressed, as a whole, a common place referred to through a multiplicity of narratives that registered a way of totalising the inhabited space and, consequently, revealed the presumed organic dimension of societies and cultures. Thus, the supposed human cosmos continued to be conceived as a particular type of space whose main peculiarity would be to contain within itself multiple perspectives that, in turn, would be culturally expressed through

1 This paper is an extended version of a text published as a part of an interdisciplinary collection that accompanied an exhibition presented at Museo Nacional de Antropologia in Mexico City.

collective representations and symbolic systems (Abramson and Holbraad 2016). Hence, throughout its development, cosmology seems to have been constituted as an epistemological practice centered on the one hand on the study of the macrocosm, and on the other hand as a practice focused above all on the study and analysis of the variation of human worlds. Hence, these two trajectories, by overlapping, seem to show the different relationships between the various cosmological entities identified (Scott 2016).

In the Mexican case, it is possible to register some of these multiple connections by focusing on narratives and figurations that express a particular conception of the world and reveal the presence of cosmological elements and patterns that, in some way, determine the existence of poetic mechanisms which contribute to the configuration of existing relationships and interactions. As a whole, these expressions seem to acquire a topological form in that they exhibit a complex network in which multiple conceptions configured and stored within diverse cultural consciousnesses modulate the perception of events or potential events, which, within some experiential and enunciative dimension, could suppose events that are conceived as the end or the extinction of a world. For example, throughout his life, David Alfaro Siqueiros produced several works that could well be referred to here as expressions of the imaginaries that shaped his cosmopoetic consciousness. In paintings like the work entitled *Admonition. A dead fire will cover the whole earth* (1967) Siqueiros depicts a scenario in flames to identify some of the apocalyptic figurations that the painter also projected in other pieces, where he represented catastrophes that could have been conceived at that time as a kind of revelation and as an event of annihilation, apocalypse, or extinction about to occur (fig. 1).

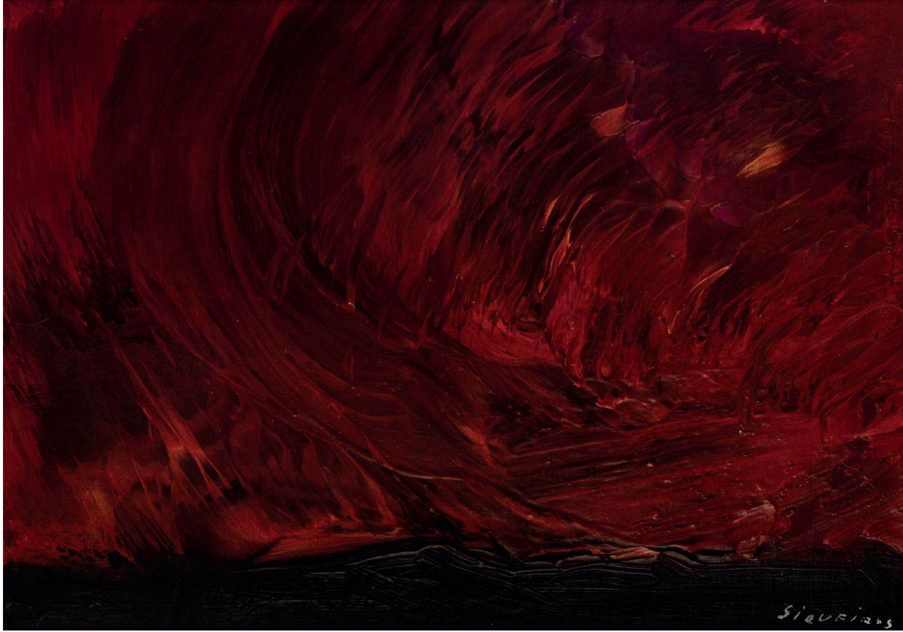

Figure 1. David Alfaro Siqueiros, *Admonition. A dead fire will cover the whole earth*, (1967) acrylic on masonite, 47.4×60.5cm, Private Collection, (courtesy of David Alfaro Siqueiros/Artists Rights Society), New York/México.

Part Two

If the experience of 'reality'—understood as that which is predicated and interpreted in the terms of a given situation—presupposes a mechanism of implication of the 'whole,' such a contingent relation, by producing a cosmophany, allows the generation of an expression of the world as reality. Assuming this principle, eventually the cosmogenetic relation provokes a displacement in which the predication of the 'world' is detached from its physical referent, resulting in a narrative entity. Therefore, the transit through this procedural unit makes it possible for every individual and human group to create a cosmology, that is, to create a narrative that establishes itself as a unique, total, and self-enclosed reality. Consequently, the limit of this mechanism would be the distinction between what is and what is not a world (Berque 2006).

Currently, it is possible to register multiple discourses that have the alleged effects of the so-called Great Acceleration in the Earth System or the advent of a sixth mass extinction as central referents. These narratives seem to find correlates in the cataclysmic imaginaries and apocalyptic figurations produced in modern cosmologies. In turn, they seem to be coordinated with the narrative complex created in the Judeo-Christian eschatological tradition which, in the Mexican case, would have also func-

tioned as a tool to modulate the Mesoamerican categorisation mechanisms that coordinated the cosmologies and visions that the human groups living at that time in Mexican territory had about events or potential events that would put an end to the world as it was conceived. Hence, as a whole, these narratives and figurations make it possible to record multiple dimensions of a complex cosmopoetic scenario, which currently seems to have acquired an exponential dimension.

Today's so-called 'mass extinction events' are determined by the disappearance of a radically large number of species resulting in the vanishing of a wide variety of life forms in a short period of time. Unlike the previous five recorded events, the so-called 'sixth mass extinction episode' appears to be largely triggered by anthropogenic factors. However, these mass extinction phenomena are perceived and narrated in a multitude of different ways, i.e. they are established as multiple and specific narratives that demand the conformation of diverse observational mechanisms that allow for the recording and exploring of different worlds, beyond their cosmological limits (Bird Rose, Van Dooren, and Chrulew 2017). From a similar position (Arroyo-Cabrales, Morett and Ríos 2024), an approach is made to record the context that determined various 'mass extinction events,' which, in turn, seems to have motivated those events linked to the five great mass extinctions that occurred in the 3.7 million years that life on Earth has existed. In particular, the work points to the anthropogenic factor as the one that seems to have largely determined the extinctions at the end of the Pleistocene. In this way, the text intends to record some of the questions that emerge when exploring the correlation between climatic changes and mass extinction events, specifically where the interaction of early human presence seems to have played a role in the changes that were factors for the extinction of megafauna and other Pleistocene species.

Part Three

After the establishment of so-called 'universal time' throughout the sixteenth century the intellectual and discursive devices that consolidated modern temporal consciousness, which had already been prefigured in the Judeo-Christian tradition, were also developed. That temporal consciousness, by presupposing itself as coextensive with the world, nature, or the universe, also served as a tool for establishing presumed scales that were supposed to be neutral parameters for recording changes or the recurrence of various events/processes. Therefore, the consciousness of the Western world seems to be a correlate of the emergence and establishment of modern conceptions, produced after a profound secu-

larisation of the Judeo-Christian conception of time, producing, above all, the expansion of so-called historical time (Fabian 2014). However, other temporal dimensions also seem to have contributed to the determination of the chronological consciousness of individuals and human groups in a pendulum-like manner: the 'A series,' which responds to the past-present-future implication, and the 'B series,' which operates on the basis of the before-after relationship. However, both express models that act systematically in the shaping of systems of temporal organisation. On the one hand, the mechanism expressed in the 'A series' constructs an idea of time that engenders conceptions of becoming derived from its dynamic quality and presupposes ontological distinctions between events in terms of their configuration as past, present, and future events. On the other hand, the system expressed in the 'B series' constructs an idea of time where the experience of past, present, and future are not real characteristics of the events but arise from our relationship with them as conscious subjects, making it impossible to construct ontological distinctions between past, present, and future events (Gell 1992).

In the Mexican context, said temporal modulators contributed to the conformation of a complex cosmological topology that first determined Mesoamerican conceptions, and later the mechanisms that acted after the transplantation of the systems of the Judeo-Christian tradition, to later further produce a sphere where temporal consciences have been subject to transformations of various types; leading to the configuration of a cosmological panorama that includes multiple temporal dimensions. In some works, approaches are developed that allow us to distinguish both the systems of temporal organisation used by the populations that inhabited the Valley of Mexico and those that operated in the Western conception of time (Ledesma 2024). Thus, for Nahua groups, time seems to have functioned as a regulating mechanism for natural and social transition processes, resulting in a consciousness that identified both the beginnings and the ends of the Eras. In the narratives of these groups, the mythical events that narrate the beginnings and ends of previous world-eras were often conceived as events impregnated with violence and destruction. From a similar perspective another contribution, allows us to establish an articulation between Mesoamerican and Western consciousness regarding the end of the world and also showing that the end of a world and the end of time are close concepts, but that they imply significant differences between them. In this approach it is possible to identify the relationship between these two dimensions by exploring various narratives that reveal inherent aspects of existence (Cortés 2024). Thus, it's possible to explore some of the complex trajectories of the Christian and Mesoamerican

worldviews, and their relationship with the ideas of individual and collective final destiny.

Within the framework of this perspective, perception, defined as a cyclical process, presupposes operating as a structure made up of the reception of information originating from the outside, the application of an *ad hoc* scheme based on the set of interpretative elements available, and the establishment of mechanisms focused on the construction of emerging figurations. Consequently, it is within this continuous procedural unit that figurations are produced which potentially correlate with the perceptual data and which fit in with the various maps of the world which are continually modified. Hence, following perception, it is possible to identify a concrete world from which projections are traced towards desired or feared worlds, and also paths towards the past and towards possible preceding worlds. Consequently, the perception of time seems to occur within a dynamic process which, in turn, allows for the multiplicity of possible worlds (Gell 1992).

A canvas depicting the story of The Flood, based on the narrative contained in Genesis, shows the event mentioned in the Old Testament, integrating the ark scene into the background of the composition, and then distributing a multiplicity of entities that give the impression of an abundant presence of human figures; some apparently dead and others who seem to be trying to survive in the midst of the catastrophe. The figuration expressed in the painting integrates into the composition a significant number of buildings that are distributed in the space and help to give a sense of dimension to The Flood and its cataclysmic effects. At the time, Artus Wolffot's *The Flood* might have evoked a new warning, taking, as a reference that event which, according to Judeo-Christian imagery, almost extinguished life on Earth, and which in the seventeenth century, when the work might have been painted, was supposed to express a prefiguration of the end of the world that would eventually occur.

Figure 2. Artus Wolffot, *The Flood*, s/f, oil on canvas, 109.5 × 120.7 cm, Museo Nacional de San Carlos, Secretaria de Cultura-INBAL, Mexico.

Part Four

Taking the previous conjectures as a reference, it would be possible to register some intertwining mechanisms between the multiple situations that allow the emergence of experiences through which human groups elaborate conceptions about their worlds; understood as entities that concomitantly produce diverse temporal consciousnesses. In this way, it seems feasible to explore multiple articulations between cosmologies and chronologies and thus to register a vast network of narratives and figurations that express the existence of a complex cosmopoetic realm, understood as an experiential and enunciative reference of a mechanism of spatio-temporal articulation, but which appears in certain circumstances as an entity on the verge of extinction or even imagined after its extinction. For example, it is now possible to record cosmological elements that have their origin in the narratives that Mesoamerican groups created about the end of the 'world.' These figurations are explored by Báez (2024), with particular focus on reviewing the current oral tradition of the Nahua peoples who inhabit the Sierra Norte region of Puebla and the Huasteca region of Hidalgo and Veracruz. Through these accounts it seems possible to

record the way in which present-day Nahua groups retain in their memory cosmological components created in Mesoamerican and Judeo-Christian eschatologies, and which, in their everyday contexts, give meaning to the current climatic conditions to which they are permanently exposed. A similar dimension is found in a variety of narratives produced by Mayan groups that were presumably conceived as omens of the destruction of their world. Although these narratives seem to show the way in which Mayan groups established parameters that underpinned their daily knowledge and rituals, this approach shows that the goal of pre-Hispanic Mayan narratives did not consider the existence of prophecies in their texts. Alternatively, they linked the actions of their present with references to the mythical past with the goal of interweaving events to make sense of their cosmology (Gallegos 2024).

The Permeability of the Modes of Categorisation within Cosmopolitical Dimensions

Part One

As has been shown, the cultural distinction of time would be one of the common dimensions of the human phenomenon, however, it can also be perceived to be a fact that the boundaries and relations between the cultural distinctions of time can be drastically different from each other. In this way, the same event could be semantisised simultaneously from multiple frameworks of perception, conceptualisation, and symbolisation of time. Indeed, one temporal system may also appear to be symbolically referenced in another, as in cases where the historical process is subsumed in categories and terms of a mythological order or vice versa (Uspenskij 2017). Consequently, it is fundamental to underline that, regardless of their differences, it is possible to think that multiple temporal consciousnesses can operate in terms of simultaneity or, let us say, coexist in the same experiential procedural unity, whether in their subjective, intersubjective, or transubjective dimension.

To mention another example, Lourdes Almeida's work *Saint Michael the Archangel* (1996) (see figure 3), elaborated by means of digital montage, condenses elements that originate in diverse frameworks of perception, conceptualisation and symbolisation of the world and time. The photograph achieves a figuration *ad hoc* with its *time* but anchors it in different symbolic elements typical of the eschatological tradition of Judeo-Christian origin, which, in this case, function as tools to interrogate

questions associated with the forms of representation of the body and discourses on gender and sexuality. Thus, the conceptual principle of the piece achieves a re-figuration where the three-headed dragon subjugated by St. Michael the Archangel evokes a scenario where non theological agents are referred to as apocalyptic entities.

Figure 3. Lourdes Almeida, *Saint Michael the Archangel* (1996), chromogenic printing from digital negative, 50×40 cm, Estudio Lourdes Almeida, México.

It seems then that the modes of identification/classification, by modulating the existential dimension in symbolic ecologies, allow for the determination of each existing entity according to the organisational principle that the regime in operation decides. Each of these modes prefigures both a particular modality of collective existence and a specific purpose for each entity distinguished within it. A human group is therefore supposed to be the result of the execution of the mechanisms referred to above. In some cases, some of these mechanisms seem to correspond partially to the term 'social system,' but until very recently, however, most of the human population did not make sharp distinctions between the natural and the social, nor did they think that the treatment of humans and non-humans corresponded to completely separate devices. Hence, the exploration of the various modes of social and cosmic organisation, understood as expressions of the modes of distribution of beings/things, would have made it possible to identify a wide diversity of topologies where who/what is included with whom/what, in what way and what for (Descola 2012).

Perhaps it has already been possible to show that the multiple forms in which the cosmogenetic dimension is expressed are always a consequence of the modes of categorisation derived from the perception and interaction between beings/things and that these are also configured in coordination with the temporal patterns that each human group establishes. Determined by combinations established on the basis of relational models, modes of categorisation would allow for the establishment of distinctions of existing entities. Thus, through categorisation, human groups would establish mechanisms focused on the configuration of singularities, which outline the categories that would determine the relative positions within a particular symbolic ecology (Descola 1996), i.e. their world.

Part Two

If the animist mode of identification/classification distributes humans and non-humans into multiple species, forms, and behaviours, it becomes necessary to consider that beings/things endowed with an interiority analogous to that of humans living, in this symbolic ecology, in worlds possessing identical structure and properties. Although animism and naturalism apparently share the way in which they hierarchise human beings, at the level of the general model of collectives this operation would occur in a very different way in each case. For example, animism seems to exhibit a flexible mechanism in the allocation of the social dimension, whereas naturalism reserves the realm of the social for everything that is not natural. From this approach, only naturalism seems to be truly anthropocentric, in that it defines non-humans tautologically by their lack of humanity,

identifying in human identity and its attributes the moral referent that determines the rest of the beings/things. Animism thus appears to be less anthropocentric, insofar as it only derives from humans what is necessary for non-humans to receive the same treatment as humans (Descola 2012).

As far as the animist mode of identification/classification is concerned, figurations created within groups determined by this type of symbolic ecology have been explored and it has been possible to find in their images entities that have animal and/or human features, while in other cases the elements that make up the figuration make immaterial entities visible and present. In these cases, the images reveal the existence of hybrid classification mechanisms, where characteristics of an animistic symbolic ecology intermingle with distinctive features of a totemic order. These types of examples permit us to identify that the conditions of compatibility and incompatibility between different elements are factors in the establishment of mixed symbolic ecologies, since it is possible to register some components that are generally present together and others that never do. Thus, when starting with the general identification of the references that make up a given symbolic ecology, it is possible to register, in certain cases, the presence of foreign entities that were considered incompatible but which appear given their degree of compatibility. In this way, the logic of ensemble that governs the co-presence and compatibility of modes of identification/classification and their representations potentially enables the enrichment of classification mechanisms that, in turn, produce transformations, both in the elementary components of the syntax of worlds and in the rules of their combination (Descola 2016).

Taking into consideration the above-mentioned aspects, the question of the existence of a situation where it would be feasible to register, at the same time, elements corresponding to different modes of identification/classification and where several possible ways of structuring the social world coexist becomes relevant. As such, it is possible to find examples of said contexts and also to register this situation from certain images, since in their figurations the presence of elements that are part of diverse classification mechanisms is evident. In this context, a work recently created by Ernesto Muñiz and entitled *Coronavirgen* (2023) (see figure 4) seems to refer to a mixed or manifold mode of identification/classification. In its first version, the work seems to have been intended to confront the Catholic world with the current environmental crisis. Using a collage technique, Muñiz then depicted a Madonna with an oxygen mask and the representation of SARS-CoV-2 (the virus that causes COVID-19) instead of the sacred heart with which she is usually depicted. By employing the collage technique, the author succeeds in juxtaposing entities belonging

to different modes of identification/classification, integrating celestial figures in terms of natural and earthly events. Particularly in the case of the first version of this piece, Muñiz decided to paste it on the street the day before the announcement of the confinement caused by the worldwide spread of the virus. In doing so, the author gave the image the function of prefiguring the end and beginning of a new era, as he integrated a reference to planet Earth into the composition, thus emphasising the global dimension of the catastrophe revealed.

Figure 4. Ernesto Muñiz, *Coronavirgen* (2023), collage, 80.3×60.4 cm, Private Collection, México.

Part Three

In a recently published article, an approach is made to explore the way in which Rarámuri memory safeguards a particular relationship with the forces of the cosmos, making them responsible for preserving the order and viability of the 'world' (Gotés 2024). The text shows the way in which Tarahumara cosmological consciousness is sustained by a series of narratives and rituals that refer to the origin of the existing and place the maintenance of order as a central criterion. In this way, a balanced correlation is sought between the souls or spirits of the ancestors, living people, nature, and the supernatural entities that observe and judge the life of the Tarahumar. In short, the paper aims to show how the Tarahumar way of categorisation is organised on a daily basis in order to contain the destructive forces of chaos, even including the Western 'world.'

From another ethnological approach, (Neurath 2024) focuses on the Wixárika figurations of the most feared cataclysms in their narratives. The flood, and occasionally a great conflagration by fire, are the two agents that would provoke the extinction of the Wixárika world. The first is associated with the rainy season and the second with the burning of the milpas before sowing, during the dry season. The text also refers to the way in which Wixárika stories show a confluence of Amerindian and Christian traditions, and the way in which ritual mechanisms re-create the upper part of the world. The work thus shows how the Wixárika cosmos must be systematically and periodically re-created through ritual process units; for example, the two great ceremonies that have recently taken place, first in February 2011 and then in March 2022, both on the summit of Cerro Quemado, near Real de Catorce (San Luis Potosi, Mexico).

Figure 5. Johannes Neurath, photographic record taken during the Wixárika ceremony of the Renewal of the World, Cerro Quemado, Wirikuta, Real de Catorce, S.L.P., 18–19 March 2022, Johannes Neurath Collection.

A correlate of the above appears to be recorded in several Huichol paintings depicting the deity *Takutsi Nakawe* [Our Grandmother]. In all of these figurations they seem to refer to the Huichol myth of the flood. In different versions of this story a man discovers an old woman who announces a cataclysmic flood. Consequently, the man builds a boat or canoe to save himself, together with the woman, a little black dog, a piece of *braza* to make fire, and five cobs of corn, which correspond to the five variants cultivated by the Huichols.

Unlike the ways in which the groups referred to above express their relationship with the beings/things that make up their *worlds*, the Western, naturalistic world seems to have produced diverse situations determined by the coexistence of different forms of relationship, given that its categorisation mechanisms would allow for the emergence of a great variety of points of view that, in general, come into conflict, because they rest on different valorisations of 'being.' In fact, the distinction/implication of the naturalistic mode of identification seems to have created a kind of margin in the treatment of existing groups, preventing the establishment of a mode of interaction capable of synthesising the relations that structure non-modern collectives. It is possible that the germs of naturalism

developed as a splitting of analogism at various times and in different situations. Perhaps, because of this, there is an argument to be made about naturalism never existing in a consolidated form, since the distinction that modulates it is always in hybrid figurations. Thus, the question arises as to the analogist substrates in modern aspirational groups, and, with it, the question of the true existence of a naturalistic mode of identification, or even the possibility to think that it is not currently possible to identify any of the above modes of identification/classification in their pristine form (Descola 2016).

Part Four

In a further work (Melesio, 2014) a review of the apocalyptic visions is postulated, in which Mexico City in particular is referred to as the place where, repeatedly, the end of the world is experienced. In many of his chronicles, the Mexican writer and thinker Carlos Monsiváis recorded multiple events that are identified as constituent elements of a scenario where total chaos dominates. From the destruction of Tenochtitlán and the subsequent emergence of the new City of God, Mexico, through catastrophic events such as the 1985 earthquake and events that portend the end of Mexican Babylon, Monsiváis's chronicles formulate an apocalyptic vision that would find its most recent expression in the context of a new apocalypse manifested by the collapse of the contemporary Mexican political system. In Monsiváis's texts, therefore, the figuration of a perennial apocalypse is established in which the events that take place are its components, and where the narrator's critical vision provides a mechanism of description and analysis capable of recording, in detail, various processes and events that show the end of the world as recorded in Mexico.

Considering the aspects mentioned in the previous paragraphs, it seems pertinent to refer to a painting by José Clemente Orozco, who produced one of the most interesting expressions of the apocalyptic imagery created in Mexican visual culture at the end of the first half of the twentieth century in the temple of Jesús Nazareno in Mexico City. In *Apocalypse*, made between 1942 and 1944, the artist decided to recover the apocalyptic story contained in the Book of Revelation to elaborate a narrative *ad hoc* to the reality he saw at that time. The figuration expressed in the painting integrates a character represented surrounded by winged entities that operate as elements depicting the event; generating a visual site full of references to death, misfortune, suffering, and horrors that reveal a world destroyed or in the process of being exhausted. At this point it becomes necessary to point out the ambivalence that the reference to cosmopolitics has acquired in contemporary narratives produced

in the social sciences, which is supposed to find one of its anchor points in the way eighteenth-century philosophy defined cosmopolitanism. In this approach, cosmopolitics entailed outlining a set of anthropocentric problems that focused on the identification of various political disputes between human beings and groups. Thus, irrespective of the local communities to which individuals may ascribe, and the common sense to which they may adhere, human groups would eventually acquire the awareness of being part of a single human community. Therefore, the cosmopolitical sphere, seen from a Kantian anthropology, was supposed to be an arena determined by the mutual recognition of this circumstance and where it would be possible to shape certain principles applicable to all human beings. However, a second sense of cosmopolitics seems to have recently entered the semantic web of social sciences (Wardle and Schaffner 2017).

In 1999, another Mexican artist, Miguel Calderón, produced a piece entitled *Moribundo* (1999) (see figure 6). The work is a large-format figuration that adopts the logo of a Mexican mattress shop bearing the name Dormimundo. However, in this case, the artist, through a morphological alteration, achieves a commutation effect by replacing the name of the brand by the word '*moribundo*' [dying, moribund], making the piece a predictive figuration that alludes, above all, to the crisis and eventual extinction of the museum as a cosmopolitan institution. In this sense, the work finds, in the museum/world implication, a double cosmopolitical dimension, expressing a critique of modern Western cosmology, which, in turn, would have established the principles that modulated the modern notion of the universe.

Figure 6. Miguel Calderón, *Moribundo* (1999), installation, varying measurements, Colección Fundación M, México.

In its second meaning, cosmopolitics implies being restricted to concrete situations, outside of generalising aspirations. Thus, the perspective that determines this second meaning is interested in the construction of practices that combine freedom and traceability. From this approach, the cosmos is a category that does not refer to the unified place in which all individuals would perceive themselves as citizens. Consequently, it does not set out to offer a definition of a common world. Cosmos, as it appears in this meaning of the term cosmopolitics, designates the unknown of these multiple, divergent worlds, so that it has nothing to do with the aspiration to bring all the world's inhabitants into agreement and to function as a cosmos that has the purpose of being an operator of equality. Therefore, the second meaning of cosmopolitics implies a way of modulating a cosmopolitical common sense, a spirit of recognition of the otherness of the other that is able to apprehend ethnic, national, and religious traditions, and to ensure that they benefit from their mutual exchanges (Stengers 2014).

As I have tried to show through the works discussed here, in the Mexican case, it seems possible to find a diversity of cosmopoetic expressions that include scenarios determined by poetical elements that reveal a complex narrative of cosmopolitical dimensions. Thus, taking, as a starting point, the conjectures outlined I propose an approach that seeks to identify some of the multiple ways in which human groups express concep-

tions about their worlds. In other words, the diverse ways in which narratives are produced in the Mexican context that express imaginaries about the cosmos, its origin, and its eventual vanishing, allow for the exploration of a complex topology of images, objects, and entities that manifest the existence of a heteroclite cosmos that unveils multiple mechanisms of experiential and enunciative reference that articulate the innumerable spatio-temporal dimensions and, consequently, trace a complex cluster of poetics and figurations that express mechanisms for imagining the end of time through stories of annihilation, apocalypse, and extinction.

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Bibliography

Abramson, Allen and Martin Holbraad, eds. 2016. *Framing Cosmologies: The Anthropology of Worlds*. Manchester: Manchester University Press.

Arroyo-Cabrales, Joaquin, Luis Morett Alatorre and César A. Rios Muñoz. 2024. "El Cuaternario en el contexto climático, mastofaunístico y humano: ¿procesos de cambio o extinciones?" In *Imaginar el fin de los tiempos: historias de aniquilación, apocalipsis y extinción,* edited by Adolfo F. Mantilla Osornio, 26–41. Mexico City: Instituto Nacional de Antropología e Historia; CAPAS.

Báez Cubero, Lourdes. 2024. "El fin de los tiempos: relatos nahuas sobre el fin del mundo y otras historias." In *Imaginar el fin de los tiempos: historias de aniquilación, apocalipsis y extinción,* edited by Adolfo F. Mantilla Osornio, 126–139. Mexico City: Instituto Nacional de Antropología e Historia; CAPAS.

Berque, Augustín. 2006. "Cosmofanía y paisaje moderno." In *Paisaje y pensamiento,* edited by Simón Marchán Fiz and Javier Maderuelo, 187–207. Madrid: ABADA.

Berque, Augustín. 2019. *Poetics of the Earth: Natural History and Human History.* Translted by A. M. Feenberg-Dibon. London: Routledge.

Bird Rose, Deborah, Thom van Dooren, and Matthew Chrulew. 2017. *Extinction Studies: Stories of Time, Death, and Generations*. New York: Columbia University Press.

Cortes Guzmán, Alejandra. 2024. "Entre el fin del mundo y el fin de un mundo: convergencias y repercusiones apocalípticas en la época novohispana." In *Imaginar el fin de los tiempos: historias de aniquilación, apocalipsis y extinción,* edited by Adolfo F. Mantilla Osornio, 80–99. Mexico City: Instituto Nacional de Antropología e Historia; CAPAS.

Descola, Philippe. 1996. "Constructing Natures. Symbolic ecology and Social Practice." In *Nature and Society. Anthropological Perspectives,* edited by Philippe Descola and Gísli Pálsson, 82–99. New York: Routledge.

Descola, Philippe. 2012. *Más allá de naturaleza y cultura.* Buenos Aires: Amorrortu.

Descola, Philippe. 2016. *La composición de los mundos. Conversaciones con Pierre Charbonnier*. Buenos Aires: Capital Intelectual.

Fabian, Johannes. 2014. *Time and the Other: How Anthropology Makes its Object.* New York: Columbia University Press.

Gallegos Gómora, Miriam Judith. 2024. "2012: ¿tiempo de renovación de un ciclo maya o fecha apocalíptica de la civilización contemporánea?" In *Imaginar el fin de los tiempos: historias de aniquilación, apocalipsis y extinción,* edited by Adolfo F. Mantilla Osornio, 62–77. Mexico City: Instituto Nacional de Antropología e Historia; CAPAS.

Gell, Alfred. 1992. *The Anthropology of Time. Cultural Constructions of Temporal Maps and Images*. Oxford: Berg.

Gotés Martínez, Luis Eduardo. 2024. "Suwábama. Mapuari Guwanibe Wichimoba." In *Imaginar el fin de los tiempos: historias de aniquilación, apocalipsis y extinción,* edited by Adolfo F. Mantilla Osornio, 102–109. Mexico City: Instituto Nacional de Antropología e Historia; CAPAS.

Ledesma Bouchan, Patricia. 2024. "Encauzando lo inasible. Narraciones, mitos y rituales de inicios y fines de ciclos entre los nahuas prehispánicos." In *Imaginar el fin de los tiempos: historias de aniquilación, apocalipsis y extinción,* edited by Adolfo F. Mantilla Osornio, 44–59. Mexico City: Instituto Nacional de Antropología e Historia; CAPAS.

Melesio Nolasco, Juan Carlos. 2024. "Visiones apocalipstickas en la crónica de Carlos Monsivais." In *Imaginar el fin de los tiempos: historias de aniquilación, apocalipsis y extinción,* edited by Adolfo F. Mantilla Osornio, 142–155. Mexico City: Instituto Nacional de Antropología e Historia; CAPAS.

Neurath, Johannes. 2024. "Los fines del mundo y la antropología." In *Imaginar el fin de los tiempos: historias de aniquilación, apocalipsis y extinción,* edited by Adolfo F. Mantilla Osornio, 112–123. Mexico City: Instituto Nacional de Antropología e Historia; CAPAS.

Stengers, Isabelle. 2014. "La propuesta cosmopolítica." *Pléyade* 14 (12): 17–40. https://biblat.unam.mx/hevila/PleyadeSantiago/2014/no14/2.pdf

Scott, Michael W. 2016. "To be a Wonder: Anthropology, Cosmology, and Alterity." In *Framing Cosmologies: The Anthropology of Worlds*, edited by Allen Abramson and Martin Holbraad, 31–54. Manchester: Manchester University Press.

Uspenskij, Boris. 2017. "Semiotics and Culture: The perception of Time as a Semiotic Problem." *Sign Systems Studies* 45: 230–236.

Wardle, Huon and Justin Shaffner, eds. 2017. "Introduction: Cosmopolitics as a Way of Thinking." In *Cosmopolitics: The Collected Papers of the Open Anthropology Cooperative Volume 1*. Open Anthropology Cooperative Press. https://openanthcoop.net/cosmopolitics-the-collected-papers/

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Patricia Murrieta-Flores

Nepantla, Between Mesoamerican Time and Colonial Space: Reflections on the End of the World in Central Mexico

This essay seeks to provide a reflection on a subject that not only captures our imagination in modern times, but has also been at the heart of philosophical debates throughout human history. I refer to the concept of finality, and how it is that death, and ideas about what constitutes the end of the world, become embedded in our collective cognition. Humanity has documented its fascination with these themes over the years as entire genres such as science fiction can attest to with an endless number of novels, as well as many other modern cultural expressions. These explorations have been taking place for millennia, and every representation of the end of the world in culture whether through writing, painting, sculpture, and music acts as an evolving essay on what might happen in the face of catastrophic change, using human creativity as a tool to explore answers to these universal anxieties.

Climate change and the threat of a sixth mass extinction, exacerbated by human activities and capitalist mechanisms, add a layer of urgency to these reflections (Mantilla Osornio, 2024). The exhibition "Imagining the End of Times: Stories of Annihilation, Apocalypse, and Extinction" [Imaginar el Fin de los Tiempos] co-organised by the Centre for Apocalyptic and Post-Apocalyptic Studies and the Instituto Nacional de Antropología e Historia invited us to delve into complex questions about what we consider 'the world' and what we mean by 'the end.' In this context, we paused to reflect on how multiple disciplines explore the construction of our reality. Neuroscience, for instance, asks whether reality is a function

of our brain chemistry interacting with the environment, or is it perhaps something deeper? Anthropology, in turn, urges us to reflect on the complex social and cultural entanglements that give shape to our world, questioning what our cosmology entails, and how we construct our worldview. What happens, then, when we are faced with situations that mean the death not only of loved ones, but of the world as we know it?

In the late fifteenth and early sixteenth centuries, the Americas and their populations were to experience a cataclysmic upheaval without precedent. Contact between the Americas and Europe not only precipitated the formation of modernity and globalisation as we know it today, but also marked for Mesoamerican societies and beyond, what many would perceive and describe as the end of the world. This phenomenon was not simply limited to superficial changes in customs or political structures, but went deep into the indigenous worldview, altering the perception and value of time, natural cycles and the very structure of reality itself. This transformation encompassed all aspects of the everyday life and ceremonial practices of indigenous peoples: from social and political organisation, which was deeply imbricated in the territory and landscape, to fundamental aspects such as language, food, clothing, and even conceptions of gender and interpersonal relationships. The transition between the period that we know today as pre-Hispanic to the viceregal space involved much more than a simple change of rulers or the introduction of new technologies and religion. It was, in many ways, a confrontation between two ways of understanding the world: a cyclical vision, embedded in nature and governed by a cosmology deeply rooted in ritual and ceremony, and another represented by linear thinking with the conception of a past, present, and future driven by the notions of salvation and eternal damnation that characterise Western Christian thought. At the centre of these cultural and epistemological convulsions was the conception of time, which in Mesoamerica possessed a cyclical nature, seen not only as a framework for understanding natural or historical events, but as a reflection of an eternally renewed cosmic order.

The arrival of the Europeans meant the imposition of a linear and progressive temporal framework, typical of Western and Christian thought, which prioritised an eschatological vision of history directed towards an apocalyptic end. This vision was in radical contrast to the indigenous concept of cycles of creation and destruction, where each end is also a new beginning. Accepting this new temporal structure meant, for many indigenous peoples, a form of cultural annihilation, which has sometimes been interpreted literally as the end of their world. In his iconic book *The Colonisation of the Imaginary* (1993), Serge Gruzinski explored how this pro-

cess of cultural imposition attempted to subjugate and eventually replace indigenous ontologies, fundamentally transforming indigenous peoples' relationship to their environment, their past, and their future. This colonisation of time and the imaginary was not only a physical conquest, but an invasion of what we now consider the mind and spirit, where time ceased to be a cycle of eternal renewal and became a linear path towards the end of days. Despite the conclusions we can form from historical evidence and archaeology, it should be noted that the difficulty of understanding Mesoamerican time lies not only in its complexity and the richness of its manifestations, but also in the fact that most of our knowledge comes from sources that were compiled or transcribed decades after the Conquest, in a context already deeply marked by European influence. This historiographical distortion means that any attempt to reconstruct or understand the pre-Columbian worldview is inevitably tinged by external perspectives and prejudices. In this context, the work of researchers such as Gruzinski (1993; 2002), Leon-Portilla (1993; 2003; 2013), López Austin (1961; 1980; 1990; 1994; 2015), Graulich (1999; 2016), and more recently Diaz Alvarez (2018; 2019), Kruell (2012), Ruiz Medrano (2011; 2012), Matthew and Oudijk (2007), Alcántara Rojas and Navarrete Linares (2011; 2019), among many other scholars, becomes essential to unravel how the perception of time has been transformed and how these transformations have influenced the historical and cultural narrative of indigenous peoples. These studies raise crucial questions about the universality of Western-imposed conceptions of time and how these may have silenced or distorted other ways of understanding and experiencing temporality. As Mantilla Osornio (2024, 47) puts it, how can we question the universality of the homogeneous and regular temporal consciousness established in the modern Western matrix? How can we come closer to understanding how this frame of reference, this consciousness, is intertwined with a completely different one, namely Mesoamerican? And how can we create epistemological scopes and concepts that allows us to register the way in which different temporalities would play a fundamental role in the description of the narratives of the 'others' and the legitimation of hegemonic narratives?

The task of decolonising time, therefore, involves not only a critical review of historiographical sources and methods, but also an effort to recover and value indigenous languages and cultural expressions as vehicles of an alternative *cosmovisión* [worldview]. This includes a detailed study of events and practices both during the pre-Hispanic period and throughout the colonial era, in order to observe how these conceptions adapted, resisted or transformed in the face of the imposition of an external temporal order. This profound epistemological shift is not only

of academic interest, but has practical and contemporary implications, as it affects how the descendants of these cultures perceive their past, present, and future. By exploring and eventually understanding the essence of cyclical time in Mesoamerica, we not only illuminate a crucial aspect of the indigenous worldview, but also contribute to a greater understanding of the cultural resilience and adaptability of indigenous peoples. To better understand what was possibly the essence of the conception of cyclical time in Mesoamerica, but especially among the Nahua and those in Central Mexico, we can approach an important archaeological example that can be visited today in the heart of Mexico City.

Tenochtitlan as the Beginning and the End

On the eve of European-American contact, specifically in the Late Postclassic period, the rich worldview of the Nahua world was fully integrated and manifested in diverse social, cultural, economic, and artistic forms. Through oral narrative and poetry, painting, codices, ceramics, sculpture, music, landscape and architecture, profound notions about the structure and meaning of the cosmos were transmitted and experienced. In other words, in Tenochtitlan, the main city of the Mexica (Aztecs) and head of the Triple Alliance, the architecture of the Templo Mayor (Great Temple) was not only a space for religious or social encounters, but an active field where the cosmogonic cycles, the alternation of day and night, and the eternal renewal of the universe were recreated and lived. In 1978, a chance discovery during infrastructure work in the centre of Mexico City by the Luz y Fuerza company led to the discovery of a monolith of colossal proportions (Fig. 1). This event, accidental in its genesis, was crucial to literally and figuratively unearth a piece of great importance from the pre-Hispanic past. The monolith turned out to be the representation of Coyolxauhqui, the dismembered lunar goddess in Mexica mythology, a finding that reconfigured the historical understanding of the city, its cosmovision, and its conception of time and space. This finding would also allow the archaeological identification of the ceremonial centre of Tenochtitlan, the location of the Templo Mayor and many of its surrounding buildings, as well as its eventual excavation.

Figure 1. Monolith of Coyolxauhqui. To give an idea of its dimensions, this monolith is 3.25m in height, a thickness of 30.5cm in and it weights approximately 8 tons. INAH-Mediateca, http://mediateca.inah.gob.mx/repositorio/islandora/object/objetoprehispanico%3A23248

The first chapter of Book III of the Florentine Codex, which deals with the origin of the gods, records the myth in which the story of this goddess appears (Sahagún 2012). The story tells us that one day on the hill of Coatepec, Coatlicue, the mother of the gods, was sweeping when a little ball of feathers descended from the sky. Amazed, Coatlicue picks it up and places it between her breast and belly. When she finishes sweeping, she realises that the feather ball has disappeared and she has become pregnant. In this story, Coatlicue is the mother of the Centzon Huitznahua (the Four Hundred Southerners) and also of Coyolxauhqui, who is her eldest daughter.

Upon learning that their mother is pregnant, Coyolxauhqui and the Centzon Huitznahua are greatly offended because they do not know who the father is. This offence is so serious that Coyolxauhqui incites his brothers to kill their mother, and together they plot her death. When Coatlicue learns of this it gives her great sadness and fear, but Huitzilopochtli, her unborn son, speaks to her from the womb to comfort her, and she is subsequently reassured. Coyolxauhqui and the Centzon Huitznahua then prepare for war and to kill their mother, but Cuauhtlicac, one of the Centzon Huitznahua, secretly communicates with Huitzilopochtli in

his mother's womb, and tells him the route taken by Coyolxauhqui and his brothers. When they are about to reach Coatepec, Huitzilopochtli is born gloriously with his body and face painted ready for war. He is born with his full warrior's attire, including his shield, his dart spear, and with one of his hands he commands the fire serpent, Xiuhcoatl. With it, he attacks Coyolxauhqui and cuts off his head. From the top of the hill of Coatepec, Coyolxauhqui's body rolls down, and, in the process, becomes completely dismembered; lies at the feet of the mountain and Huitzilopochtli. The Centzon Huitznahua attack him together, but they cannot fight him and when they see that the battle is lost, they flee to the south where Huitzilopochtli pursues them, but only some of them escape.

The mythological story involving Coyolxauhqui, Huitzilopochtli, and the Centzon Huitznahua is not a simple tale. Within the tale, Coatlicue symbolises the earth, Coyolxauhqui the moon, Huitzilopochtli the sun, and the Centzon Huitznahua the stars. Huitzilopochtli was the main god of the Mexica and this narrative is emblematic of how they conceived the cosmos and its perpetual creation, capturing a series of elements that structure the understanding of the world. These will include not only the observation of natural phenomena, but also the interweaving of a series of activities that have the function of explaining "reality" and forming a sense of the world. This account provides the explanation of why night and day exist, but also shows us the active creation of cyclical time, and points to fundamental elements within the Nahua worldview regarding the understanding of the nature of this conception of time, as well as the calendar itself.

Coatlicue, the mother of Huitzilopochtli and Coyolxauhqui in Mexica mythology, is the telluric goddess, the goddess of the earth. Her role, cleansing the hill of Coatepec where these events take place, is deeply symbolic (Fernández 1963; Matos Moctezuma 1991; Graulich 2000). Her action not only sets the stage for the birth of Huitzilopochtli—the sun—but also symbolises the constant regeneration of the world, an essential feature of Mesoamerican cyclical temporality. In this context, the fall of the ball of feathers to earth, which will generate the birth of Huitzilopochtli, signals the fertilisation of the earth by the sky, and the cleansing becomes a metaphor for the preparation of the universe for change and renewal. The change in this case will be the hierophanic birth of Huitzilopochtli, i. e. the incarnation of the sun, pursued by the moon—Coyolxauhqui—and the cosmic battle that will take place between them; where the sun must fight every day with the moon and the stars, i. e. the Centzon Huitznahua, thus explaining the cycle of day and night (Johansson 2017).

The appearance of the sun signals the future to come, the change of what was before and of the world where darkness, night, moon, and stars were already present. However, it is suggested by the rejection of change, i.e. the arrival of a new being—Huitzilopochtli—that, before this, the world was relatively static. In the cosmic battle that is to be fought, movement is then generated. The sacrifice of Coyolxauhqui and the death of the gods will give way to the day, but, at the same time, the sun advances creating a future; time returns in regression towards night, establishing a dual rhythm that will be the cause of this movement. As Patrick Johanson (2004, 113) has previously pointed out: "The course of the Sun and that of the Moon generate the space-times successively diurnal and nocturnal, masculine and feminine, evolutionary and involutionary, but above all the space-times of existence and death."[1]

The essence of Mesoamerican time, then, lies in the creation of life out of death, and death out of life. The end and the beginning always accompany each other in a dance that never ends. In the case of the Nahua of Central Mexico, myth, but also time, are not only expressed orally, but are materialised and summoned to the different sensory and cognitive planes through the territorial organisation and the creation of a landscape and architectural narrative. The physical organisation of the Nahua territorial unit, i.e. the *altepetl*, the city and the villages, responded to a recreation of the universe on a scale, where time and mythical space were reproduced in the terrestrial realm (Bernal García and García Zambrano 2006; Fernández Christlieb and García Zambrano 2006). Time is articulated in relation to space, where the temporal units, as Ana Diaz (2019) puts it, acquire spatial connotations that are articulated on the basis of the division of the world into four or five parts that are composed of four directions and a centre. Each day, year, and era then correspond to a physical space, as can be seen in the organisation of the altepetl.

The excavation of the Coyolxauhqui monolith led to the discovery of the steps of the Templo Mayor, the architectural enclosure of the ritual space par excellence of the city of Tenochtitlan (Mundy, 2015). The Templo Mayor is the representation or urban conception of the mountain of Coatepec on the side of Huitzilopochtli, and of Tonacatepetl or the hill of maintenance on the side of Tlaloc. From the top of the mountain, represented by the pyramid and in this case the temple of Huitzilopochtli, the sun triumphantly precedes the dismembered body of Coyolxauhqui represented in the monolith, which has rolled down the side of the hill represented by the steps (Fig. 2). Thus, when the monolith of Coyolxauhqui is found at the foot of what we know today as the Templo Mayor in the centre of Mexico City, we find ourselves in the presence of the very moment

1 My translation from Spanish.

when the sacrifice of the gods takes place, and in the space where cyclical time begins in motion: the creation of day and night (Fig. 3). The monumentality of the monolith of Coyolxauhqui in the Templo Mayor not only marked a place of religious and mythological significance but also served as a perpetual reminder of the cycles of conflict and reconciliation, death and rebirth that formed the basis of the Nahua worldview. This archaeological discovery, therefore, not only broadened the understanding of the pre-Hispanic past, but also reaffirmed the complexity and depth of the indigenous perception of time as a living and dynamic entity.

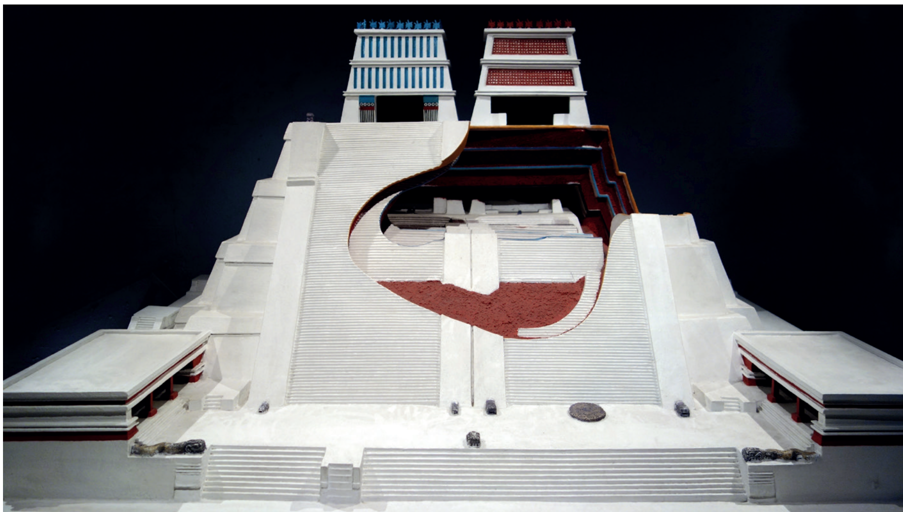

Figure 2. Front view of a model of the Great Temple (Templo Mayor). Viewing it from the front, on the top-left side, we see the temple of Tlaloc (the god of rain), while on the top-right is the temple of Huitzilopochtli. At the feet of the stairs lies the monolith of Coyolxauhqui. The model also depicts the different constructive stages of the Temple that happened across the rise of the Mexica city. Every stage was added to the previous one. Image by Steven Zucker licensed under CC BY-SA 4.0.

Figure 3. Archaeological site of Templo Mayor. Front view of the Coyolxauhqui monolith in its original position. Notice the flight stairs that survive of the temple. Image by José Luiz Bernardes Ribeiro licensed under CC BY-SA 4.0.

To visualise Mexico City at that time, with the mist descending from the volcanoes, the causeways stucco glowing under sun of dawn, and the vibrant life of its canals and plazas, is to invoke a world where past and present intertwine, where the cyclical time dictated by myths and gods still beats in the heart of what is now a modern metropolis (Fig. 4). To imagine the sound of rattles and the scents of copal in the air is to remember that, in every corner of Tenochtitlan, people lived within a continuous cosmic narrative, one that defined every aspect of life and death, and that even today, continues to resonate with those who seek to understand the depth of our connection to time and space.

Figure 4. A 3D rendering of Tenochtitlan. Image by Thomas Khole licensed under CC BY 4.0.

In the complex tapestry of Mesoamerican history and cosmology, indigenous forms of cognition of the world represent a profound divergence from European perceptions, especially with regard to understanding and interacting with the cosmos. Mesoamerican indigenous societies not only conceptualised the world through visual images, such as those captured in codices, but also used architecture to sensorially immerse themselves in the mythical and historical narratives that defined their existence and worldview. The pre-Columbian cognitive framework allowed its members to be not only spectators, but also active participants in history, myths, and the ceaseless cycle of time. This understanding was reinforced by rituals and, in some cases, the use of entheogenic plants, which facilitated a deep exploration of consciousness and allowed individuals to directly experience elements related to their ancestral wisdom. In this context, time and space were not abstract, but living realities with which people constantly interacted, participating in sacred reality and having the ability

to influence divine designs through their actions and sacrifices. This holistic approach is diametrically opposed to the Christian view introduced by the Europeans, where a central divine will and a linear time leading from Creation to the Last Judgement prevailed. In contrast, for Mesoamerican peoples such as the Nahua, time is cyclical and each calendar period, each ritual, reflects and renews the world and its order.

The fall of Tenochtitlan in 1521 marked a dramatic turning point in the history of Mesoamerica. The devastation of Tenochtitlan meant the end of the hegemony of the Mexica Huey Altepetl and of the political and territorial structure that had a strong relationship with cosmic symbolism. The destruction of the temples and sculptures by the Spanish was not only a physical conquest, but also represented the annihilation of the will of the gods. It is important to remember, as recorded in Mexica history, that it was Huitzilopochtli who ordered the creation of the city of Tenochtitlan on this isle in the middle of Lake Texcoco. In this sense, the ruin of Tenochtitlan would mean the end of sacred space, but also of cyclical time, that is, the structure that supported all the reality known and lived by the indigenous people. As such, it must be considered that sacred time was connected to each and every aspect of everyday life.

The *xiuhpohualli*, or 365-day calendar, allowed for the precise organisation of practices such as agriculture, astronomy, hunting, fishing and gathering, while the *tonalpohualli*, or 260-day calendar, governed the different aspects of sacred and divinatory time that permeated not only these activities, but also events ranging from the birth of a child, rituals, and healing practices, to the celebration of religious festivals. On the one hand, by changing the way space was organised with the establishment of the viceroyalty's territorial organisation, sacred time was being brought to an end in multiple ways. The introduction of new ideas about space and the importance of landscape, as well as the destruction of the physical reproduction of the cosmos represented in the altepetl and the Templo Mayor, would break with the experience of sacred space and time. On the other hand, the imposition of a new calendar system and religious festivals profoundly altered the daily practices and rituals that had defined life in Mesoamerica. Through a new way of conceiving time and the imposition of other customs, the annihilation of practices intertwining with cyclical time, and thus its end, was sought. The characteristics of the names and numbers of the days of the Tonalpohualli determined the course of destiny and, therefore, when to harvest, when to start a war, when to marry, or even the destiny of people (Díaz Alvarez 2019). The influence exerted by the characteristics of the days permeated each individual, because the influence of the date of their birth—as recorded in the calendar—gov-

erned the destiny of their entire life. This was noticed by the European friars very early, as we can observe in the sources. The priests immediately realised that the way of conceiving time was intimately linked to the worldview and therefore to religious beliefs. Baptism with Christian names and the 'Castilianisation' of indigenous names is an example of how they tried to distance indigenous people from the tonalpohualli, and from the processes of prophecy and augury that the act of naming someone entailed. In the same way, the introduction of European food and drink, and particularly the attempt to diminish and sometimes prohibit the use of certain types of plants and foods that were related to religious acts and festivals, such as teonanacatl (sacred mushrooms) or *huautli* (amaranth), also led to the breaking of cyclical time (Aguilar González 2022; González Romero 2023). In the case of medical practices, these were deeply linked to the understanding of the three soul forces of the body, the various sacred influences that mapped directly onto the manifestation of the divine, and the representation of the body as a microcosm. In this way, they were also linked to sacred time and space. On the one hand, indigenous medicine would often be condemned as an idolatrous practice, but on the other, the value of the plants and techniques used would be recognised, an extraction and selection of knowledge would be generated and submitted to the consideration of the European cosmovision. In this way, part of the eventual scientific revolution that takes place in Europe thanks to American plants and whose knowledge and use comes from the indigenous cultures of America, is not only unrecognised, but is claimed as a European discovery (Morales Sarabia et al. 2017; Eudave Eusebio 2021).

Nepantla, In Between Worlds

The processes of cultural annihilation would not happen without resistance, and the persistence of pre-Columbian practices demonstrates that the Mesoamerican worldview did not disappear completely. The indigenous people found ways to adapt and maintain their traditions, often syncretising Christian elements with their own rituals and beliefs, thus ensuring the continuity of their worldview despite oppression and colonisation. Fray Diego de Durán (1995), for example, noted how the populations sought to couple the dates of celebration of the Christian saints they adopted with the feasts of the pre-Hispanic deities, and how, when children were baptised with the Catholic name, the name of the sign of the tonalpohualli in which they were born was added. Durán writes with the idea of warning other religious people of these practices, and these

can be interpreted as a strategy to be able to continue connecting the characteristics of sacred time with the person, and therefore with his or her divine destiny. Sacred time was also deeply tied with the consumption of ritual foods. In the case of *huautli* (amaranth), before the arrival of the Europeans, was used to make *tzoalli*, which was a dough mixed with maguey honey and used to make images of divinities that were consumed in rituals during certain festivals (Velasco Lozano, 2016). This was probably one of the reasons why the Spanish categorised this plant as a worthless herb, but nevertheless, in the seventeenth century, Jacinto de la Serna (1987) still recorded the persistence of this rite. In the case of medical knowledge, healing and divination practices have continued to this day as indigenous and Christian customs are intertwined in complex and profound ways. This can be seen in the petitions for rain that are made today on the volcanoes and hills to Tlaloc and the rain gods. In the seventeenth century the practice was recorded in towns such as San Mateo, Xalatlaco and Tenango in the current state of Morelos where communities paid conjurers with money or pulque to protect their milpas from storms (Lorente Fernández 2009). De la Serna (1987, 290), records incantations that were still performed in the pre-Hispanic manner and others of a more Christian nature. This tradition continues with the Graniceros in the volcanoes of Central Mexico, who, even today, still ritually manipulate the weather (Broda 1997; Lorente Fernández 2009).

These practices demonstrate how indigenous people have kept the legacy of their relationship with the cosmos alive, challenging dominant narratives and reaffirming their place and time in the world. Yet, experiencing such cataclysmic change—and on the brink of the end of time—how did indigenous societies experience these changes?

Historical sources give us some answers. In the *Historia de las Indias de la Nueva España*, Fray Diego de Durán gives an account of the counting of days, and relates how he discovers an indigenous man who had already been evangelised carrying out what he considers to be idolatrous practices. Durán (1995, t. 2, ch. 3) confronts him, and the man responds:[2]

> Father, do not be afraid, for we are still in *Nepantla*.

To which Durán says:

> And when I understood what he meant by that word and metaphor, which means to be in the middle, I insisted again that he tell me in what middle was it in which they were. He told me that since they were not yet well rooted in the faith, I should not be frightened by the way they

2 Both italics and translation to English are the authors.

> were still neutral, that they did not turn either to the one law or to the other, or rather that they believed in God and justly turned to their ancient customs and those of the devil. And this is what he meant by his abominable excuse: that they were still in the middle and neutral.

According to the concept of *nepantla*, a Nahuatl word meaning 'to be in the middle' or 'between something' and in this case 'between two worlds,' a profound feeling emerges in the process of naming the state in which the Mesoamerican peoples found themselves at that time. With Christianity tearing the essence of being from reality itself, and seeking to uproot the ideas and convictions that the elders still practised, the peoples of Central Mexico found themselves at this crossroads, between two cosmovisions; at the edge of a time that was still remembered, but entering a space that they suspect did not entirely belong to them, and that had not finished solidifying itself as a clear, but above all viable, path. In its inflexibility towards other forms of existence, sixteenth century Christianity condemned Mesoamerican people to a category of childishness that it assumed was rooted in the corruption derived from infidelity. Evangelisation, then, emerged as the only form of salvation, and therefore as a just cause for colonisation and subjugation of those whose cultural, scientific, and spiritual transcendence could not be understood, let alone recognised as equal.

The *Libro de los Colloquios*, compiled by Sahagún, narrates a meeting that took place between twelve Franciscan friars and several tlamantinimes, that is, sages of the Nahua culture. In the seventh chapter of this text, the Nahua priests express a profound sentiment (León-Portilla 2008, 79):[3]

Perhaps we are only going to our doom, to our destruction. Or have we acted slothfully? Where would we really go? For we are macehuals, we are perishable, we are mortal. May we not die, may we not perish, though our gods have died.

As Sánchez de Tagle (2022) has pointed out, this passage not only evokes a deep melancholy, but also contains two elements of great significance. First, the term '*macehual*' means worthy of being something, the one who deserves, connoting a principle of reciprocity with the creator gods of the Fifth Sun, who sacrificed their lives to maintain the flow of existence (Towsend 2019). On the other hand, the resigned acceptance of the death of their deities transcends their mere eschatological demise. This aspect represents much more than this. It refers to the end of the very reality in which one lives, and the disappearance of culture in its essence, which, in turn, leads to the extinction of the notion of cyclical time. The new Christian reality and the imposition of the Western cult will

3 The English translation is from the author.

mark the supremacy of linear time, and therefore the death of indigenous time. In the Christian canon, time is conceived in a linear way, where the historical evolution goes from creation and paradise to the apocalypse. Human beings, despite their free will, will always be subject to the divine plan, which is imminent, unidirectional, and immovable.

In the case of the Nahua, the cosmos is in movement and is, as such, constantly recreated, and through rites and myths—as we see in the Templo Mayor—the essence of time is repeated and where the human being is a participant in a reiterative way. In this way, the humanity inhabits not only space, but also sacred time. Furthermore, in this principle of reciprocity, the human being would have influence in the creation of history, where profane and sacred time are reciprocal. In Christianity, time is one, that of God, and has the specific purpose of fulfilling the divine design which is ultimately salvation (Sánchez de Tagle 2022). In the Nahua world, time is recreated, allowing in its cyclical conception, change, movement, and renewal. That is, the constant design of creation and destruction and the dance between life and death. Thus, in my own reading of this passage, when the tlamantinimes declare: “May we not die, may we not perish, even though our gods have died,” despite the resignation to the death of their gods and therefore of the known world, the passage also refers to the essence of cyclical time where mortality and the inevitability of the end is recognised, but also the desire and imminence of continuation. By meeting in the middle, in *Nepantla*, indigenous peoples will generate a new reality that, in many ways, still continues.

The mountains of Guerrero house the Lienzo de Petlacala, a document narrating the Nahua migration from the Valley of Mexico to this region, which takes place during the mid-fifteenth century and culminates with the founding of the town (Fig. 5) (Jiménez Padilla and Villela Flores 1999; Villela Flores, 2018). This document, which probably dates from the seventeenth century, is painted in the style of early colonial maps that combine the traditional manner of Mesoamerican codices with European-style spatial information and references. The canvas shows Charles V meeting with three indigenous nobles, who are presumed to be the founders of the town, and surrounding the scene is a map with place names, boundaries, and other elements of the Mesoamerican pictorial tradition.

Figure 5. The Lienzo de Petlacala as part of the petitions of rain. Photo courtesy of Samuel Villela Flores.

The Lienzo not only precedes the municipal elections and, in particular, the act of inauguration, legitimising the transfer of power to the new representative through the communal power that the lienzo confers, but also once a year this lienzo is carried to the altar at the top of Chichitepetl, just before the rainy season where it also precedes the rain petitions (Villela Flores 2018). On the one hand, the act of taking power and the walk in which the lienzo is carried demarcating the borders of the territory, seems to be linked to the possible continuation of the Mesoamerican conception of power, where there is a legitimation intimately associated with genealogical relationships. On the other hand, the lienzo also creates a hierophany by combining the presence of a mythical founder (in this case Charles V), who appears to meet the actual founders of the community, and where the act of determining the borders by walking this lienzo through the territory, creating the territorial demarcation, is also the act of summoning the sacred time of foundation; which renders the space sacred and thus also legitimises it (Jiménez Padilla and Villela Flores 1999; Villela Flores 2018).

As can be seen in this specific case, as well as that of the Graniceros, but also as de la Serna mentions at the time, despite the practice and acceptance of many of the Christian precepts, in the communities there is still the deep connection with the landscape and the sacred and primordial space and time, which in one sense or another will return through

the ritual acts we mentioned. As such, the concept of *Nepantla* can be thought of as a metaphor for survival and creation. The experience of 'being in the middle' was not limited to the direct confrontation between two worlds. It also became a creative process through which indigenous people generated new forms of knowledge and resistance. Faced with the disruption of their temporal and spiritual structures, Mesoamericans not only preserved fragments of their identity, but also forged new cultural expressions that reflected loss as well as adaptation and survival.

Today, the concept of *Nepantla* is still relevant. We must consider that we are constantly imagining and re-imagining both the end and the beginning. We need only look at modern dynamics and the new era ushered in by digital technology to realise that we constantly find ourselves in *Nepantla*. It also reminds us of how cultures confront, adapt, and transform external influences in contexts of contact and conquest. The history of Mesoamerican temporality and its transformation under Spanish rule teaches us about the resilience and adaptability of human societies in the face of fundamental changes. It also shows us that, in the case of the indigenous world, far from being an end and fulfilling what the Tlamatimines wished, "that we should not die, that we should not perish;" in *Nepantla* they found not only continuity, but forged, as they continue to forge, fluid paths to the rhythms and times that their communities build. Finally, the concept of *Nepantla* can offer a space for reflection on how we understand and contextualise the 'end of the world' in diverse cultural traditions and how these interpretations influence our perception of history and culture in the globalised present.

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Bibliography

Aguilar González, Ricardo. 2022. "El sustento de las conquistas: cuerpos y panes de Mesoamérica a la Nueva España de 1518 a 1573." In *1521–1821: nacimiento y ocaso del México colonial*, edited by Marco Antonio Landavazo Arias, 42–53. Morelia: Universidad Michoacana de San Nicolás de Hildalgo.

Alcántara Rojas, Berenice and Federico Navarrete Linares. 2011. *Los pueblos amerindios más allá del estado*. México: Universidad Nacional Autónoma de México.

Alcántara Rojas, Berenice and Federico Navarrete Linares. 2019. "'Tlalnamiquilihmiquiztzonquitzaliztli' Meditación sobre la muerte y el fin." In *Cantares mexicanos III*, edited by Guadalupe Curiel Defossé and Salvador Reyes Equiguas, 469–508 México: Universidad Nacional Autónoma de México Instituto de Investigaciones Históricas/Fideicomiso Felipe Teixidor y Monserrat Alfau de Teixidor.

Bernal García, María Elena and Angel Julián García Zambrano. 2006. "El Altepetl Colonial y Sus Antecedentes Prehispánicos: Contexto Teórico-Historiográfico." In *Territorialidad y Paisaje En El Altepetl Del Siglo XVI*, edited by Federico Fernández Christlieb and Angel Julián García Zambrano, 31–113. México: Fondo de Cultura Económica/Instituto de Geografía de la Universidad Nacional Autónoma de México.

Broda, Johanna. 1997. *Graniceros: cosmovisión y meteorología indígenas de Mesoamérica*. México: UNAM.

Díaz Alvarez, Ana. 2018. "Nombrar Las Veintenas En Los Códices. Estrategias Coloniales de Reconfiguración Gráfica Del Año Entre Los Nahuas." *Anales Del Instituto de Investigaciones Estéticas* 1 (113): 145–95. https://doi.org/10.22201/iie.18703062e.2018.113.2653

Díaz Alvarez, Ana. 2019. *El Cuerpo Del Tiempo. Códices, Cosmología y Tradiciones Cronográficas Del Centro de México*. México: Universidad Nacional Autónoma México, Instituto de Investigaciones Estéticas/Bonilla Artigas Editores.

Durán, Diego. 1995. *Historia de Las Indias de Nueva España e Islas de Tierra Firme*. 2 vols. Edited by Rosa de Lourdes Arredondo Camelo and Rubén Romero Galván. México City: Consejo Nacional para la Cultura y las Artes.

Eudave Eusebio, Itzá. 2021. "Escritura, imaginarios y colonización, los primeros trazos en la posesión del espacio y los cuerpos indígenas." *Telar* 27: 239–257. http://revistatelar.ct.unt.edu.ar/index.php/revistatelar/article/view/553/562

Fernández Christlieb, Federico, and Angel Julián García Zambrano, eds. 2006. *Territorialidad y Paisaje En El Altepetl Del Siglo XVI*. México: Fondo de Cultura Económica; Instituto de Geografía de la Universidad Nacional Autónoma de México.

Fernández, Justino. 1963. "Una aproximación a Coyolxauhqui." *Estudios de Cultura Náhuatl* 4 (August): 37–53.

González Romero, Osiris Sinuhé. 2023. "Sabiduría y Ritual de Los Hongos Sagrados En Mesoamérica." *Cultura y Droga* 28 (35): 21–49. https://doi.org/10.17151/culdr.2023.28.35.2

Graulich, Michel. 1999. *Fiestas de Los Pueblos Indígenas: Ritos Aztecas, Las Fiestas de Las Veintanas*. México City: Instituto Nacional Indígenista.

Graulich, Michel. 2000. "Más sobre la Coyolxauhqui y las mujeres desnudas de Tlatelolco." *Estudios de Cultura Náhuatl* 31 (November). https://nahuatl.historicas.unam.mx/index.php/ecn/article/view/9240

Graulich, Michel. 2016. *El sacrificio humano entre los aztecas*. México City: Fondo de Cultura Económica.

Gruzinski, Serge. 1993. *La colonización de lo imaginario: sociedades indígenas y occidentalización en el México español, siglos xvi-xviii*. Translated by Jorge Ferreiro. México: Fondo de cultura económica.

Gruzinski, Serge. 2002. *The Mestizo Mind: The Intellectual Dynamics of Colonization and Globalization*. New York: Routledge.

Jiménez Padilla, Blanca and Samuel Villela Flores. 1999. "Vigencia de La Territorialidad y Ritualidad En Algunos Códices Coloniales." *Arqueología Mexicana*, 38: 58–61.

Johansson, Patrick. 2004. "Tiempo y muerte en el mundo náhuatl prehispánico." In *El historiador frente a la historia: el tiempo en Mesoamérica*, edited by Virginia Guedea, 109–48. México: Universidad Nacional Autónoma de México.

Johansson, Patrick. 2017. "Gestación y nacimiento de Huitzilopochtli en el monte Coatépetl: consideraciones mítico-obstétricas." *Estudios de Cultura Náhuatl* 53 (January): 7–53.

Kruell Reggi, Gabriel Kenrick. 2012. "La concepción del tiempo y la historia entre los mexicas." *Estudios Mesoamericanos* 1 (12): 5–24.

León Portilla, Miguel. 2008. "VII. ¿Nuestros Dioses Han Muerto? Confrontación Entre Franciscanos y Sabios Indígenas." In *Obras de Miguel León-Portilla: Literaturas indígenas part 1 volume 2*, 11–30. Creación Literaria Náhuatl: Del Periodo Colonial a La Nueva Palabra. México: Universidad Nacional Autónoma de México: Colegio Nacional.

León Portilla, Miguel. 2013. *Visión de los vencidos: relaciones indígenas de la conquista*. Edited by Ángel María Garibay Kintana and Alberto Beltrán. 29th ed. Biblioteca del estudiante universitario no. 81. México City: Fondo de Cultura Económica.

León Portilla, Miguel, and Rosa Campos de la Rosa. 2003. *Obras de Miguel León-Portilla*. México: Universidad Nacional Autónoma de México, Colegio Nacional.

Leon-Portilla, Miguel. 1993. *La filosofia nahuatl: Estudiada en sus fuentes con un nuevo apendice*. 7th ed. Universidad Nacional Autonoma de Mexico.

López Austin, Alfredo. 1961. *La Constitución Real de México-Tenochtitlan*. México City: Universidad Nacional Autónoma de México, Instituto de Historia.

López Austin, Alfredo. 1980. *Cuerpo Humano e Ideología. Las Concepciones de Los Antiguos Nahuas*. 2 vols. México City: UNAM, Instituto de Investigaciones Antropológicas.

López Austin, Alfredo. 1990. *Los Mitos Del Tlacuache: Caminos de La Mitología Mesoamericana*. México City: Alianza Editorial Mexicana; Distribuido en forma exclusiva por Editorial Patria.

López Austin, Alfredo. 1994. *El Conejo En La Cara de La Luna: Ensayos Sobre Mitología de La Tradición Mesoamericana*. México City: Dirección General de Publicaciones del Consejo Nacional para la Cultura y las Artes, Instituto Nacional Indigenista.

López Austin, Alfredo. 2015. *Las razones del mito: la cosmovisión mesoamericana*. México City: Ediciones Era.

Lorente Fernández, David. 2009. "Graniceros, los ritualistas del rayo en México: historia y etnografía." *Cuicuilco* 16 (47): 201–23.

Mantilla Osornio, Adolfo Felipe. 2024. *Imaginando el fin de los tiempos: Poéticas y figuraciones sobre los mundos y sus extinciones*. Berlin: De Gruyter. https://www.degruyter.com/document/isbn/9783111081755/html

Matthew, Laura E. and Michel R. Oudijk, eds. 2007. *Indian Conquistadors: Indigenous Allies in the Conquest of Mesoamerica*. Norman, OK: University of Oklahoma Press.

Moctezuma, Eduardo Matos. 1991. "Las seis Coyolxauhqui: variaciones sobre un mismo tema." *Estudios de Cultura Náhuatl* 21: 15–29.

Morales Sarabia, Rosa Angélica, José Pardo Tomás, Mauricio Sánchez Menchero, eds. 2017. *De La Circulación Del Conocimiento a La Inducción de La Ignorancia: Culturas Médicas Trasatlánticas, Siglos XVI y XVII*. México City: Universidad Nacional Autónoma de México, Centro de Investigaciones Interdisciplinarias en Ciencias y Humanidades; Centro de Estudios Filosóficos, Políticos y Sociales Vicente Lombardo Toledano.

Mundy, Barbara E. 2015. *The Death of Aztec Tenochtitlan, the Life of Mexico City*. Austin, TX: University of Texas Press.

Ruiz Medrano, Ethelia. 2011. *Mexico's Indigenous Communities: Their Lands and Histories, 1500–2010*. Boulder, CO: University Press of Colorado.

Ruiz Medrano, Ethelia. 2012. *Reshaping New Spain: Government and Private Interests in the Colonial Bureaucracy, 1531–1550*. Translated by Julia Constantino and Pauline Marmasse. Boulder, CO: University Press of Colorado.

Sahagun, Bernardino de. 2012. *Florentine Codex: Book 3: The Origin of the Gods*. 2nd ed. Translated by Arthur J. O. Anderson and Charles E. Dibble. Salt Lake City, UT: University of Utah Press.

Serna, Jacinto de la. 1987. "Manual de Ministros de indios, para el conocimiento de sus idolatrías y extirpación de ellas." In *El alma encantada*, edited by Pedro Ponce and Pedro Sánchez de Aguilar, 265–480. México City: Instituto Nacional Indigenista-Fondo de Cultura Económica. https://mediateca.inah.gob.mx/repositorio/islandora/object/articulo%3A8319

Townsend, Camilla. 2019. *Fifth Sun: A New History of the Aztecs*. Oxford: Oxford University Press.

Velasco Lozano, Ana María. 2016. "Los cuerpos divinos. El amaranto: comida ritual y cotidiana." *Arqueología Mexicana*,138 (December): 26–33.

Villela Flores, Samuel. 2018. "Altares y Ritualidad Agrícola En La Montaña de Guerrero, México." *Dimensión Antropológica* 25 (72): 7–31.

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Subaltern Apocalypses and Cosmopolitics of the Peoples in the Southern Cone of America[1]

Thinking Subaltern Apocalypses Today

The main question surrounding this piece of writing is: what are we to do with a radically post-enlightened world in which the elimination of particular populations has become banal and faces absolute impunity and where rhetoric itself is being disqualified because the art of persuasion has been submitted to pure violence?

Günther Anders pointed out that the present—his present, our present?—was marked by a "Promethean breach," which he understood as "a synchronicity of the man with his world of products" (Anders 2003, 32). Human beings, he explained, "can create the hydrogen bomb, but we cannot imagine the consequences; between acting and feeling[.] Our feeling lags behind our acting: we can kill by bombing hundreds of thousands, but not cry for them, not feel sorry for them" (Ibid).[2]

How, then, do we imagine the end of times today when we do not have to imagine it because the end is entirely 'exposed' and brought into the light? How do we make-image when the image itself has been undressed, de-realized as an imitation, as *imago*? We need to think attentively about the civilizatory effects of this hyperexposal, attempting to reach another comprehension of Anders's idea of the "naked apocalypse." Since he refers to "[a] concept of apocalypse that consists of a simple end of the world that does not imply the opening of a new positive situation (the situation of a 'kingdom')" (2011, 83), which thus dissolves all language; then, we are currently dealing with an end of the world that is stripped *ex ante* of its representation, insofar as it is subtracted from all foundation and all

1 Following Raymond Williams, I am aware of the complexity of the uses that the word "peoples" has had throughout history and at different junctures, especially in the European sphere, in the disparaging use (in the physical model) as a synonym for "the low," (as in lowly) as Williams explains it: "This physical model has determined much of the vocabulary of social description; compare *standing*, *status*, *eminence*, *prominence* and the description of social *levels*, *grades*, *estates* and *degrees*. At the same time more particular terms of description of certain 'low' groups have been extended: *plebeian* from Latin *plebs; villein* and *boor* from feudal society, COMMON (q.v.) added the sense of 'lowness' to the sense of mutuality, especially in the phrase 'the common people'" (Williams 1983, 192). However, aware of this ambiguity, but following Badiou's "positive" notion, we will call "people" both those who, insofar as they destroy their own inertia, become the body of political novelty, and all those who, without

kingdom at the same time, an apocalypse that dispenses with all justification and all transcendence. What effect does this form of the end have in this generation, in contemporary *pueblos*, broadly said, when it 'happens' to them *as it* happens, for example, in Gaza, Palestine? Probably, the first and most evident effect is fear, a new, fundamental fear that equally cannot find a language.

I place this introduction here to encourage a closer examination of Latin American communities, who also belong to these contemporary peoples in the midst of this language debacle.

The Apocalyptic Device: Heteroclitic and Paradoxical

As Adolfo Mantilla points out, the Apocalypse, in its role as a "vision-image-reality device," orders a temporary system oriented by an eschatological principle, which constructs a linear time. Its major strength would be, he adds, in the articulation of crisis with catharsis through means of revelation (2024, 79). By 'crisis,' we mean a moment of definition, interregnum; 'catharsis' which refers to the ritual purification or purge in works of tragedy: the purifying and liberating effect brought on by extreme emotions. On the one hand, then, the apocalyptic *dispositif* works with the certainty granted by time oriented in this way. On the other hand, it alludes to the emergency of a critical time/space where, on the contrary, certainties are destabilized. This leads to a need for a definition. If we follow this imagination of apocalyptic time as something that will irrecusably come and that, in Christianity, since John of Patmos will do this through catharsis, it is time to purge the social body.

In this sense, I propose that the apocalypse as a representational *dispositif* contains a heteroclitic strength;[3] that is strange, diverse, and also paradoxical and torn, or syncopathic:[4] it condenses justice through the expectation of punishment of the unjust; that is, the transformation and the turning of the world after the pain; at the same time, the spectacularization of the "judgement" itself in the cruel overexposure of punishment and the establishment of a new order as the prescription of a single world, reverberates in the establishment of a restrictive space/time, equal to itself, punitive, marked in origin by vengeful catharsis. People under regimes of extreme violence, as Fabian Scheidler explains, have imagined the apocalypse as a resource to end social suffering, but, as Gilles Deleuze proposes on his side, their apocalyptic imagination has, at the same time, collapsed into prescriptions of how to imagine a world destined and

totally "detaching" themselves from this inertia, are nevertheless not really included in the *dispositif* of the "sovereign people" as constituted by the State (Badiou 2014,14–15).

2 All references to both primary and secondary foreign language texts have been freely translated by the author of this essay.

3 "For Foucault, the dispositif, as a network of relations, is not stable, but mobile and dynamic. Its components, as well as the set of relations between them, vary according to the level of efficacy attained in a given efficacy at a given juncture" (Vega 2017,139).

4 "The representation is a carrier of antagonistic or paradoxical structural effects, which could be defined as 'syncopations' at the level of its semiotic functioning, or symptomatic 'tears' in a more metaphysical and anthropologic level" (Didi-Huberman 2014, 74).

permanent: the kingdom of universal justice. Commenting on D. H. Lawrence's book *Apocalypse*, Deleuze joins the Englishman in his criticism of the Christian device inaugurated by John of Patmos, highlighting this work as a complex revenge of the weak, through the figure of the Sheep that, before becoming a sacrificer, was sacrificed:

> What the Apocalypse [by D.H. Lawrence] wields is the revindication of the "poor" or "weak" because they are not what they seem; they are not humble or miserable, but rather more than fearsome people that do not have a soul other than the collective one. Amongst the most beautiful pages by Lawrence, we find those of the Sheep: John of Patmos announces the Lion of Judah, but a sheep is what arrives, a horned sheep that roars like a lion, that has become singularly astute, all the more cruel and fearsome because it is presented as a sacrificed victim, and not as a sacrificer or executioner (Deleuze 1996, 61–62).

Here, the popular forces have been conquered by this "carnivorous sheep, the sheep that bites, and that shouts 'help, what have I done to you? It was for your own good and for our common cause'" (1996, 62). Here, Deleuze is interested in relieving the system of Judgement in John's writing, as the invention of a new image of power, based on a "[w]ill to destroy, a will to introduce oneself in every corner, the will of being the last word forever and ever" (1996, 63). This is a circular system, that uses, as its arm, its own subdued majorities, which in turn become instruments in the production of new victims. For the French author "[t]he Apocalypse has won, we have never managed to exit the system of judgement" (Deleuze 1996, 65). Following this direction, alongside Deleuze, we should ask ourselves how to exit the system of trial that is implied in the apocalyptic device. At the same time, how will it be possible to replace a heteroclitic apocalyptic imagination, that is, a language that shapes and that dares to imagine a kingdom.

The Extended Post-Apocalypse of the Peoples of Latin American

Latin Americans, who have been submitted to physical, cultural, and material apocalyptic punishment (cathartic, purifying) are victims of radical forms of violence that have destroyed their worlds entirely. As a result, they find themselves forever exposed to acts of disappearing, threatened even in their representation—as Georges Didi-Huberman has elaborated

on. The peoples of Abya Yala, thus, find themselves in the trance of permanently (re)constructing their worlds in an extended post-apocalyptic situation. They are situated after the disaster which, however, works at the same time as an eschatological interregnum in the threat of the new disaster.[5] It is an interregnum in which, as Antonio Gramsci warned, all kinds of morbid phenomena emerge;[6] because everything is open, illuminated (ready for 'vision' and visionary imagination), in crisis, and it is tense, that is, appearing in lacerating irritation with the premises that have supported it.

I propose that the peoples of Abya Yala[7] elaborate their present and future, transferred by the forces of this image-vision-reality or apocalyptic device, which is heteroclitic and paradoxical. Maintaining the memory of having been victims of the destruction of their worlds and, at the same time, having submitted to the material reproduction of fear in the daily experience of threat to their existence and representation; the peoples of Abya Yala produce this same social suffering as a source of new figurations of the end of times in fictions. This includes those fictions about transformation that enrich their images in the paradoxical Apocalypse-*dispositif*.

Therefore, understanding the relationships that Latin American peoples have with the apocalypse demands assuming two methodological premises: firstly, one must comprehend that most peoples placed in this Abya Yala territory inhabit the post-apocalypse, which means the apocalypse, according to them, has already taken place. Their ancestors are either those who survived the mass kidnapping that displaced millions of people from Africa and then enslaved them throughout all of the Americas, from Canada to Biobío or those survivors of the Hispanic-Lusitanian Conquest, which, we know (do we know it well enough though?) brought with it various ailments. They are also survivors of the 'Second Conquest' that extinguished, yet again, thousands of people and whole communities during the nineteenth century and throughout the entire Southern Cone and beyond. Some of them are also children and grandchildren of survivors of the uncountable types of criminal extractivism that enslaved and mutilated entire populations: in the rubber tree plantation of the Amazon; or in the massacres that were developed by states and businessmen in Bahian Sertão, Patagonia, and Tierra del Fuego amongst many others. They are also survivors of the civic-military dictatorships in the Southern Cone, which disappeared, murdered, and tortured a whole subcontinent, submitting thousands of people to systematic fear. This transnational organization of death was named after an imposing Andean bird: Cóndor, which was wholly desired, and its state terrorism regimes projected, in

5 'Disaster,' I recall, comes from *dis* and *astro* (star). It refers to a stellar cataclysm; in ancient cultures it is always connected to the announcement of calamities. It is, therefore, always an omen or prophecy; it is always, to a certain degree, threatening to be a closing of time.

6 "Se la classe dominante ha perduto il consenso, cioè non è più" dirigente ", ma unicamente" dominante ", detentrice della pura forza coercitiva, ciò appunto significa che le grandi masse si sono staccate dalle ideologie tradizionali, non credono più a ciò in cui prima credevano ecc. La crisi consiste appunto nel fatto che il vecchio muore e il nuovo non può nascere: in questo interregno si verificano i fenomeni morbosi più svariati." (Gramsci 1977, 311).

7 When I say the peoples of Abya Yala, I mean the subjects adjourned economically, socially, culturally, sexually; those who usually inhabit the peripheries of our cities or the fields, and whose genealogy was submitted to the radical violence of diverse genocides.

time and space, a system of injustice, despise, and structural violence that had also been a result of the former genocides, and that still oppresses the same peoples to this very day. Seen through this lens, the apocalypse has already taken place for our peoples. And it did not stop. It happened again and again and again as a kind of monstrous repetition.

My work arises mainly from the question of how to 'make visible' an imagination in the process of transformation of/by these peoples, who are in revolt against the status quo of neo-colonial culture, liberal democracy, and hyper-capitalism in the Southern Cone? How not to fail to *see*, to show, to assume, that we are talking about experiences of an extended post-apocalypse, which has become a space/time of unresolved anxiety, where insecurity, threat, fear, and violence prevail, but in the framework of which said peoples continue to search for and to investigate possibilities of survival through the construction of fictions and images that resist this destruction. How can we do justice to the many revelations proposed by these peoples?

And yet more importantly: Why is it so important to do justice to these revelations? Why should we bring to the fore the works of fiction of the post-apocalyptic margins, of the confines of territories? What do they reveal to us other than the repetition, as Derrida said, of the system of judgement? In his enquiry into the forms of the imaginal disappearance of peoples, Georges Didi-Huberman has emphasized that an emancipatory thought must dedicate itself to 'making sensitive' the passage of peoples by 'making visible,' he points out, "the failures, the places [...] through which, declaring themselves as 'impotence,' particular peoples affirm both what they lack and what they desire" (2014, 90). Showing, then, not only the certainties of the peoples of Abya Yala (their judgements as fictions of punishment) but also engaging with their contradictions, shortcomings, openings, and failures in meta-apocalyptic fictions that allow them to observe from the outside their destined place in the system of judgement, and, in turn, to destabilize it, is paramount.

It is also of fundamental interest to understand how these peoples produce such radical worlds, which the one-dimensional culture of hyper-capitalism and its institutions cannot even grasp. There is no place in the present capitalist imaginary but reduce people to mere residual effects of the functioning of the market, cannot comprehend a post-apocalyptic population who has been resisting and making worlds despite having been condemned to the ghetto, to a mere electoral force, a reserve army, or territories of residue. Because the peoples of Abya Yala are held in a state of constant threat, they emerge radically plural in the face of the homogenizing fantasy of a world and in defense of their many own worlds.

Fictions of the Apocalypse: Recomposing the Cosmopolitical Relationship from the Margin

Marginalized peoples are surrounded by ghosts. Such ghosts bear the sign of those that Fisher (2014) spoke of: those that come from a future that we have never realized, transmuted into ghosts of the past, destroyed promises that appear together with the phantasmagoria of a future that has ceased to be a promise. They become, as has been made clear by the recently elected president of Argentina, pawns in a game of Russian roulette that only the brave play. How, then, does one live time when one lives in this doubly threatened reality? People make-life, make-world *in* and *from* this reality. They do so post-apocalyptically, and they cosmopolitically construct forms of worlds and relationships that have allowed them to continue existing and creating. This is demonstrated by some contemporary Argentinean and Chilean fictions, which are sure to be revisited today by mystagogic political scientists in an attempt to 'decipher' the mystery of those peoples who, at best, have tried to 'integrate,' but whose language they are far from being able to *hear* and understand.

Many peoples construct cosmoses,[8] they make alternate worlds out of those social spaces considered ghettos by metropolitan societies (also in the South). This is fictionalised in Juan Diego Incardona's novel *El campito* (2009), which dislocates the traditional suburban territorial unit of greater Buenos Aires[9] that Borges developed to some extent in the notion of *orillas* (shores). In the novel the territory is transformed into a series of phantasmatic worlds, almost planets, Peronist neighbourhoods, whose inhabitants, activists who had escaped the 1955 *coup d'état* and Peronist fighters of the following decades (Pariente 2019, 332), have been adapting to sustain themselves as communities in post-apocalyptic resistance to the constant threat to their existence. The adaptation has been corporal, environmental, moral, aesthetic. Thus, with their own norms and diverse species of beings, human and semi-human, of singular, mutant natures, the inhabitants of the Peronist 'neighborhoods' behind the city limits have resisted the threat unleashed against them by the 'oligarchy' from beyond the Campito, embodied in the form of monstrous aggressive agents, military and biological interventions, the harassment of spy satellites and the panoptic organization with iron systems of control, circulation, and access.

The novel does not concentrate on the multimodal violence exercised by this elusive power of the oligarchy, which represents, for everyone, an almost omnipresent threat, but, which puts pressure, above all else, on the worlds constructed on the shores and between the roads of the Campito. As Eliana Pariente has pointed out, this space "is not posed in terms of

8 As Israel Rodríguez-Giralt, David Rojas and Ignacio Farías explain, for Isabelle Stengers and Bruno Latour, "[t]he particle 'cosmo' refers to the specific need to include a concern that refers to the different, to multiple and divergent worlds, populated by tensions and articulations" (Rodríguez-Giralt et. al. 2014, 7).

9 This corresponds to the Southern cities of the urban agglomeration of Buenos Aires, that surrounds the capital and possesses the highest population density of the entire country.

the real-imaginary dichotomy, but rather as a cadastral one—secret/hidden" (2019, 332). Indeed, the village worlds that make up the space/time of Campito function as a secret, as veiled forms of life, and as clandestine cosmoses. The work thus proposes "an intuitive, consensual and communal geography" (2019, 334) that inverts notions of heroism: "'If the upper or middle classes—the dwarves said—were to get into this infected mud, they would not survive more than half an hour [...] [.] Only we, who were made of their mud, their water, their filth, could love this land'" (Incardona 2009, 125). The dynamic not only repositions the actors of the 'Judgement,' but also unifies people around a communal narrative: It is the very act of oral narration illuminating a subject who has crossed the ages, sustaining his wandering between the shores of the Campito as a principle of freedom, and maintaining his humanity which was also somehow 'donated' by the interaction with these fantastic beings. They receive him in each of the Peronist neighborhoods and bring out precisely the cosmopolitical power that sustains these marginalized peoples, who, even when subjected to permanent war, which Isabelle Stengers has called "the perpetual state of war that makes capitalism reign" (2017, 18), assume a Dantesque 'vision' of existence in this work by Incardona. As such, they construct this Campito, as a space 'between' roads, between peoples, as a strategic erasure that is articulated here as a cosmos, as a sensitive place/time that enables the shelter of the bodies of the harassed (Peronists) and their heterogeneous existence. They emerge, therefore, as a post-apocalyptic cosmopolitical power that is capable of refusing the repetition of punishment and Judgement through forms of solidarity among different beings.[10]

In "Desaparición de la población Santo Tomás, La Pintana" [Disappearance of the Santo Tomás suburb, La Pintana], a poem belonging to the volume *Compro fierro* [I Buy Iron] (2007) by Juan Carreño, the speaker shares the apocalyptic experience of the marginal neighborhood:

> Conocí a la Chica días antes
> del fin del mundo.
> Cristo había llegado hace tiempo
> y vivía en la Santo Tomás.
> Por esos días la gente andaba en la magia
> aplaudiéndose la cabeza.
> Éramos pura bulla.
> Vimos los supermercados transformarse en perreras
> y los carros de sopaipillas
> en palomares.
> Sólo alcanzaba para quedarnos escuchando árboles.

10 "Under a non-specific and subjective denomination, diluting its borders and disguising its own geographical extension, the Campito does not cease to want to demarcate an outside and an inside of both spatial and temporal weight" (Pariente 2019, 333).

Por esos días ya estábamos todos tan
solos
que ni nos dimos cuenta
cuando de un sablazo
el cielo
se nos rajó (8).

I met the Girl days before
the end of the world.
Christ had arrived a long time ago
and lived in the Santo Tomás slum.
In those days people went about in magic
clapping their heads.
We were pure hullabaloo.
We saw the supermarkets turn into kennels
and the sopaipillas carts
into pigeon lofts.
It was just enough to listen to the trees.
In those days we were all so
alone
that we didn't even notice
when all at the stroke
the sky
has cracked on us (8).

The speaker from the Chilean suburb warns us: the apocalypse has already happened, the prophecy is fulfilled, and the sky has fallen. The apocalypse had come, but then another one came, which slashed the sky over the inhabitants of the neighborhood. We don't know what happened to them, but it could be, as in Juan Carreño's first novel *Budnik* (2018), that the post-apocalyptic condition is appropriated in unpredictable ways by the inhabitants of the margin. For example, in the novel, the main character, who is a child, decides to escape from the violent environment of his home to live in an uninhabited place inside a cement pipe—one of those regularly used for sewage: "I went to live in a Budnik cement pipe behind or in front of the Antumapu plantations. I lived alone and drew what I wanted. I was totally free. And I lived on rubbish," (17) on what people threw away.

These are the lives of the people that the enlightened society—as the Argentinean writer and filmmaker, the '*poeta villero*' César González, has exposed—has not even begun to know, let alone try to understand,

its tragic character of post-apocalyptic peoples,[11] survivors, in the sense proposed by Aby Warburg, considered as survival, insofar as, as Didi-Huberman explains, "Survival, then, opens history […] survival makes history more complex: it frees a kind of 'margin of indeterminacy' in the historical correlation of phenomena" (2009, 76), where the surviving pathos (Warburg's *Pathosformeln*) consists of those "Motions, emotions 'fixed as if by an enchantment' (Didi-Huberman 2009, 183). Forms that are always staged, from bodies that, in the face of threat, "then become untamed, lying between cancellation and presence, state of siege and resistance, prostration and refusal." (Festa 2023, par. 35)

Therefore, the villages portrayed in films such as *Diagnóstico esperanza* (2013), *¿Qué puede un cuerpo?* (2014), *Lluvia de jaulas* (2019), and most of César González's filmography more broadly, show a communicative vocation that uses *pathos* to overcome the stigmatizing barriers that have been placed on the villages of the margin as ravaged by the death impulse. On the contrary, despite the fact that for some time now "the sky has been torn," as Carreño's poem put it, the people, say the villagers actors/authors in González's films, do not stop searching and continue to be animated by the impulses of life, searching for pleasure and happiness, even in the midst of the crudest violence, and constructing alternative worlds which, although constantly threatened by the system of judgement (embodied here in the form of permanent punishment of the social and individual body through the prison and police systems), are also permanently escaping from it in the form of solidarity and encounter in friendly enjoyment.

As I have said previously, the peoples of Abya Yala, subjected to apocalyptic experience, have constructed a relationship with the apocalyptic image-device that is heteroclite and diverse. As such, they use said device to understand themselves in this extended post-apocalypse that is an after the end of the worlds, in a context in which their own integration into the 'world' is a question, a pain, and also a mystical search. In his testimonial fiction *El niño resentido* (2023), César González deploys these "mystical rochos [drunks]," in the streets of the city in a cathartic performance:

> Dueños de todo en medio de la nada. Autores y espectadores de la misma tragedia. Socios en la caída, pero en una caída entre perla, zafiros y dorados trofeos de guerra. Queríamos saborear los límites más dulces del abismo, aunque eso implicara morir pronto. […] Los ojos de nuestros amigos muertos nos miraban a toda hora […]. Todo era efímero y perpetuo (2023, 154–155).[12]

11 Amongst his essay *El Fetichismo de la marginalidad* (2021); his filmography: *Al borde* (2023) and his fictionalized autobiography: *El niño resentido* (2023).

12 "Owners of everything in the middle of nothing. Authors and spectators of the same tragedy. Partners in the fall, but in a fall between pearl, sapphires and golden war trophies. We wanted to taste the sweetest limits of the abyss, although this would mean dying soon. […] The eyes of our dead friends stared at us at every hour. […] Everything was ephemerous and perpetual."

Recomposing the future would imply discussing the very notions of apocalypse as it has been read teleologically; as developed by the Italian anthropologist Ernesto De Martino, for whom, as Natalia Castro Picón has pointed out, peoples have constructed another type of apocalyptic cultural experience, which allows them to make anticipation an incentive for current action, a call that "commands 'to begin', to bear witness, to be there, to wait in preparation and to participate by working" (De Martino in Castro Picón 2022, 57). Therefore, from De Martino's point of view and in the orbit of Walter Benjamin, the biggest problem for us today would be

> the interruption of the intersubjective links that make it possible to order the world in common. This impossibility of culturally experiencing the world is what obstructs the crisis-reintegration dialectic that condemns the West to an apocalypse without an eschaton, incapable of transcending beyond its crisis, prevented in the face of its own exhaustion (Castro Picón 2022, 57).

Overcoming capitalist realism, that is, "the catastrophic impasse of a society from which all future was drained, and from whose possibilities the majority were excluded" (Viveiros de Castro and Danowski 2019, 81). would then involve recognising the future that peoples have been building also as an alternation of their own time, conjugated in the cosmological space of all possibilities, as a conjura tiempera [*timekeeper conjuring*] (temporo-ambiental), that is, as a material, sensual, and imaginal weft and call.

This implies recovering the apocalyptic imagination as a creative thought that, in its imaginative radicality, can think of new futures and provide a cosmopolitical link that gathers the power that peoples have been developing in their resistance during this extended post-apocalypse. Similarly, the peoples who, in Federico Cuatlacuatl's[13] ongoing series of short experimental films and photos *Tiemperos del Antropoceno* [Timekeepers of the Anthropocene] (2021), announce themselves as the "anthropological invaders of our own invaded history," reveal to us their post-apocalyptic character while traveling through time and space, inhabiting a "dimension between existence," and going to the past in the future, to their *Teopansingo*, to recover their histories, to return and be able to subsist. This is not about attempting to conjure disaster but about returning to life *despite* the disaster's long journey. Assumed to be beings of another atmosphere: 'illegal aliens,' 'cultural nomads,' 'smugglers, smuggled, smuggling,' 'pilgrims of time and space,' 'navigators of uncertainty,' 'aliens,' these people inhabit this interregnum—this latency of another civilization.

13 https://www.cuatlacuatl.com/

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Bibliography

Al borde. 2023. Dir. César González. Futurock. https://www.youtube.com/watch?v=cOvADswfaJw

Anders, Günther. 2003. *Más allá de los límites de la conciencia. Correspondencia entre el piloto de Hiroshima Claude Eatherly y Günther Anders.* Buenos Aires: Editorial Paidós.

Anders, Günther. 2011. *La obsolescencia del hombre* (*Volumen I*). *Sobre el alma en la época de la segunda revolución industrial.* Translated by Jüsep Monter Pérez. Valencia: Editorial Pre-Textos.

Badiou, Alain. 2014. "Veinticuatro notas sobre los usos de la palabra 'pueblo'". In VV.AA. *¿Qué es un pueblo?*, 9–18. Translated by Cecilia González and Fermín Rodríguez. Buenos Aires: Eterna cadencia.

Carreño, Juan. 2007. *Compro fierro.* Monte Patria: Lagartija ediciones.

Carreño, Juan. 2018. *Budnik*. Santiago: Los Perros Románticos.

Castro Picón, Natalia. 2022. "Apocalipsis cultural y realismo capitalista, el debate en torno al fin del/un mundo." *Pensamiento al margen* 15: 51–61.

De Martino, Ernesto. 2019. *La fine del mondo*. Torino: Giulio Einaudi Editore.

González, César. 2023. *El niño resentido.* Buenos Aires: Reservoir Books.

González, César. 2021. *El niño resentido.* Lomas de Zamora: Sudestada.

Deleuze, Gilles. 1996. "6. Nietzsche y San Pablo, Lawrence y Juan de Patmos." In *Crítica y clínica*, 58–84. Translated by Thomas Kauf. Barcelona: Anagrama.

Diagnóstico esperanza. 2013. Dir. César González. Todo Piola producciones. https://www.youtube.com/watch?v=3XTlr34YtFQ

Didi-Huberman, Georges. 2014. "Volver sensible / hacer sensible". In VV.AA.. *¿Qué es un pueblo?*, 69–99. Translated by Cecilia González and Fermín Rodríguez. Buenos Aires: Eterna cadencia.

Didi-Huberman, Georges. 2009. *La imagen superviviente. Historia del arte y tiempo de los fantasmas según Aby Warburg.* Translated by Juan Calatrava. Madrid: Abada Editores.

Festa, Giovanni. 2023. "Metáforas de la exclusión, vidas marginales y cuerpos indóciles en el cine. Sepúlveda, González, Carreño." *Reflexiones Marginales*, 73 (73). https://reflexionesmarginales.com/blog/2023/01/27/metaforas-de-la-exclusion-vidas-marginales-y-cuerpos-indociles-en-el-cine-sepulveda-gonzalez-carreno/

Fisher, Mark. 2014. *Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures*. Zero.

Foucault, Michel. 1991. “El juego de Michel Foucault.” In *Saber y verdad*, 127–162. Translated by Julia Varela y Fernando Álvarez-Uría. Madrid: Ediciones La Piqueta.

Gramsci, Antonio. 1977. *Quaderni del carcere. Volume primo.* Torino: Giulio Einaudi, editore.

Incardona, Juan Diego. 2018. *El campito.* Buenos Aires: Interzona.

Lluvia de jaulas. 2019. Dir. César González. Todo Piola producciones. https://www.youtube.com/watch?v=A2-L88flk7A&t=1195s

Mantilla Osornio, Adolfo Felipe. 2024. *Imaginando el fin de los tiempos. Poéticas y figuraciones sobre los mundos y sus extinciones.* Berlin: De Gruyter. https://doi.org/10.1515/9783111081755

Pariente, Eliana. 2019. “Mapeo de las identidades postcrisis: el peronismo como organizador teritorial desde la novela El campito, de Juan Diego Incardona.” *deSignis* 31: 329–337. http://dx.doi.org/10.35659/designis.i31p329-337

¿Qué puede un cuerpo? 2014. Dir. César González. Todo Piola producciones. https://www.youtube.com/watch?v=FssHmff12lI

Rodríguez-Giralt, Israel, David Rojas and Ignacio Farías. 2014. “Cosmopolíticas.” *REVISTA PLÉYADE* 14: 1–15.

Scheidler, Fabian. 2020. *The End of the Megamachine: A Brief History of a Failing Civilization.* Zero Books.

Stengers, Isabelle. 2017. *En tiempos de catástrofes. Cómo resistir la barbarie que viene.* Translated by Víctor Goldstein. Barcelona: Futuro Anterior Ediciones.

Tiemperos del Antropoceno: Tolchikaualistli. 2020. Dir. Federico Cuatlacuatl. México.

Vega, Guillermo A. 2017. “El concepto de dispositivo en M. Foucault. Su relación con la ‘microfísica’ y el tratamiento de la multiplicidad.” *Nuevo Itinerario. Revista digital de Filosofía* 12: 136–158. https://doi.org/10.30972/nvt.0122038

Viveiros de Castro, Eduardo and Déborah Danowski. 2019. *¿Hay un mundo por venir? Ensayo sobre Los miedos y los fines.* Buenos Aires: Caja Negra.

Williams, Raymond. 1983. “Masses”. In *Keywords: A Vocabulary of Culture and* Society, 192–197. New York: Oxford University Press.

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Emily Ray

Minding the Gap Between Worlds: Extinction, Climate Change, and Doomsday Prepping

The prospect of extinction driven by climate change often leads people to try and forestall the end of their world through doomsday prepping. I draw from Mantilla's work on intersubjectivity and extinction alongside the institutional: What happens when the drive to extinguish all life on the planet meets our drive to survive any conditions on this planet? I engage institutional analysis alongside scholars of nuclear subjectivities to better understand the confounding condition of living in a neoliberal order that requires suffering and death to maximize its efficiency. This work discusses doomsday prepping in a world radiating with nuclear energy. I define prepping as more than a set of habits or behaviors but as a political institution, including the relationships between prepping and facing the prospects of our own extinction as people living in a postnuclear world.

Prepping is seemingly simple to define: It is merely preparing for anticipated disruptions to the flow of everyday life. In this sense, prepping is a normal activity of well-regulated adults who anticipate some variation in the predictable flow of social and environmental stasis for which having a surplus of life's necessities would be useful, even if the specific disrupting event is not yet known. Prepping also denotes stockpiling supplies for weeks, months, or years of living in isolation apart from other people and in a world that is so severely ruptured there is no guarantee of a stable state, society, or economy. Prepping is as a manifestation of consumer society that, against the backdrop of skepticism of the state to provide meaningful social support, and its attendant anxiety about disintegrating social life, compels individuals to accumulate, hoard, and stockpile con-

sumer goods in such quantities and in such places as to 'ride out' events that disrupt, destroy, or derail the status quo of their everyday lives.

What does it mean for humanity to live between the world as we know it and the world that is unwinding in the age of climate change and extinction? What does it mean to live on the edge of a crisis unfolded? How do we live 'where the veil is thin' between two worlds? The veil partitions the material world from the spiritual, or the living from the dead. I think about the veil as a partition between the world we live in and the postapocalyptic one we cross into. In some traditions, the veil is thinner at certain times of the year during seasonal cycles, when contact between worlds is easier. The movement between words is reminiscent of literature addressing the world before and after the advent of nuclear technology. Gabriele Schwab moves between past, present, and future in a nuclear world, or what she terms the postnuclear world as one that is still marked by the "necropolitical violence" of the atomic age but is no longer part of the Cold War period (Schwab 2020). Living in the postnuclear world in a postnuclear subjectivity means living with a time-shifting spectral presence. Nuclear residue in everything that comes from the past is part of our present and will outlive us, making radioactivity an "undead materiality" and a "haunting from the future" (Schwab 2020, 45). The thinned veil is permeable between the living and dead worlds, the worlds of the present and the future, such that it is impossible to imagine living where the veil is thick, where we have more space between existence and non-existence. Perhaps being nuclear subjects means we will become those who haunt instead of those who are haunted. Schwab issues a warning about the double-bind of imagining extinction:

> [T]he refusal to imagine extinction would amount to buying in to the politics and epistemology of denial and (self-)deception; succumbing to the apocalyptic imaginary, on the other hand, would amount to buying in to the ecology of fear and annihilation that enables nuclear necropolitics in the first place. The challenge therefore consists in imagining extinction while at the same time avoiding the secondary gratifications of sensationalizing apocalypticism (48).

This quote confounds our typical orientation towards apocalyptic conditions associated with climate change. Climate change is often approached as if it will eventually unfurl into its final form. Waiting for its arrival, even if it is already here, leaves humanity to live a ghostly or spectral existence between worlds. Are extinction and climate change denialism a way to reassert ourselves in a world that is impermanent? Prepping for end times

is a way to establish life on one side of the crisis even as we anticipate living on the other side of it, as though we will pass through the space between worlds. We keep waiting for climate change to become Climate Change, for extinction to become Extinction. Prepping serves as an attempt by some members of humanity to anchor themselves to the world as it is in order to survive the passage into the post-apocalyptic world. But what if world-ending is not an event but a process, and a process that loops rather than concludes decisively?

Sabu Kohso writes about the horror of nuclear technology unleashed in commercial and military uses and the ways in which this creates new apocalyptic formations. He argues that one way Fukushima alters our perspective of world ending and world beginning is by seeing a world ending crisis folded back into the world as it is:

> If the Fukushima event itself is interpreted as an eschatological sign, it does not seem to indicate the immediate end/rebirth of the world[…][.] Fukushima materializes the inaccessibility of a singular moment of end/rebirth, as the catastrophe of this event is absorbed into an endless process of radioactive contamination and its management […] [.] Here apocalypse is perceived as an unending process toward the predetermined future (or return) of a radioactive planet (Kohso 2020, 8).

These apocalyptic moments, like the Fukushima disaster, are not the final rupture with reality and the official transition into the end of the world. Each event that irradiates, pollutes, and makes the world harder to live in challenges the perception that we are all atomised individuals waiting for the end/new world but instead we become a "new crowd," in Kohso's words, living in the same world that is even harder to manage. Instead of looking for opportunities to secure our individual survival; to avoid the suffering and challenges of living in the world as it is, he embraces life as a struggle, a way to continue living on without anticipating the final break. We live with the world as part of our actions rather than looking for the better world coming out of the rupture.

Some consider extinction and climate change to be hyperobjects, Timothy Morton's term for an object that exists across so many scales and temporal dimensions it defies containment and overawes us. Climate change manifests as a storm or drought, but we cannot put our minds, hands, or solutions around climate change as such. An interesting challenge to the hyperpobject is the masterless object:

> Once [radionucleotides are] unleashed these become an anticommodity, or (*mushubutsu,* masterless object), in the term circulated in post-Fukushima Japan [...] [.] To survive, the capitalist economy must create a mechanism to commodify the masterless object. In an alternate view, however, it would be more accurate to say that by creating the endless necessity of aftercare, nuclear industry guarantees capitalism its zombie life of permanent stop-gap operation (Kohso 2020, 88).

The masterless object is related to Kosho's later description of the global nuclear regime as driven by power contestations within it rather than acting as if it were attached to particular global actors, or that it had a body and a conscious experience itself. The masterless object was used as a defense by the Tokyo energy company, TEPCO, responsible for the Fukushima disaster, by claiming that the radioactivity unleashed by the accident was out of their control. Radionucleotides simply merged with ecosystems and became unmanageable, no longer ownable. Yet capitalism drives these same companies to find ways to profit from the escape of masterless objects. "As the concept of masterless object, uttered by TEPCO for self-exemption, revealed unwittingly, radiation is less an object than a mode of existence or event, wherein split atoms of uranium are merging with the environment in nano dimension, following the complexity of planetary flows" (Kohso 2020, 110). The hyperobject, on the other hand, may defy containment as a single object and instead function as a category that contains objects into which it manifests. I contend hyperobjects are not really objects but rather processes that have manifestations through objects in the world. The masterless object provides a way to see what are often termed hyperobjects, instead, as processes that permeate the whole of living, that are part of the Earth itself and the way we live in it. These processes defy ownership and mechanisms of control, yet they still manage to prompt capitalist responses through profit-seeking containment and adaptation commodities. The masterless object confronts us, with our commitments to rational planning, containment, and control, with objects that simply do not comply. Even a post-apocalyptic world would be irradiated with the reactor water from Fukushima.

Kosho concludes by recommending nothing short of doomsday prepping:

> In a strict sense, we can do nothing if the end of the World/Earth comes as a singular event. As long as we are not transcendent and can do nothing about such an occasion, the End is not our problem. We will have to live on by nurturing and sharing techniques for survival in local

> purgatories, in order to turn them into microparadises. We are neither ruler nor savior of the planet. We are just trying to live in a way comfortable for us and to die in a way suitable for us, with a mobility with which we can live where we want to live. We want to achieve a future that is undetermined, a future that we can create (165).

American-style prepping is bound up with a leftist project of liberating world history from the fatalism of capitalism, from the apocalyptic fate that we are all bound to as nuclear subjects. The better future is one that is open and under our care, but this is only possible to achieve by preparing to survive the world as it currently manifests. Prepping fits into this formulation. Life as struggle may entail preparing to live in a life that requires great effort to survive. Japan has experienced what the US prepped against experiencing in the Cold War: The radioactivity of everyday life after an event that becomes part of a world-changing process but not a sudden world-ending event. Fukushima upended the distinction between the good world and the polluted condemned world, making it even more difficult to distinguish between the apocalyptic and post-apocalyptic:

> Here things were inverted. Adjectives like green, natural, or organic that figure motherly resources could no longer embrace us with their good intentions, but internalized the invisible threat of radiation. On the other hand, artificial constructions and foods—cold, ugly, distasteful, and unhealthy as they could be—came to give us the minimum sense of security (Kohso 2020, 29).

This loss of a sense of security can be recaptured through the institution of prepping, and, as such, find a way to assert control and certainty where both seem sucked into a vacuum of world-ending technologies and their attendant politics.

Prepping is part of the embrace of the artificial with life support systems that mechanically mimic the biosystems upon which life on Earth depends. Bunkers have filtration systems, pumps, inflows and outflows, stockpiled shelf-stable goods that are anything but fresh, green, and perishable. Prepping requires taking on the qualities of a fully managed life as a defense against precarity and chance. Amongst the neoliberal and committed to rugged individualism of the US, preparing and bunkering is meant to be exclusive to family units and made available through the marketplace of survival. Capitalism continues to fold disaster and catastrophe into the next iteration of consumer society. Rather than facing a crisis of

existence, capitalism creates markets to tend to the after-affects of nuclear disaster. Capitalism forces us to continue living between worlds, the one that is always decomposing and the one that comes next, but it continues dragging us along in the political, economic, and social infrastructure of the world that produces the crises we understand as apocalyptic. We live in an in-between world as members of a species that is undergoing an extinction crisis; between a world that is favorable to human life and a world that is no longer. We are not fully spectral or ghostly, but living in a liminal space of climate change has ghostly aspects. The liminal space is one that assumes climate change has yet to touchdown, it is sending out warnings through storms and changing ocean currents, but we do not think that it is here. Climate change as always projected into the future from the Western perspective likewise entraps us in a liminal space.

Schwab talks about this space between worlds discussing the "as if" in *Radioactive Ghosts* in the "psychic splitting" between the reality of living in the plutonium economy and living as if there is a world that is not yet radioactive, and we can still live in that one. This splitting allows us to not just deny climate change or extinction events as having already arrived, but it allows us to deny the nuclear world as one that is complete; there is no daylight between the world we live in and the one that is glowing with radioactivity. "[B]y confronting human beings with the possibility that they might become the agents of the ultimate death of planetary life, nuclear politics transforms the human species itself. As the only species that arrogates nuclear power, human beings are turned into nuclear subjects" (Schwab 2020, 21). The species-power the human holds allows for us to not just bring the death of individuals of our species but of other species, too. Schwab argues the advent of nuclear power is also the advent of the power to cause extinction (Schwab 2020, 27).

Prepping is not irrational; it is a rational response to an irrational world. The intellectual commitments of the Enlightenment period, as the Frankfurt critical theorists have told us, have put us in the position of rationally managing nuclear atoms and its distribution across species and ecosystems. This is an irrational project but one we undertake, even though radiation as a masterless object will continue rejecting comprehensive management. Prepping is not just a set of behaviors in the matrix of subconscious and conscious existence, prepping as a socio-political institution is a coping mechanism that adapts for all kinds of subjectivities in the new extincting world. One of the ways in which people prepare to survive annihilation or extinction is to bunker down and ride out conditions as they consume everyone else. In the US, the bunker is usually an underground domicile for personal use, not public, and buried in a backyard or

property away from the family home. Yet the bunker is not required for the acts of bunkering; The bunker is one material manifestation of what it means to bunker as a way of life.

The bunker itself promotes imaginary doomsday scenarios and acting out preparation in anticipation of some post-disaster world that is radically changed. "The bunker fantasy promises shelter from the apocalyptic forces of nuclear war. But it also affords an opportunity to reorganize the world as it *could be* rather than as it is: the act of sheltering requires stripping one's life down to the bare essentials to rebuild from scratch and it provides a space for reckoning with everyone and everything sacrificed or left outside the bunker" (Pike 2019, 16). In Virilio's tour of the Atlantic Wall, he described being inside one of the abandoned bunkers as "being in the grips of that cadaveric rigidity from which the shelter was designed to protect him" (Virilio 1994, 16). The modern doomsday shelter, as it developed out of the fortress, must attend to the changes in weaponry and threat. "Today the technological conjunction of the vehicle and the projectile concentrates both movements of reduction: with the supersonic jet with a nuclear payload, for example, the whole planet becomes 'a defensive redoubt' [.] […] The conquest of the earth thus appears above all the conquest of energy's violence" (Virilio 1994, 20). The superpowers of the mid-century urgently engaged the race to conquer energy's violence while taking the need to fortify their populations in anticipation of the use of such harnessed violence seriously. The bunker as a refuge for those who wish to repopulate a stripped Earth fits alongside existing millenarian beliefs about nuclear war as apocalyptic. The world that seems to be always coming to an end is a world in turmoil. Climate change is both unavoidable and underway. Far-right leaders continue to gain footholds across the globe, and the American empire is waning. The context in which people prepare for violence, instability, and disaster is severely hemmed in by neoliberalization, the preeminence of capitalism, democracy skepticism, and the legacies and current activities of colonialism, and racial, class, and gender hierarchies. In this environment, rational irrationality is an expected approach to making a life. Focusing on the self as a survivalist makes it difficult to imagine confronting and surviving collectively experienced harms together and to account for others across the differentiated impacts they may experience.

Preppers often account for 'the end of the world as we know it' (TEOTWAWKI). "As we know it" is an important qualification. The end may not be the end of all existence in the present and future, but the end of what is known and familiar. What comes at the end of the world as we know it? Only those who are prepared will know. The new world might be salvation

through Jesus Christ and unification with God; it might be a wasteland in which those who were smart enough to prepare can rebuild the world. However dismal the outlook is here, the upshot is the unknowability of the future. The end of what we know may be the beginning of a world liberated from oppressive systems. The end may also be one that has no clear path forward, just a break from the past. The prepper imaginary is not fated, and TEOTWAWKI remains open, unscripted, and hard to prepare for. Perhaps as Kosho suggests, the end of the world culminates into nothing, or loops back on itself. The futility of American-style prepping comes into relief. Aside from ensuring bare survival, prepping does not actually prepare people to live in a radically changed or new world. Prepping limits the vision of entering a new world to one of fortification, outliving others, and looking for a future of competition over scarce resources. At the edge of what anyone or any algorithm can predict is the edge of what prepping can do discursively and materially.

The prepping subject lives in the postnuclear world. Prepping is incomplete and requires maintaining conflicting postures about the world we live in, the world we will pass into, and the passage itself. Prepping reveals the tense orientation towards potential species extinction: 'extinction for thee but not for me.' Those who prepare and bunker may dodge the extinction event, in which case extinction would be a mass die-off, but not a permanent end to a species. Prepping is foiled by the masterless object. Radioactive particles move through the perceived barriers between apocalyptic worlds. The porous boundaries in spacetime allow for a flow between an apocalyptic and post-apocalyptic world, one that may filter out humans but filter in what we have made. The porous boundaries apply to climate change too, if climate change is understood as something we do and we live with, rather than something we are waiting for. We may be waiting on a post-climate change world for as long as we have been waiting for the United States' 9/11 to conclude and reveal something else, which is to say, we live in a world now always marked by this punctuation in many unfolding processes. Prepping as an institution cannot prepare people to rethink how we live and organize ourselves, and therefore move into a future quite different from our current trajectory.

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Bibliography

Kohso, Sabu. 2020. *Radiation and Revolution*. Durham: Duke University Press.

Pike, David L. 2019. "Haunted Mountains, Supershelters, and the Afterlives of Cold War Infrastructure." *Journal for the Study of Religion, Nature, and Culture*. Vol.13, Issue 2, 208–229.

Schwab, Gabriele. 2020. *Radioactive Ghosts*. Minneapolis: University of Minnesota Press.

Virilio, Paul. 1994. *Bunker Archeology*. Translated by George Collins. New York: Princeton Architectural Press.

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Doomsday Prepping as Prophecy, Predestination, and Media Spectacle

Introduction

This essay concerns the visual culture of cosmologies and apocalypses as Adolfo F. Mantilla Osornio's work frames them, specifically the shift from natural to technological catastrophe, and how the visual culture of Western narratives displaces, dominates, or subsumes other stories of catastrophe, renewal, or other kinds of cosmological cycles. I will use the framing to politically analyze the idea of prophecy, predestination, and media spectacle through the lens of the contemporary politics of doomsday prepping. Using political frames to take on eschatological or theological ideas is a short bridge to cross; as Benjamin notes, political concepts are secularized theological ideas (Benjamin 1986).

The shared research project between Emily Ray and myself studies the politics of doomsday 'prepping' in the United States. Although the 'doomsday' that people are prepping for can take several shapes, Mantilla's work can be taken as a starting point to make sense of how doomsday prepping came to be understood in the imaginary of the United States as part of the broader development of what Marcuse called technological rationality (Marcuse 1968). This prepping imaginary is mobilized to induce responsibilized citizens to respond to natural, social, and technological catastrophes, as well as become integrated into discourses of political predestination, as well as fodder for consumption in an ecology of social media influence. By prepping, we mean a constellation of behaviors that can look like stockpiling, hoarding, extreme camping, or millenarian yearnings for the end of the world. Our goal has never been to give a complete

taxonomy of the behavior and assess which is 'good' prepping or 'real' prepping. Nor has it been to determine what is rational or deluded behavior. That work is important, of course, but our project is focused on the political conditions that make prepping a sensible response as individualized consumer behavior. Such behavior runs from storing shelf-stable goods at home, building a bunker in the backyard, a panic room in the condominium, or squatting in a decommissioned nuclear missile silo in the vast expanse of the Midwest United States. Additionally, when we talk about 'doomsday' we are not referring to a specific religious eschatological frame, and while it may be useful to distinguish between 'doomsday,' 'apocalypse,' 'armageddon,' 'catastrophe,' and the like, preppers use these terms interchangeably or treat them as a jumble. Finally, bunkerization is a term we deploy to describe the process, politics, and everyday life of preppers; as a way they both articulate the world and also how they relate to it. Bunkerization is thus a process of managing risk and vulnerability, fortifying the home, and withstanding catastrophic conditions—be they social, ecological, or technological. To sum up our approach: preppers, using a variety of approaches and methods, are getting ready for the 'Bad Thing' to happen, whatever that happens to be, in the hopes they can predict, prepare, and persevere through to the other side; whatever happens to be there.

I use bunkerization in the United States to tell the social science story that complements Mantilla's cultural, anthropological, and historical one to think about prepping as an ideological project and how it connects to its pre-modern antecedents. Mantilla's work lays out how visual culture shifted from a human-nature dialectic at the end of the 19th century into a nature-society dialectic in the twentieth century. This shift is important because it shaped how people conceived of and related to apocalyptic events. Namely, as we move from the human-nature dialectic, where the apocalypse is something that is beheld, witnessed, or otherwise a kind of passive experience, in the modern conception of apocalypse in the nature-society dialectic, humans do not merely behold the unfolding of the end as a passive experience, but are active participants in the unfolding, resisting, or enacting of an apocalypse. This active role calls into question notions of liberal subjectivity, and political responsibility, but, as I will focus on here, an active, participatory apocalypse raises political questions of how old eschatological concepts find new expressions in a secular, modern, technologically-driven apocalypse.

To make my case I will consider prophecy, predestination, and media spectacle in their modern, secular modes, to build toward a political theory of bunkerization. These will not necessarily look like their premodern

antecedents, but they will loop back to said antecedents and, hopefully, the relationship will nevertheless be clear. For Prophecy, I want to extend Weber's sociological theory of 'disenchantment' and what it means to act without guardrails. I will further investigate what the political stakes of disenchantment are, and how this disenchantment changes the cosmological surety of eschatological thought. I will also discuss how the neoliberal subject makes for a curious prophet in the context of technological annihilation. These are prophets without followers; pastors without flocks—fully neoliberalized autonomous individual units—whose individual fortification and preparation is a matter of individuated volition and consumer purchasing power. Finally, I will discuss the time horizon of modern eschatology, noting that rather than a long-term, cyclical, or renewal kind of apocalypse, modern apocalyptic thinking is compelled to predict the time and the place of annihilation as yet another data point in the consumer model for rational behavior. This makes the apocalypse an everyday event: ever-present, and always already about to happen. Then I will discuss predestination, which I will give a modern analog of prefiguration. Here, I want to underscore how bunkerization makes itself inevitable in the totality of a one-dimensional neoliberalized society. While this might echo a kind of Calvinist predestination, I want to argue how this seeming technological lock-in both in weaponry and domestic fortification produces a bunkerized subject, but unlike the predestination of a Western religious variety, there is no actual destination for the bunkerized subject. In other words, the bunker is a tomb, and there is no imagination for what happens if and when the time comes to leave the bunker. I thus argue that the political challenge is one of prefiguration, or as I will lay out in political theory terms, the attempt to think how we might end up somewhere else, the ability to get there, and why it is more desirable than the seemingly inevitable. Finally, I will lay out bunkerizing as a kind of media spectacle. Here I will link the political theorizing back to visual culture in a way that shows the material politics of doomsday prepping. Preppers are an increasingly mainstream population of people engaging in increasingly mainstream behavior. While it may be comforting, funny, or disturbing to gawk at these people, I argue that the modern visual culture of prepping is a de-politicization of the real needs of preparedness and precludes collective action responses to shared threats. Here, we again see that much like the pre-modern, pre-western conceptions of the apolitical apocalypse, there is little possibility for political responses. But the modern version shifts from apolitical to depoliticized and results in a barren kind of bearing witness. We are not asked to behold the awe, splendor, or violence of the rupture, but to consume prepping behavior itself as a spectacle.

In other words, never to actually consume the hoarded goods—because that would mean that things have gone very, very wrong— but to consume the behavior and visual spectacle of prepping.

Prophets Without People, Pastors Without Flocks

When Max Weber wrote his seminal essay "Politics as a Vocation" he lamented, even as far back as the turn of the twentieth century, the extent to which social and political possibilities were effectively reduced to the technocratic tinkerings of bureaucrats, leaving little room for the transformational possibilities of authentic politicians (Weber 2004). He foresaw a "polar night of icy darkness" that would envelop society as it became rationalized to the point of inertia; no more political questions, no more alternatives, just technocrats administering the bureaucracy. He refers to this project of modernity as disenchantment (Weber 2004, 93). I suspect this can mean a lot of things to a lot of people, but I will deploy the term as Hannah Arendt said, to mean "thinking without a banister" (2018, 497). In other words, the old guardrails that provided orientation of humans to nature and to the world, and the surety of the cosmological order, have fallen away. This leaves humans to their own devices, responsible for their actions, and without a meaningful metaphysics to shape action (Strong 2013). Setting aside the question of whether disenchantment or reenchantment is a desirable thing, the theological concept of prophecy changes in a disenchanted world.

Mantilla analyzes the visual culture of the apocalypse at the turn of the twentieth century, and shows how apocalyptic representation is based on natural cataclysms, the overcoming of the social in the human-nature dialectic. This has important implications for at least these two reasons: 1) it establishes how this kind of apocalyptic rationality is one of apolitical passive witnessing, and 2) prophecy is less a matter of chronological guesswork but rather cosmological surety. The first point firmly establishes that in a pre-modern sense, apocalypse is something that can be borne witness to, but it is not an opportunity for political action. Somehow, through some divine plan, nature has overtaken the human, and this may be an opportunity for a second coming, a heavenly Jerusalem, or in non-western, non-Christian religions, a renewal, rebirth, or new cycle. Saying this kind of prophecy about the apocalypse is apolitical is not a critique; it is simply out of our hands and the role of prophecy is to try to persuade people to orient themselves toward the cosmological good such

that if/when things end they will have some kind of salvation, purpose, or fulfillment. It is not necessarily about predicting the time or the place of an event, but a kind of Foucauldian pastoral care for the souls of oneself and others, techniques of truth for aligning oneself with the good (Foucault 1982). The second point comes into stark clarity in mid-twentieth-century technical modernity, because the idea of prophecy has not gone away but rather becomes chronotechnological rather than cosmological, and the normative orientation of cosmology falls away. As opposed to the more cosmological, divine will approach to the apocalypse which suggests that humans cannot know the time and the place, technological rationality simply cannot abide this. The positivist approach to knowledge with its attendant quantification of everything seeks surety through empirical demonstration (Horkheimer 1975). In the nature-society dialectic, this means a total rationalization and domination of nature through technological sophistication. Taken to its logical conclusion, complete knowledge about the world itself much therefore also include knowledge about its end. We can see how many degrees Celsius the earth is warming over time, and what projected thresholds lead to corresponding ecological scenarios. We can know, in meteorological real-time, the spread patterns of nuclear fallout and the timeframe of uninhabitability of nuclear detonations. We can track tsunamis and other extreme 'natural' disasters and marshal resources, capital, and public health cadres to limit displacement, rebuild infrastructure, and know how long and how intensely the resulting misery will be given levels of investment. This kind of scientific prophecy, which seemingly contradicts Weber, might be a politicization of the apocalypse because of the disenchantment brought about by technological modernity because responsibility as participants falls on us. Whereas prophets in a pre-modern sense could warn about ordering one's soul toward the good, prophets in this technological modernity sense try to sway public opinion, shape public policy, and serve as both prophets of doomsday as well as katechons to try to prevent it. The new prophets say that greenhouse emissions will have apocalyptic consequences unless we adopt a plan of action, or rogue objects in space have a non-zero statistical likelihood of impact. We have moved from a passive apocalypse of revelation and cosmological fulfillment, into a realm of an active apocalypse that implicates responsibility and participation in its unfolding or prevention.

This chronological approach matters because, in the modern technological conception of an apocalypse, there is no 'after,' at least politically. This results from the disenchantment of technological rationality and the loss of cosmological guardrails. If there is a distinct after; a renewal, a

heavenly Jerusalem, then perhaps orienting toward that will gain a heavenly reward, or perhaps a front-row seat to the destruction of the earthly world. But if there is no cosmological surety or cyclical certainty, then what is left except to know when the party is over through empirical observation? If there is no conception of an after then all that is left is to know when and get ready for it to see what remains on the other side, if anything. Rebirths, renewals, or new cycles are not guaranteed, so a passive apolitical apocalypse will not do. However, just because an apocalypse is no longer apolitical does not mean it must necessarily be politicized. It is entirely possible to go from apolitical to depoliticized modes of apocalypse, and doomsday prepping can do just that. Preppers are thus Weber's revenge. Given the obvious lack of remaking social relations on the technocratic advice of scientists/prophets, preppers want neither to accept social and political responsibility for making things otherwise, but nor can they simply apolitically witness it. They must prepare to withstand and survive the horror of annihilation. This approach drains preparation of its collective action or political importance and depoliticizes the apocalyptic event. This more individuated version can only be done through, adequately prepared through, a bunkerized life to survive the apocalyptic rupture, everyone else be damned (perhaps literally in the case of the rapture). This is what prophets without people and pastors without flocks mean. The prepper is a prophet who is not concerned about orienting others to the cosmological order, nor are they interested in saving peoples' souls. The prepper is a prophet only concerned about the time of the apocalyptic rupture such that they can make use of their stockpiled goods and bunkerized homes to survive the moment.

This may sound irrational, and prompted some to ask: is the point for preppers simply to survive two more weeks than everybody else? The answer to that question may be even bleaker. It is not about surviving but being right. The bunker is the modern prophet's Patmos where they can account, even if only to themselves, how they saw the apocalypse coming, lived through it, and can tell the tale, even if it is to nobody else. In that sense, the concept of bunkerization carries with it this modern prophecy of self-preservation. Why buy a supply of goods that will last ten years if the person doing so does not think, at least in some kind of probabilistic risk management, that there is a non-zero chance of needing that self-stable supply of goods? This is how bunkerization flattens the end of the world into mere chronology.

Predestination or Prefiguration?

The neoliberal order insists on a retreating state and seeks to funnel all choice into consumer options, producing what Marcuse calls a one-dimensional society. This is a society without opposition, and operates with a "smooth, democratic unfreedom" (Marcuse 1968, 1). This social order invades everyday life and short-circuits the chances for alternatives in the realm of politics, culture, and even language itself. Politics becomes a disenchanted matter of rational choice, culture becomes commodity consumption, and discourse reinforces the existing order. It is against this one-dimensional backdrop that I argue bunkers are predestined, or what policy experts might call an example of 'path dependency.' I am not saying that the bunker or panic room is a common lived reality, but rather that bunkerization becomes a commonsense mode of everyday life. Consider things like home surveillance systems, in the United States where plenty of people hoard guns, or being 'energy independent' in case the power goes out. These are rational responses in a one-dimensional society where there are no collective action alternatives to shared threats.

This predestination of the bunker is problematic, however, for a number of reasons. First, it highlights the limits of bunkerization. Hardened homes with stockpiled goods as a matter of consumer choice might be able to mitigate personal risks, but cannot rise to the level of the kinds of catastrophic changes the prepper is supposedly getting ready to confront. This is a problem because recognizing shared vulnerability might produce another kind of relation to the world and each other, but the predestined, one-dimensional bunker can only insist on its own logic and the solution to any problem. Second, the predestination of the bunker is on a very short horizon. That is, prepping prophecy, as described above, is constantly surveying the landscape and assessing whether the conditions are sufficiently degraded such that it is time to enter the bunker. This sheer imminence of total catastrophe thus makes everyday life a constant awareness of the end, or if not the end, that things may degrade such that it may as well be the end. This precludes a meaningful conceptualization of the future, and the future becomes an agonizing present where preppers decide when to enter the bunker and foreclose on the future for good.

An alternative to the predestination of the bunker is a prefigurative, anticipatory politics that envisions and tries to enact new ways of orientating ourselves to the world. Prefigurative politics would be an anticipatory politics that focuses on, "(re) making life tensed on the verge of catastrophe in ways that protect, save, and care for certain valued lives, and damage, destroy, and abandon other lives" (Anderson 2010, 782).

That is to say, undoing the damage of individualized neoliberal subjectivity that cannot fathom collective action and shared vulnerability. We should be cautious to assume that undoing the individualized neoliberal version of preparedness does not mean that the state apparatus as currently constructed is necessarily the alternative. Statecraft is part of a one-dimensional society, and the ability of states to shape the future in a technological/spatial/temporal way that limits the vectors for opportunities for change in the present and funnels human action in ways that reinforce the "spatio-social production of the future" that looks like the status quo (Jeffrey and Dyson 2021, 642). An interesting dialectical tension seems to emerge here. On the one side, prefigurative movements offer alternative versions of social life that are qualitatively different than the existing order; on the other side is a governing apparatus, in anticipation not only of the techno-social determinants to keep tomorrow like today but also to contain the prefigurative movements that can challenge them, so that they can be short-circuited or otherwise neutralized. Thus, in a one-dimensional society, the state can only be anticipatory in its dominating way inasmuch as its need to dominate is anticipated by those being dominated. In other words, prefiguration in a one-dimensional society can only happen in response to domination. A managed prefiguration that is enveloped in already existing statecraft does not present a different vision for the future; it is simply more of the same. State-sanctioned bunkerization is still bunkerization.

I do not pretend to know how to overcome this dilemma of how even anticipatory politics can feed into the neoliberal, one-dimensional condition of bunkerization, but I only want to highlight that these are the stakes; an eternal (and eternally anxious) present of scanning the horizon for the catastrophe that cancels the future. Getting bogged down in assessing which is 'good' prepping or 'bad' prepping, or in any case whether someone is prepping for the right reasons does not break out of this bind of managing prefigurative politics. After all, many states in the United States offer tax rebates for installing solar panels and many cities offer free classes on how to raise chickens and install garden beds. This should give pause to wonder whether these things have any radical content in themselves or if they serve to reify the given order. In the United States, plenty of intentional communities and savvy consumers have gone 'off-grid' but so have many white nationalist groups (Makuch and Lamoureux 2018). It would be a mistake to assume intention or prefiguration on a given behavior or technology itself is able to formulate alternative futures. Prepping with a cheerful attitude can still be a kind of bunkerization.

Bunkerization as Media Spectacle

Even though bunkerization is increasingly mainstream in the United States, that does not mean that all prepping behavior is ubiquitous or is done at the same level. People who store shelf-stable food in case the power goes out are certainly different from people who build condominiums in abandoned nuclear missile silos in the middle of the United States (Perlin 2021). For those who do neither of those things, a whole media ecology has been built up around gawking at preppers, however this section focuses on a very particular aspect of the current visual culture of prepping through social media influencers. This focus puts a fine point on the idea of preppers as prophets who lack anticipatory or prefigurative politics. An example of this phenomenon is an Instagram account called "preppingforeverything." In a November 19th video post they insist:

> We are not crazy conspiracy people, nor 'doomsday preppers,' who are overreacting.
> But what we are, is paying attention to what is happening in the world and preparing our homes and hearts for what's to come.
> Learn the skills.
> Prepare your homes.
> Grow and preserve your food.
> Find your people.
> Create food storage.
> Build YOUR ark.
> Are you with us?

There are many fascinating things happening in this video. First is a disavowal and then confirmation of being preppers. It asks the audience to not identify them as 'crazy conspiracy people' because the viewer also probably would not consider themselves a crazy conspiracy person. Of course they do not identify which 'crazy' conspiracies, though this implies reasonable non-crazy conspiracy theories worth entertaining. That reasonability gets inferred when they say that they are looking at what is "happening in the world." What is happening in the world? They do not say, but this is an intentional appeal to the savviness of their target audience; smart consumers do not need to be told. They are presumably already in the know. This is a sly wink and a nod as if to say "we all know there is 'A Very Bad Thing' on the horizon, and we must get ready for it." We see the mode of prophecy when they speak of what is to come and that the home

must be fortified, but so must the heart. We also see that the horizon of the prophecy is stuck at the moment of catastrophe itself, where they are oriented toward "what is to come." There is no discourse of what comes after, but this just highlights the always-already everyday life of apocalyptic thinking. It is therefore no surprise that they then launch into their eschatological frame: preserve food, find your people (we might pause here to wonder what exactly *that* means), and build your ark for a little biblical flourish. These social media prophets give us a glimpse of a visual culture of modern prepping. The video sets a tone of bucolic foreboding. In typical socail media fashion there are smash cuts to 'a day in the life' of their prepping practices. They start with some relatable everyday things like chopping wood, fishing, and dying fruit. But then other practices start being interspersed, like vacuum sealing meals, filling fuel cannisters, and posting with multiple high-caliber firearms. The video then cuts back to harvesting eggs, raising sheep, and churning butter. All of this is presented in the undifferentiated way of quick social media videos. They say they are not doomsday preppers, but we all know everything is falling apart so maybe fortify your home and heart! And perhaps to make a final non-crazy point they ask, "Are you with us?" Who is "us?" This video has detailed the things that individuals or families should do, so what does it mean to be with them? This final bit of incoherence shows the lack of a prefigurative horizon or anticipatory politics. For social media preppers, doomsday has become a 'vibe,' yet another vector of consumer culture.

This kind of media spectacle approach to prepping, which insists that the activity is not weird because of a vague sense of dread about what is going on in the world that perhaps we know or at least feel, and that prepping is a reasonable response, is less about recruitment of preppers than an invitation to identify with and consume a prepping ethos. Social media influencing is not the only vector of course. In the United States evangelical groups, right wing quasi-militias who sell tactical gear with breathless warnings about intrusive governments, or 'off-grid' communities are all prepping, too. What they are prepping for may look different in the details, but remains symptomatic of this modern notion of apocalypse. These are prophets who have (perhaps scientifically) deduced one or myriad cataclysms that will wipe out civilization. And while they cannot offer a future where that does not happen, or a future after the apocalyptic rupture, prepping remains one-dimensional, and reifies the neoliberal dictates of wise individuals exercising their responsibility to themselves through consumer choices. Consuming a prepping ethos may be consuming the media spectacle rather than the thing itself, but even that still highlights the lack of alternatives that are not prepping.

Conclusion

Mantilla's work provides a historical and anthropological pivot point that invites us to think about the politics of apocalypse in the move from natural to technological devastation. The idea that an apocalypse from a cosmological order as being out of our hands would mean that the apocalypse is an apolitical event, and is instead an opportunity to orient ourselves toward the cosmological or metaphysical truths and bear witness to things that come to pass. In a modern age of technologically induced apocalypse, bearing witness is not enough. Scientific rationality will quantify the end, and individuals are compelled to take responsibility for withstanding the event, not merely behold it. Yet in this modern conception where bunkerization has taken hold, prophecy and prefiguration produce a vision of the apocalypse that cannot see a post-apocalypse; there is no future beyond the eternal present of vigilantly preparing for the calamity. This intensifies the neoliberal dictates of individual action, consumer choice, and a hollowing out of public life. In other words, the modern apocalypse, whatever shape it takes, funneled through this lens of bunkerization, produces not *apolitical*, but *depoliticized* subjects. The future cannot be different than today because there is no future, and, after all, the point of eternal everyday vigilance is just to figure out when to hit the panic button and go into the bunker.

A way out is to try to build a prefigurative politics to get out of the bunker, but the challenges are many. The logic of a one-dimensional neoliberal society seeks to absorb countermovements or present its own false alternatives. Even beyond that, the consumer culture surrounding a prepping ethos is engrained at the level of individual consumption too. In other words, and to finally conclude, the hope here is for a prefigurative politics that does not ignore shared risk, existential or otherwise, and ways of collectively confronting it. That means resisting the logic of the bunker and the logic of prophets, predestination, and a visual culture that railroads everyday life through a bunkerized logic that is always already prefiguring the end. Are you with us?

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Bibliography

Anderson, Ben. 2010. "Preemption, Precaution, Preparedness: Anticipatory Action and Future Geographies." *Progress in Human Geography* 34 (6): 777–98. https://doi.org/10.1177/0309132510362600

Arendt, Hannah. 2018. *Thinking Without a Banister: Essays in Understanding, 1953–1975,* edited by Jerome Kohn. New York: Schocken.

Benjamin, Walter. 1986. *Reflections: Essays, Aphorisms, Autobiographical Writings*, edited by Peter Demetz. New York: Schocken.

Foucault, Michel. 1982. "The Subject and Power." *Critical Inquiry* 8 (4): 777–95.

Horkheimer, Max. 1975. *Critical Theory: Selected Essays*. Translated by Matthew J. O'Connell. New York: Continuum Publishing Corporation.

Jeffrey, Craig and Jane Dyson. 2021. "Geographies of the Future: Prefigurative Politics." *Progress in Human Geography* 45 (4): 641–58. https://doi.org/10.1177/0309132520926569

Makuch, Ben, and Mack Lamoureux. 2018. "Neo-Nazis Are Organizing Secretive Paramilitary Training Across America." *Vice* (blog). November 20, 2018. https://www.vice.com/en/article/a3mexp/neo-nazis-are-organizing-secretive-paramilitary-training-across-america

Marcuse, Herbert. 1968. *One-Dimensional Man*. Boston: Beacon.

Perlin, Jenny, dir. 2021. *Bunker*. Documentary. https://www.jennyperlinstudio.com/bunker

Strong, Tracy B. 2013. *Politics without Vision: Thinking without a Banister in the Twentieth Century*. Chicago: University of Chicago Press.

Weber, Max. 2004. *The Vocation Lectures*, edited by David Owen and Tracy B. Strong. Translated by Rodney Livingstone. Indianapolis: Hackett Publishing Company, Inc.