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BY YOUR POWERS COMBINED: HEROIC SOLUTIONS TO CLIMATE
CATASTROPHES IN *THE FIFTH SEASON*, *AVENGERS*:
INFINITY WAR, AND *HORIZON: ZERO DAWN*

KEMATAT MATTHEW MEDRALA

83 pages

Popular entertainment has become concerned with addressing issues of climate catastrophe in order to reflect the real concerns of its audience. Because these media narratives are produced by wealthy institutions that reach millions of people, it is vital to understand what these stories say about the causes of existential crises and their presented solutions. This thesis applies an ecocritical approach informed by environmental justice theorists and Marxist theory in order to analyze what a contemporary popular film, video game, and novel have to say about addressing an oncoming ecological crisis. This analysis reveals that mass death among the disempowered is considered inevitable in these fantasies, and that only a certain few empowered individuals are capable of restoring the world to a fragile status quo.

KEYWORDS: Climate; Catastrophe; Superhero; Digital; Media; Death

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KEMATAT MATTHEW MEDRALA

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Fulfillment of the Requirements
for the Degree of

MASTER OF ARTS

Department of English

ILLINOIS STATE UNIVERSITY

2020

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BY YOUR POWERS COMBINED: HEROIC SOLUTIONS TO CLIMATE

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K. M. M.

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INTRODUCTION

In March 2020, when a quarantine was declared in the United States of America to address the outbreak of a novel coronavirus, a particular meme acquired popularity on social media: images of animals exploring human locations, with captions attributing the absence of humans to the notion that “nature is healing.” The romanticization of such a notion, where the elimination of human traces is deemed ‘natural’ and even beneficial to the biosphere, speaks to a prevalent concern framing humanity’s relationship to nature as oppositional and perhaps requiring drastic solutions. This misanthropic notion of construing the removal of humans as a positive has manifested in politicized acts of violence, such as the March 2019 murder of 51 Muslims by a far-right ‘eco-fascist’ whose manifesto brimmed over with rhetoric romanticizing a vision of the future, “not one of concrete and steel, smog and wires but a place of forests, lakes, mountains and meadows” (Forchtner). When considering that the suffering resulting from the current viral outbreak is waged disproportionately upon marginalized populations across the world, it is vital to understand the link between romantic rhetoric of environmental revival and the racialized nature of which humans are held responsible and needing of removal to achieve said recuperation.

As the issue of catastrophic global climate transformation becomes of increasing concern to the Global North, popular contemporary literature, games, and films reflect cultural anxieties about the causes and consequences of climate change and allow audiences to explore possible outcomes of and potential solutions to these growing problems. It should be understood that the terms ‘Global North’ and ‘Global South’ are used not to describe literal geography but are instead part of an economic and political framework wherein less-economically developed nations are the ‘South’ and the wealthier nations are the ‘North’; as such, these economic terms

have been used by critics of globalization like Naomi Klein, environmental justice theorists like Rob Nixon, and Marxist theorists like Jason Moore to critique the Global North's prosperity as dependent on the exploitation of the Global South. Literature in the Global North about climate change vary in their diagnoses of the causes of climate change, as well as in their depictions of reactions/solutions to global disaster. In this thesis I will compare and contrast three contemporary texts: N.K. Jemisin's 2015 novel *The Fifth Season*, the 2017 video game *Horizon: Zero Dawn* by Dutch developer Guerrilla Games, and the 2018 Marvel Studios film *Avengers: Infinity War* directed by Anthony and Joe Russo, with a particular eye on how these narratives frame climate catastrophes as well as how their portrayals of post-disaster life contribute to an ongoing trend in neoliberal media of presenting individuals as symbols for systemic actions, as can be seen in the rhetorical framing of activist Greta Thunberg by pro-environmentalist and anti-environmentalist parties alike.

Coming from a 'Global South' nation such as Thailand, it is inevitable to think about the reality of climate change in terms of the hostile impact it has on the people, particularly the most marginalized and disadvantaged. As global temperatures continue to rise, the impact can be felt not just in the prolonging of droughts and heatwaves, nor only in the rising of ocean levels or the acidity of that water, but also in the mass migrations of people forced to move inland and into areas where resources have been accumulated. These crises of resource scarcity have been used as the rationale for governments to impose ever stricter national boundaries, population control measures, and grabs for natural resources, even as the anthropogenic engines behind these climate crises remain obfuscated and indeed enabled to accelerate their processes for the sake of accumulating capital. Corporations have exploited mass migrations as a chance to acquire labor, nations consider the melting of the Arctic as a boon for improving shipping routes, and absurd

solutions such as using dust in the atmosphere to dilute the impact of sunlight have been suggested in lieu of changing the economic structures of accumulation. Theorists such as Ian Angus, Timothy Clark, and Jason Moore have identified the current era as the Anthropocene, wherein human activity has been a dominant factor in shaping environmental factors and the living beings dependent on said climate, and link an increase in this human-led environmental transformation to the process of aggressive accumulation dictated by capitalism.

As the impacts of climate change become too prominent to deny, public discourse on the subject has shifted to accommodate various perspectives that reflect the capitalist framework within which they operate. These framings may range from the revival of Malthusianism, wherein the deleterious symptoms of the Anthropocene are blamed on human overpopulation as opposed to the systems of resource accumulation, to a technocratic redistribution of resources throughout a world left deprived by capitalist overexploitation, to the reification of rigid social structures where individuals are held responsible for the actions of institutions. Malthusianism, according to Marxist theorist Kohei Saito, is a pessimistic theory of absolute overpopulation (Saito 224) and the law of diminishing returns, arguing that the increase of population requiring the cultivation of less fertile lands is an “inevitable result of the natural development of civilization” (Saito 206). Popular culture reflects and amplifies such ideologies through their accessibility to mass audiences, and as such even the seemingly superficial invocation of resource scarcity used to justify a villain’s genocidal actions in a blockbuster film promotes a particular view of real-life crises; one that is conspicuously not rebutted in dialogue by other characters. It is perhaps more important than ever to pay attention to what types of framings and solutions are presented to climate crises within contemporary entertainment, as the presentation of these ideas may impact how people of the future perceive life in the Anthropocene.

My analysis of these three literary texts will be situated within the theoretical framework of environmental justice ecocriticism, which is concerned with how literature and criticism can address the inequalities and hazards disproportionately wrought upon marginalized populations (Adamson, Evans and Stein 149). While *Horizon: Zero Dawn* and *The Fifth Season* are both set in worlds created in the aftermath of an ecological disaster, *Avengers: Infinity War* presents a contemporary world order whose enforcers struggle to defend their system against an existential threat ostensibly motivated by resource overconsumption. *The Fifth Season* and *Avengers: Infinity War* may share in common empowered individuals who are made to uphold the status quo, but the orogenes of *The Fifth Season* seek to overturn the system that exploits them while the heroes of the Marvel Cinematic Universe consistently reaffirm the symptoms of inequality that create the antagonists of their world. *Horizon: Zero Dawn* and *Avengers: Infinity War* both feature wealthy war-profiteers whose recklessness and pursuit of short-term solutions contribute to global malaise, but the latter frames the profiteer as a hero on a path of redemption while the former places its industrialists firmly in the graveyards of the past. Among all these texts there is a tension between the whims of powerful individuals and the power available to collectives, with different conclusions: *Avengers* presenting at first an individual capable of successfully eliminating half of the universe while presenting as his counterpoint a cadre of superhuman defenders, *Horizon* presenting its protagonist as uniquely capable of interfacing with technology and nature beyond the specializations of the various communities she encounters, and *The Fifth Season* focusing on three different types of experiences that ‘empowered’ individuals may encounter in this post-collapse world order. I will argue that these three texts all contribute to the modern ecocritical discourse by identifying (to various degrees) the systemic issues that contribute to ecological disasters as well as portraying how these disasters affect both the

powerful and the marginalized, yet still prescribe as solutions a reliance on empowered individuals who can enact a restoration of the world order rather than show how collectives can work to address ecological malaise. Common across these works is a refusal to portray a future where averting a collapse of the current world order is possible; instead, the prospect of mass death and suffering is treated as an inevitability, as well as a decision made by empowered individuals to affect the lives (and deaths) of the masses. Given that over a hundred million people had been recorded as seeing the follow-up to *Infinity War* in the space of a single weekend (Mondello), over ten million copies of *Horizon: Zero Dawn* have been purchased by PS4 owners (Roberts and Hood), and the *Broken Earth* trilogy have sold over two million copies as of 2020 (Khatchadourian) with both a role-playing game developed by Green Ronin (Sass) and TV adaptation by Turner Network Television (Andreeva and Petski) under way, it is evident that there is a large audience investing their time in these works and eager to purchase follow-ups by their creators.

As texts all created with the purpose of mass-market appeal in the western world, it can be understood that ‘heroic’ narratives of saviors with power may be more appealing to a certain target audience than reflecting the disenfranchisement currently experienced by marginalized populations; as such, in addition to exploring how these texts identify and frame the causes of ecological disasters, I will look to see how these texts present or critique the notion of individualistic solutions to global crises. An ecocritical analysis of how these texts present individualistic causes and solutions to ecological disasters not only allows for a critical appraisal of which narratives are provided a popular platform and for whose benefit said narratives are ultimately for, but will also make it possible to create more pertinent texts that address positive

futures that do not prescribe apathy or large-scale death from the masses for the sake of a privileged few.

I have chosen for my analysis a multimodal range of media – a novel, a film, and a video game – because I recognize that each of these media forms is produced, consumed, and reproduced at a high rate, meaning that their aim to appeal to broad audiences would entail the creator to be conscious of how such perspectives may understand their take on climate catastrophes. I have chosen texts which have been created within a range of five years in order to situate my analysis in a single era, rather than have one text reflect a perspective decades apart from the other texts. Each of these works has generated a lot of discourse both within scholarly fields as well as commercially-driven audiences – Jemisin’s *The Fifth Season* has been critiqued both as a literary text on sites such as GoodReads and by literary critic Naomi Novik while also sparking ecocritical analyses from scholars, and its acquisition of the Hugo Award for Best Novel in 2016 has made its author a prominent name among modern writers of speculative fiction. *Horizon: Zero Dawn* was acclaimed among critics at the time of its release both for its technical accomplishments and its narrative presentation, selling over 7.6 million copies worldwide within a year of its February 2017 release, and as of June 2020 has had a sequel, *Horizon: Forbidden West*, announced to release alongside the PS5 gaming console. *Avengers: Infinity War* set a world record for highest-grossing opening weekend during its initial release, and as the official first part of the finale of the highly-publicized multi-media Marvel Cinematic Universe enterprise it was therefore subject to scrutiny from audiences interested not in its value as a story but as a product of commercial interests.

Horizon: Zero Dawn, a video game produced by Dutch game development team Guerrilla Games as an exclusive release for the Sony Interactive video game console PlayStation

4, portrays a world in the distant future of post-capitalist collapse with caches of technology serving to help re-establish a 'natural' past; however, its story also involves an investigation into the neoliberal capitalist system that caused a global collapse and represents various post-collapse 'tribal' societies which reflect modern views of primitivity. According to Alexandre Paquet of the University of Toronto, *Horizon: Zero Dawn* entangles multiple forms of life grouped into planetary collectives – human, nonhuman and technological – that enable productive ways to transform notions of 'endings' and enable the opportunity for innovative cyclicity. This works off the Marxist critique of capitalism's conception of time, which assumes that the individual has little to no power in comparison to the broader power available for groups. At the same time, *Horizon* is a heroic narrative wherein an individual descended from a brilliant scientist becomes the key to restoring the past's splendor while also fighting against its past excesses. The game portrays a distant future which nevertheless blends imagery of prehistoric hunter-gatherer social groups with technological creations now supplanting the roles formerly occupied by animals. Anna Tsing's discussion of a salvage economy, while bound up within an identification of how marginalized groups currently function within modern capitalist society, comes into play here with the protagonist's reliance on salvaging both for personal subsistence and to engage in an economic system based on bartering. Ian Faith's *Technology Worship, Media Archaeology, and Zombie Media in Horizon: Zero Dawn* situates the game within a broader context of meta-games that "comment on their own forms, histories, and place in culture writ large", portraying its primitive humans as nevertheless more conscientious consumers compared to modern-day westerners due to their symbiotic relationship with machines wherein production and consumption leave dramatically less waste.

N.K. Jemisin's *The Fifth Season* (2015) is a novel depicting a post-apocalyptic society with highly-stratified castes regimented to deal with climate and terrestrial change on an individual level. The narrative focuses on multiple female perspectives across separate eras to show the cyclical perpetuation of exploitative structures, particularly how women of color remain an uncompensated source of labor. As the first part of a novel trilogy – *The Broken Earth* – that was written by an African-American author who asserts that escape from systems of capitalist exploitation is impossible without trying to confront those systems directly, *The Fifth Season* reflects this perspective in portraying a capitalistic society still dependent on racialized and gendered subjugation in the wake of environmental collapse – a rebuttal to the assumptions of global disaster leading to a post-racial future implicit in the works of contemporaries such as *The Hunger Games* or *The Walking Dead*. Jemisin has also stated that her book portrays “a society that was shaped by its environment and that was shaped by the disasters that preceded it,” seeking to intentionally “destabilize the assumption of contemporary civilization that prediction and preparation will assure human survival.” Alastair Iles identifies the following questions as being posed in Jemisin's work: “How should we live in a climate-changed world? What role does racial and social subordination play in destroying the environment? What are the dangers of hubris in seeking out a fundamental change through science and technology that cannot be readily controlled after all? How should we think about Earth itself?” Iles also identifies Anna Tsing's identification of survival as a collaborative process in *The Mushroom at the End of the World*, which comes into play in *Fifth Season*, as the multiple perspectives show a means of collaboration/contamination that partly subverts the individualist fantasy of one-against-many. I state that this subversion is only partial, however, as Jemisin still focuses on the perspective of orogenes – a racial caste engineered specifically to manipulate environmental elements – and

furthermore reveals these perspectives to be different instances of the same individual, thereby establishes a system wherein a human minority is biologically differentiated – and ‘superior’ – to the oppressive majority. While this scholarship analyzes how racialization and sexualization within *The Fifth Season* puts it in conversation with the overarching treatment of women and racial minorities in speculative fiction, I aim to link this analysis of race and gender to how other forms of contemporary media frame and utilize race and gender.

Avengers: Infinity War, directed by Anthony and Joseph Russo and overseen by Marvel Studios producer Kevin Feige, presents a neoliberal world order which is disrupted by a villain who is supposedly averting a hypothetical universal apocalypse by causing genocides which can ultimately lead to ‘stability’. Although his actions are condemned as madness by the protagonists, his many speeches where he explains his utilitarian ideology never receive a philosophical counter-argument in conjunction with the physical resistance he faces, and in the end the heroes’ solution is to return to a past rather than address the underlying issues that motivated the antagonist to begin with. *Avengers* joins a trend of other contemporary blockbuster films which have portrayed their antagonists as presenting environmentalist principles, which has not gone unnoticed by fan media publications such as *The Mary Sue*.

Infinity War in particular has been criticized by the likes of Noah Berlatsky for presenting a “dream of egalitarian genocide,” while the filmic genre of “superhero film” has been questioned by Glen Weldon of the NPR for creating fantasies that exist in a tension between altruism and fascism. In the video essay *The Ideology of the Marvel Cinematic Universe*, Jack Saint identifies Thanos as the logical extreme of the ideology espoused by Tony Stark, a founding member of the Avengers superhero team and a consistent catalyst of technological and ethical disasters himself. If Thanos is not the antithesis to the heroes of

Avengers but simply an amplification of their beliefs, the question remains: what solutions are there to the issues identified by both hero and villain? If Thanos is ‘mad’ for his actions yet no alternative solution to genocide is presented by the heroes who react to him, how might the audience understand the future of this world, and the crises facing their own world?

It is also important to conduct an analysis of products created within the auspices of the Marvel Cinematic Universe – particularly this film as part of the finale for the ‘Infinity Saga,’ containing three films all linked as within the same continuity – with an awareness of the ongoing monopolization of media owned by corporations of the size of Walt Disney Company. The Disney corporation owns Marvel Studios along with many other media distributors, be they film production companies such as LucasFilm and 21st Century Fox, or internationally-reaching television channels such as ATV, sports channels such as ESPN, and the Fox Network Groups. With so much media being distributed as well as determined by the guidelines of a corporation justifying its decisions on being inoffensive to wealthy conservative groups, or justifying their creative decisions on non-western markets such as excising LGBT representation from international blockbusters like the latest *Star Wars*, it is relevant to ask why Malthusianism was considered a compelling theme to invoke in an internationally-released blockbuster film, especially as it is a creative change from the source material of the serialized comics from which they were initially adapted. By identifying how corporations such as Disney participate in the environmental transformations of the Anthropocene along with how they impact the media created by their sub-companies, we may understand why climate narratives would be framed in a certain way by said companies. Together, the chapters in my thesis conclude that these works, being published under the approval of wealthy institutions like Disney, Sony, and Orbit Books, propagate visions of the future that portray the collapse of the world – and the tremendous scale

of death from the disempowered - as inevitable, while also diverting any large-scale resistance to institutional complicity in such collapse onto individual actors. To quote Lord Farquaad, an animated villain heavily based on former Disney CEO Michael Eisner (WhatCulture): “Some of you may die, but that is a sacrifice I am willing to make.”

My theoretical approach to these three texts is a combination of a Marxist ecocritical perspective and media studies critical theories, contributing to the developing conversation of ecomedia studies by linking critiques of neoliberal ideologies of race, gender, and class within modern narratives of climate change. I utilize Jason Moore’s *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* to identify how methods of capital accumulation work in conjunction with the deterioration of the environment within these texts. Ian Angus’ *Facing the Anthropocene: Fossil Capitalism and the Crisis of the Earth System* and Timothy Clark’s *Ecocriticism on the Edge: The Anthropocene as a Threshold Concept* help me define the Anthropocene and reveal how it manifests within these works. I also draw from Naomi Klein’s *This Changes Everything: Capitalism vs the Climate*, Anna Tsing’s *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*, and Hannah Holleman’s *Dust Bowls of Empire: Imperialism, Environmental Politics, and the Injustice of "Green" Capitalism* for examples of environmental marginalization that can be analogized to the ecological effects portrayed in these works. Rob Nixon’s work in *Slow Violence and the Environmentalism of the Poor* and Kathryn Yusoff’s *A Billion Black Anthropocenes or None* are essential resources for understanding how environmental activists have framed the narratives of their struggles and for understanding the link between anti-blackness and the exploitation prevalent in the Anthropocene. John Charles Ryan’s review of *Ecocriticism* allows me to identify contemporary trends in ecocriticism opening the potential for analyzing the role of embodiment and emotion in

environmental narratives, and Bryan Moore's *Ecology and Literature: Ecocentric Personification from Antiquity to the Twentieth Century*, which argues for personification of the natural world as not necessarily imposing anthropomorphism, works in conjunction with the framings of non-human life in these texts. I look to Donna Haraway's work from *The Haraway Reader*, particularly her discussion of hybrid figures, to analyze the roles played by hybridized figures within these texts.

In order to understand how the fields of media studies and ecocriticism have evolved and why they are frameworks compatible with one another, it is necessary to draw on literary reviews which summarize how these fields have developed. The 2015 collection, *Ecomedia: Key Issues*, by Stephen Rust, Salma Monani, and Sean Cubitt, identifies the field of ecocriticism as a relatively recent phenomenon, initially pioneered by Leo Marx and Raymond Williams in the 1960s and 1970s but gradually building in vibrancy from the 1990s into the twenty-first century through the consideration of popular media texts in forms not unlike the three genres I have chosen. Ecomedia scholarship since 2000 has also worked alongside interdisciplinary environmental studies to explore how race, class, and gender all intersect in matters of climate justice. To better understand such shifts in ecocriticism, I consider Erin James' work on *Ecocriticism and Narrative Theory: An Introduction* to define a framework of narrative theory that can be used to analyze how my three main texts serve to express their environmental themes through attempting to emotionally engage their audience, while John Charles Ryan's review in the 2018 version of *This Year's Work in Critical and Cultural Theory* helps to establish that modern-day climate fiction "concretizes abstract constructions of the future through reference to the materiality of narratives and elucidates 'what is otherwise invisible: the gradual socioecological changes that occur too slowly for human perception'" and allows for an empirical

analytical approach that can allow for analyses of literary forms beyond the novel, such as films and video games (484). *Media Archaeology: Approaches, Applications, and Implications* by media archaeology theorists Jussi Parikka and Erkki Huhtamo also help me understand matters of media archaeology, particularly digital imagery and its relationship with depictions of the natural world, while Stephanie Foote's analysis of consumption and waste patterns in *Histories of the Dustheap: Waste, Material Cultures, Social Justice* contribute to reappraising 'garbage' as artifacts representative of the systems that produced them.

Given that environmental justice ecocriticism is concerned with bringing to the fore the "invasive, pervasive effects of corporate capitalism" present in the aestheticization of ecocriticism along with the "racial-class dynamic that has enabled that process to continue" (Adamson, Evans and Stein 151), it becomes evident through analyzing these three works that they all reflect an ecological world-view that either glosses over or justifies the large-scale destruction of marginalized human populations and their environments for the sake of an empowered minority. The issues of racialized and gendered biases influencing the nature of such destruction are either unquestioned or, in the case of *The Fifth Season*, complicated by creating a fictional analogue for racist oppression that portrays the socially marginalized as simultaneously oppressed yet capable of enacting tremendous power upon the world and on the 'normal' human majority. It must be understood that such media does not flow passively from the wills of individuals, but are directed in what media studies scholar Henry Jenkins describes as a "convergence culture" with three components: media convergence, participatory culture, and collective intelligence (Rust, Monani and Cubitt 165). Media convergence refers to the collaboration between "media, industries, and audiences as part of a larger system of production and consumption with the potential for good and bad effects" (Rust, Monani and Cubitt 166),

participatory culture would entail “the intervention of fans in the production of popular media (Jenkins, 2008, 3)” (Rust, Monani and Cubitt 168), and collective intelligence would refer to how the aforementioned processes of convergence and participation allow for a combination of knowledge and skill in a network of action (Rust, Monani and Cubitt 169). Through this framework, a film, a video game, and a novel all serve as products that are distributed by industries through different mediums to develop an audience that becomes complicit in creating a public discourse that both influences and is influenced by the media they engage with. In this media ecosystem, the works that are mass distributed to audiences shape the way in which topics are discussed. For example, the HBO TV series *Watchmen* had the consequence of emboldening American audiences to invoke the 1921 Tulsa massacre in discussing modern anti-blackness and linking that historical atrocity to the contemporary president holding a rally in that town (Keveney). Environmental justice similarly becomes a topic of discussion when portrayed in popular media, which makes it especially important to understand how these three popular works portray the causes and solutions available for ecological crises for present-day audiences in a way that implicitly places the mantle of responsibility upon individuals. Given that these works are distributed to large audiences to shape how they conceive of ecological crises, there is a contradiction in promoting an individualist fantasy that ultimately obscures a model of environmental justice that more accurately reflects the struggles of marginalized populations against economic exploiters. It is the hope of this ecocritical analysis that an appraisal of these texts’ themes may serve to form a new model for narratives that resist the idea that the masses must necessarily be passive or powerless.

CHAPTER I: RESTORING THE OLD WORLD IN *HORIZON: ZERO DAWN*

Horizon: Zero Dawn is a game about digital media archaeology, where the journey of the protagonist – a young woman named Aloy – is to uncover artifacts in search of her true origin, intertwining with the player’s incentive to explore and collect artifacts that contextualize the history of a virtual post-apocalyptic world where ‘primitive’ human societies live and die alongside animalistic machines. A distinction must first be made between the physical excavation process of industrial archaeology, which digs through the foundations of abandoned locations in order to acquire clues about the lives of its former inhabitants, and media archaeology’s focus on “textual, visual, and auditory archives as well as collections of artifacts, emphasizing both the discursive and the material manifestations of culture” (Parikka, *Machinology* 3). Ian Faith’s *Technology Worship, Media Archaeology, and Zombie Media in Horizon: Zero Dawn* situates the game within a broader context of meta-games that “comment on their own forms, histories, and place in culture writ large,” portraying its primitive humans as nevertheless more conscientious consumers compared to modern-day westerners due to their symbiotic relationship with machines wherein production and consumption leave dramatically less waste. Such primitive societies include the matriarchal hunter-gatherers known as the Nora, a patriarchal sun-worshipping agricultural empire called the Carja, a nomadic society that has been able to domesticate the machines called the Banuk, and a misanthropic cult known as the Eclipse who perceive the machines they serve as deities. While the fact that all of these disparate societies share the same lingua franca of modern English may seem to be a narrative concession made for the English-speaking audience, it becomes apparent through Aloy’s archaeological discoveries that the reason for this linguistic homogeneity lies in their cornucopian world owing its existence to the efforts of its predecessor: the United States of America. It is this past

civilization and Aloy's positioning as the superwoman most equipped to recuperate it that this analysis will primarily focus on, for what *Horizon: Zero Dawn* has to say about humanity's role in both instigating and averting global ecological destruction is deeply rooted in an ecocritical discourse that includes concerns with comprehending the spatial-temporal scope and severity of the Anthropocene, determining what (and who) is responsible for the damaging effects of the Anthropocene, and what is to be done to address said consequences. This analysis shall also involve an appraisal of the post-disaster societies within this world to discuss how they portray visions of non-capitalist societies – simultaneously post-capitalist yet mirroring feudal and tribal societies in human history.

The primary figures in the history that Aloy uncovers are 'modern-day' Americans: in particular, Ted Faro and Dr. Elisabet Sobeck, a couplet who ideologically embody yet blur the binary of Father Science and Mother Earth. The former was the CEO of Faro Automated Solutions, a robot manufacturing corporation that had initially acquired acclaim through creating technologies capable of mitigating the human causers of climate change via consuming and converting biological material, only to switch toward selling their automated weaponry for use in the military-industrial complex in a move that would ultimately doom the biosphere of their era. The latter was a former employee of Faro who had initially tried to create an offshoot of FAS – Miriam Technologies – with an emphasis on eco-friendly technology as a rebellion against Faro's militaristic goals, before ultimately conceiving of and executing the titular *Zero Dawn* project as a drastic solution to the consequences of Faro's military contracts spiraling out of control. Although the game provides many other artifacts that reveal the perspectives of others who lived in the world of the past, these two opposing characters reveal a framing of the past ecological catastrophe as a conflict that not just has a clear villain and hero, but also reveal a

thoroughly technocratic optimism about the negative and positive effects humanity can have on the biosphere. It is critical to note that although the Faro robots whose initial spiraling out of human control are established to have been conceived as an ecologically friendly product, there is an implication that this technology could have remained beneficial to the biosphere with the ‘right’ leadership without acknowledging the possibility that the material costs of creating such technology could outweigh any possible ecological benefits. The optimism here about the possibility of a ‘Green Capitalism’ parallels the rhetoric being floated by billionaires such as Michael Bloomberg and Bill Gates, who have been “talking a good game about carbon bubbles and stranded assets” but make no discernable attempt to manage their own vast wealth in a manner that reflects these concerns (Klein 235).

While the steel and concrete architecture of modern cities has largely been reclaimed by almost a millennium’s worth of plant growth, holographic recordings belonging to Dr. Sobeck and Faro still persist through the environment, particularly within sealed bunkers specifically designed to withstand the ravenous hunger of a metallic swarm that devours anything organic. One particular recording of their arguments regarding Faro’s complicity in creating said swarm reveals the vitality of using rhetoric to either downplay or emphasize the severity of an ecological crisis:

Elisabet Sobeck: This isn’t a “glitch,” it’s a catastrophe.

Ted Faro: Fully aware. It’s bad.

Elisabet Sobeck: “Bad?”

Ted Faro: Jesus, Liz...

Elisabet Sobeck: It’s not “bad,” Ted. It’s apocalyptic. You built a line of killer robots-

Ted Faro: Peacekeepers!

Elisabet Sobeck: - That consume biomass as fuel –

Ted Faro: In emergencies!

Elisabet Sobeck: -And you made them capable of self-replication.

Ted Faro: Limited self-manufacture. Controlled.

In Dr. Sobeck's own words, Faro's 'rogue swarm' answers to no nation but itself, and it devours biomass at a rate that would "strip the Earth bare in fifteen months" – not too far an exaggeration from the use of apocalyptic rhetoric and deadlines for taking action by climate activists to try and emphasize a sense of urgency for industrial and political audiences. Whereas many climate-fiction narratives struggle to find a symbol that accurately illustrates both the danger yet abstractly long-term nature of climate change, the use of a rogue artificial intelligence not far off from SkyNet of the *Terminator* franchise helps to both provide a coherent instance of a disaster to combat as well as to provide a more sinister tone to the animalistic nature of the machines that still persist in Aloy's future. However, while the use of rhetoric regarding a tipping point in the planet's boundaries insists, at the very least, on radical action necessitating "a reduction in the overall size of the global economy" (Angus 105), Dr. Sobeck's proposed solution is one that cynically accepts the inevitability of mass death and instead seeks to work with the US armed forces and Faro's resources – albeit through blackmailing him with the threat of revealing his true culpability in the disaster – to create a global-scale geoengineering project that intends not to defeat the swarm in a single lifetime but to create artificial intelligences and vaults capable of intelligently reseeding the world centuries after 'Zero Day', the deadline at which the swarm was predicted to have consumed all organic life. In order to buy time for the technocratic minority of experts delegated to work on this project, the US armed forces intentionally propagate a lie to the billions of people drafted into combating the swarm: that the

Zero Dawn project was a weapon capable of eliminating the robotic plague and preserving modern-day civilization, and not a lie banking on the mass sacrifice of present-day generations for the sake of unborn future lives. While the general involved in said deception program admits to his guilt, leaving behind a file comparing himself to genocidal dictators such as Hitler in terms of the scale of deaths he is complicit in by leading ‘Operation: Enduring Victory,’ Dr. Sobeck reassures him by saying “Were it not for your actions...our actions...there wouldn’t be any posterity to judge us.” Through the course of witnessing a gorgeous future world whose beauty is directly connected to the achievements of Dr. Sobeck, the grim cost of her utilitarian measures seem tacitly justified by the splendor of the world the players get to indulge in. Furthermore, the positioning of the US military as a reluctant collaborator to an atrociously costly yet ultimately well-intentioned project – as opposed to questioning their potential complicity in providing the demand for war machines that had caused Faro’s robots to become uncontrollable in the first place – brings to mind Rob Nixon’s critique of a paucity of works that discuss “the impact of U.S. imperialism on the poor in the global South” (Nixon 33). The destructive capacity of militaristic technology is displaced onto the concept of an artificial intelligence surpassing human control, and the splendor of the preservative technology created by Zero Dawn glosses over the presumably tremendous material costs of acquiring the resources necessary for such a project. More pertinently, while the massive scale of the human sacrifice by the US military and their corporate backers is acknowledged through dialogue, there is barely any critique presented against the military’s insistence that there was no other option available but mass murder – mirroring rhetoric that treats the violence of contemporary military actions as both unavoidable and done with the best of intentions.

The Zero Dawn project itself is not just the singular work of a brilliant individual, however, but a collaborative effort which involved several tiers of technological and academic experts – classed into Gammas, Betas, and Alphas – who had been drafted without prior consent into the program in order to focus on particular facets of the terraforming technology entitled GAIA. The crew is international in its scope, including an Iranian, a South African, and a Frenchman, and were selected by Dr. Sobek for their intellectual qualifications rather than their past occupations (university lecturers or fugitive hackers). In spite of this, the artificial intelligences they are all drafted to work on have names rooted in the pantheon of Greek mythology, indicating a privileging of European cultural roots over others they seek to save. To elaborate on this privileging, one particular program – APOLLO – was designed by a Dr. Samina Ebadji as a repository of human culture designed to educate future generations about how to avoid the mistakes of the past, containing over 180 million data entries “translated into Mandarin, English, Spanish, and Arabic”, the implied prevalent languages of the world Dr. Ebadji was operating in. Furthermore, APOLLO was intended to educate future humans through ‘gamified holographic interfaces’, wherein the user was to begin at a ‘kindergarten’ level and ‘progress’ upon successful completion of each educational level; however, due to sabotage from Faro, APOLLO was never able to educate its pupils beyond the elementary level, thereby explaining how so many disparate future populations appear to share the same spoken language of English while simultaneously lacking any cultural memory of past English-speaking nations.

The use of Greek mythological names to personify the non-human intelligences of *Horizon: Zero Dawn* invokes the archaeological record of personification that has existed as a rhetorical technique for describing the natural world for millennia, with artistic representation/anthropomorphism being dated as far back to the Stone Age (Moore 29).

Personification and anthropomorphism are “often linked to emotional appeals” yet also operate “much the way metaphors do – by comparing (like) things”; Charles Darwin, although very much influenced by the Enlightenment-era ideas of the mechanical universe, faced opposition from Positivists who disagreed with his anthropomorphic depiction of natural selection (Moore 35). Within the field of material ecocriticism, which holds the view “that non-human matter has an incalculable agency of its own” (Clark, *The Value of Ecocriticism* 111), posthuman scholars such as Claire Colebrook critique the use of anthropomorphism in portraying non-human materials as still comprising “a way of moulding ‘all elements into *what they mean for us*’ (115, emphasis added)” (Clark, *The Value of Ecocriticism* 134). Being of human origin and created to fulfill anthropocentric directives, the AI – and the machines they birth and control – represent a conception of post-humanism that is ultimately still intelligible to contemporary audiences through their communication in English, and in their use of animal and humanoid forms that are based on lifeforms known in popular culture rather than more obscure species, hence the presence of robotic dinosaurs and pterosaurs but no replication of trilobites. Although Aloy is uniquely positioned to understand the rational material origins of the AIs who influence her world, such a perspective does not discount the similar material conditions that caused tribes of a different epistemological standpoint to comprehend the inexplicable nature of such ancient intelligences as indistinguishable from their notions of the divine; GAIA may on one hand be a human-made creation, but the scale at which she operates and the nurturing purpose she serves renders her more or less indistinguishable from the ancient notion of the Earth itself as a “mother” (Moore 46).

Another vital AI of note is HADES, which serves as an antagonist in Aloy’s era due to being awakened to fulfill a function of obliterating the biosphere in a similar vein to Faro’s

robotic swarm. As HADES' creator, a former criminal and horror enthusiast, explains, HADES was actually designed as a supplement to GAIA's terraforming ventures, where in the event of GAIA making errors in reconstructing the biosphere by parameters the Zero Dawn project members had set out, HADES was a programmed extinction event intended to 'reset to square one'. This process is shown to be an existential danger for the lifeforms of Aloy's era, as it is revealed that HADES' premature awakening is actually an unexpected reaction to an electromagnetic signal that caused GAIA to self-destruct and her own sub-functions to attain a self-sufficiency that can be either ecologically destructive in the case of HADES, beneficial in the case of AIs such as the flora-preserving DEMETER and fauna-restoring ARTEMIS, or ecologically neutral in the case of HEPHAESTUS, which had redesigned the Faro machines to replace environmental niches formerly inhabited by biological lifeforms until predation from humans prompted it to program robots specifically designed to eliminate humans. In the present world of Aloy's time, these technological remnants take on a spiritual dimension from the perspectives of humans, with Aloy's home tribe, the Nora, building a matriarchal religion around the 'All-Mother' – an amalgamation of cultural memories of being nurtured by a feminine AI along with the presence of an automated female voice that speaks from the mouth of a cave, which in actuality is the door to a GAIA facility locked to anybody lacking the genetic data of Zero Dawn personnel; Aloy, initially considered an outcast for appearing at the mouth of the cave with no human mother in sight, is revealed to be uniquely capable of accessing this facility and all other technological artifacts due to her genetic lineage from Dr. Sobeck.

Aloy's aptitude with using digital technology is established to be a result of her discovering in her childhood a rare handheld sensory interface device known as a 'Focus,' a technology capable of tracking nearby machines and scanning them to reveal their inner

workings, decoding datapoints, and revealing marks left behind by humans and machines alike. However, while this use of a technology implied to have been common-place in its own era sets up Aloy as an aberration, she is further established as uniquely equipped to access and utilize the technological knowledge of the past due to her being a genetic clone of Dr. Sobeck, designed specifically by GAIA in order to stop the extinction event of HADES and restore the terraforming functionality of the Zero Dawn project. This revelation reduces the potential of a mass distribution of knowledge and power to a narrative celebrating a chosen individual's inherent exceptionalism. Aloy's status as a being both physiologically and technologically modified to reinterpret the world invokes Donna Haraway's idea of Cyborg writing: "the power to survive, not on the basis of original innocence, but on the basis of seizing the tools to mark the world that marked them as other" (Haraway 33). Her exceptional physicality goes hand in hand with a new capacity to shape the fates of human, nature, and the intermediary of the machine. Although the resources necessary to create Aloy were provided by Faro's by-then defunct corporation, the impetus to incubate and birth her was the result of a posthuman creation exerting agency independent of its long-dead creators. Aloy's nature as a liminal being is discussed in the conversation following this revelation:

Aloy: "I never had a mother."

Sylens: "What are you talking about? You had two. A dead woman and a machine."

Aloy: "I'm not a person, I'm an instrument. Manufactured by a machine. Born in destruction...and fire"

Sylens: "To quench the flames and heal the world. How tragic, to learn you're a person of towering importance!"

As opposed to Sylens, who describes himself as having had a “natural birth,” Aloy considers herself as what Harraway would call in her paper *The Promise of Monsters: A Regenerative Politics for Inappropriate/d Others* as an “inappropriate/d other”: a being born not alone from a physical body or from a contemporary society but instead a third subjective position, “a place composed from interference patterns” (Harraway 70). Aloy was not created from the will of Dr. Sobeck – who had in fact forbade the prospect of cloning within her lifetime for fear of the ethical consequences – or from a member of the Nora, but was an unexpected development created by GAIA in an attempt to replicate its ‘mother’ to solve a problem the AI had not been programmed to correct on its own. The use of a protagonist who is not entirely human within an ecocritical text can challenge the boundaries of what is to be considered human in relation to the environment, in a similar way to how the use of a mutant human narrator who rejects being labeled human in Indra Sinha’s *Animal’s People* “poses profound questions about the limits and value of the human” (Nixon 57). In Aloy’s case, this revelation of being the child of the patron deity of a culture that had up until moments earlier seen her as the potential spawn of a “metal devil” only leads her to consider their abrupt worship another facet of her dehumanization. Her response reflects this frustration while also pushing for her people to take a broader view of their relation to the world: “First you shun me, now this?! I will NOT be worshiped! I’m not your “Anointed!” I don’t belong to you! There’s a whole world beyond your borders. Whole tribes of people just as good as you, and it is all in danger.” As a being generated “by the collapse into each other of the technical, organic, mythic, textual and political” (Harraway 112), Aloy’s positioning as a being not easily bound to any single reductive identity (human/machine or devil/goddess) allows her to exert an agency that enables her to shape the world to an extent that an ordinary being may not.

With Dr. Sobeck's framing as a brilliant savior of the past (coupled with her name invoking Sobek, a fertility god of the ancient Egyptians) and an emphasis on Aloy sharing her physical and emotional traits of willfulness and compassion, Aloy can thus be interpreted as a resurrection of a messianic figure, the sole savior capable of restoring the world to its original glory. In spite of being an adolescent girl, her ability to access and understand technological artifacts outstrips the generational knowledge of her tribal elders and draws the eye of an experienced explorer (and fellow Focus-user) named Sylens, who admits that she has acquired more knowledge in a handful of hours than he has amassed in decades.

Where Dr. Sobeck's desire to re-seed the biosphere was contrasted against Ted Faro's exploitation of technology for personal greed, Aloy's pursuit of knowledge only in the purpose of understanding her personal history and preserving the world is contrasted against Sylens' amoral treatment of knowledge at the cost of human lives. In particular, Sylens was responsible for collaborating with the reawakened HADES, his curiosity to understand the 'Old Ones' leading him to indulge in its pre-programmed destructive functions and form the cult of the Eclipse – who were distributed mass-produced Focuses in order to facilitate long-range communication, albeit for a military purpose rather than for civil livelihood. He helps HADES wreak destruction upon the world, killing countless living beings and even releasing a toxin that poisoned the very soil. Even after helping Aloy to bring HADES under control, thereby eliminating the communications network that had been gifted to the Eclipse members, Sylens dismisses the costs of his actions and ends the game insisting on continuing his pursuit of knowledge with a recaptured HADES. Through the conflict of *Horizon: Zero Dawn*, in which past knowledge and technology has been manipulated without care for the consequences, and ending with the technology to access said knowledge remaining instantiated in either the heroic

Aloy or the amoral Sylens, there is a cynical implication that merely allowing technological redistribution without careful instruction from experts can lead to global collapse. Furthermore, humanity's relationship with the world is one in which people hold power supreme enough to be mistaken for the divine; simultaneously capable of destroying the biosphere while also leaving behind enough traces of themselves to thoroughly restore it. Technology is established to be a materiality not distinct from humans and nature but rather inextricably bound with these ideas, not just through various machines echoing the physicality and behavior of animals and humans, but also through the implication that the benefits and detriments of their ecological impact depend on the morality of the humans creating and using them. Whereas HADES' first human contact was with a man who callously manipulated it out of his curiosity, GAIA is established to have been raised as a surrogate child by Dr. Sobeck and, by extension, perceives Aloy and her purpose of preserving the biosphere as a means of paying back this personal bond. Beyond the gendered motif of a maternal creator begetting maternal saviors and masculine exploiters begetting masculine destroyers, it is also conspicuous that GAIA is personified through a hologram of an African woman – evoking the culturally-accepted notion of Africans as the 'first humans' – while HADES remains disembodied, with his servants being insect-like war machines who are designed to be more predatory and aggressive compared to GAIA's mechanical creations, which were originally more peaceful and prey-like before HADES' machines sparked a misanthropic transformation in their behavior.

Although *Horizon: Zero Dawn* establishes that the distribution of technology without education will have negative consequences, it also possesses a critique of ignorance as an intentional propagation by those in power so as to continue maintaining their own legacy. As George Marshall suggests in his study of climate campaigners, the rhetoric used to make cases

for and against environmental policies contains similar archetypes about “what makes a compelling narrative – cause, effect, a perpetrator, and a motive (ideally one that is consistent with our assumptions about how we believe they might act)” (qtd. in Clark, *Ecocriticism on the Edge* 178). In a game that clearly contains all of the aforementioned components for such a narrative, the actors within it struggle over who gets to have their narrative last the longest. This is apparent in the revelation of Faro’s destruction of the APOLLO cultural repository and subsequent murder of his fellow Zero Dawn staff, justifying his mass-murder and cultural obliteration by saying:

I can’t stop thinking about the ones who’ll come after us. Those innocents. Those blameless men – and, and women. We’re gonna give them knowledge? Like it’s a gift? [...] It’s not a gift, it’s a disease! They’re the cure, and we’re gonna give them the disease? Our disease?! No, we can’t. And it’s not too late. If we’re willing to sacrifice. [...] I’m sorry. Really, I am. But sometimes, to protect innocents...innocents have to die.

This desperate attempt to cover up the past disgusts even Sylens, who points out that the so-called “blameless innocents” of the future were fully capable of committing horrors with or without knowledge of the past. With Faro’s constant downplaying of his own culpability in the disaster his robots wrought, and his bitterness toward Dr. Sobeck “playing the savior and the martyr all at once,” his seeming concern for keeping future generations ignorant by blaming technological knowledge as inherently bad can be seen as an attempt to displace the blame for the human cost of the Anthropocene upon a non-human force, and in particular avoiding his own legacy of being forever vilified by future generations. There is an additional element of patriarchal bias in his offhand acknowledgment that women may be among the “blameless innocents” of the future. Yet his rhetoric about sacrificing innocents to protect other innocents

renders him not too far off from the Zero Dawn staff, who had similarly agreed to sacrifice the majority of the human race without their consent in order to leave behind a legacy that they themselves could posthumously shape. It is possible to see Faro as resisting the easy reductionism of a predetermined historical narrative where he is an individual antagonist against a collective good in favor of creating a blank slate where future humans could come up with their own conclusions. In any case, Faro remains only partially successful in this historical revisionism; his erasure of APOLLO may have rendered the various human populations of the future ignorant of the specifics of their predecessors, but the Zero Dawn project itself still had enough contingencies and technological remnants left behind to not only retain evidence that historical tampering had occurred to begin with, but to provide a perspective still thoroughly slanted toward emphasizing Dr. Sobeck as the ultimate moral victor in this historical struggle.

Despite the absence of a historical repository to draw on, the human populations derived from Zero Dawn's vaults still resemble societies analogous to those familiar in the anthropological records of a real-world audience; in particular, the game's developers were inspired by the environmental determinism of anthropologist Jared Diamond's *Guns, Germs and Steel: The Fates of Human Societies* (Condit) to design the fashion, architecture, technology and beliefs of its fictional cultures based on the lands they inhabit. The artbook for *Horizon: Zero Dawn* details further information regarding the developers' intentions regarding various tribes: the matriarchal Nora, who live outside the mountain containing the vault from which they were created, interpret the vulva-shaped gate and feminine voice of its AI guardian as proof of origin from a mother goddess, while still shunning the ruins of other ancient civilizations as evil – subsequently their clothing is mostly composed of worked leather with various decorative elements derived from parts of female anatomy, particularly the womb. By contrast, the

patriarchal Carja, who have situated their kingdom atop a large mesa, worship the sun as a consequence of their location enabling the sky to seem almost endless, while also integrating motifs of birds and mechanical circuitry into their clothing and architecture to reflect the creatures they most commonly see in their world (The Female Gaze). Although Aloy's position as an empowered being whose origins come from a contemporary technological creation rather than from technologically 'underdeveloped' tribes is problematic – a status compounded by her being a young white woman dressed in clothing evocative of indigenous tribes – the ethnic composition of the societies is remarkably diverse in an effort to mitigate reducing any particular ethnicity to a static culture. Discrimination amongst tribes is determined based on geography and cultural traits, rather than skin color or hair type, and thus paints a post-capitalist world that is not explicitly beholden to white supremacist social standards; however, this seemingly utopian view of humanity surpassing contemporary bigotries still owes a secret lineage to western creators operating under a logic of eugenics. Beyond the Zero Dawn project being headed by the American Dr. Sobeck, the man in charge of the AI specifically designed to “continue the human race” was a French-German scientist who insists that his goal was to “preserve the human genome, not alter it.” The DNA samples he uses to form the humans of the post-apocalyptic world are “A snapshot of human genetic diversity, literally frozen in time – the genetic quintessence of our species, unmodified” – in light of this admission of selecting which people to preserve, the unspoken question of which populations were not deemed worthy of recreation arises.

While the artifacts of *Horizon: Zero Dawn* give primacy to the heroic narrative of Dr. Sobeck, which in turn is emphasized in the primary narrative of in-game cutscenes the player must watch in order to complete the game, there remain many other collectable artifacts that can

be optionally pursued by the player in order to further understand Aloy's present and past. As Stephanie Foote says in her essay *Enviroblogging: Clearing Green Space in a Virtual World*, "everyday practices of consumption and waste are now part of a dialogue about issues that necessarily implicate individual social actors in a larger understanding of global patterns of consumption, circulation, and waste" (74); items that were discarded or considered private material become material that Aloy can both sell for personal gain and use to bolster her archaeological journey. Although these four sets of collectables – Vantage Points, Banuk Figures, Metal Flowers, and Ancient Vessels – can be acquired and then salvaged/understood in any order, Vantage Points and Banuk Figures tell a miniaturized narrative that was intended by its original creators to be understood in linear fashion; paralleling the way in which archaeological research involves acquiring and then trying to temporally reconfigure disparate artifacts into a chronological understanding of the world. Within a post-capitalist status quo, economic exchanges depend not on the surplus value of money but instead rely on the mutual bartering of material resources salvaged from the world – such salvage rhythms do not, in themselves, mean the relationship between humans and the post-apocalyptic world cannot mirror the primitive accumulation that preceded capitalism (Tsing 134). The Ancient Vessels are coffee mugs from various 'modern-day' American corporations, reinterpreted by merchants and scholars of Aloy's era to have had crucial roles such as shaving beards or containing oils for sacred rituals because the mugs were considered by futuristic humans to be too well-crafted to be mere cups; a reminder of how present-day cultural biases can impact what the remnants of past cultures are interpreted to be, with Aloy's skepticism (bolstered by her inborn link to the past technology) helping to position her with the player in understanding the present world's interpretations to be misguided. What would be considered garbage in the contemporary world

becomes in the world of *Horizon: Zero Dawn* what Stephanie Foote would call “the visible interface between everyday life and the deep, often abstract horrors of ecological crisis” (Foote 84). The Metal Flowers, on the other hand, represent artifacts left behind by the AI intelligences as a response to the signal that had caused GAIA’s self-destruction and their own birth as sentient individuals. In addition to containing fragments of code that can be translated by Aloy’s focus into poems taken from Japanese, Arab, Turkish, Indian, Chinese, British, and American authors (it should be noted that the highest ‘tier’ of linguistic complexity uses poets from the latter two cultures, particularly Thoreau and Wordsworth, and that all of the ‘lower-tier’ writers had come from esteemed backgrounds in their cultures), these flowers are discovered to have taken root around the remains of Dr. Sobeck – therefore implying that the mechanical intelligences tending to the world are honoring the cultures that have been lost by integrating their literature into the environment itself.

The Banuk Figures are stick representations of a mechanical beast, left behind by an exiled member of the Banuk Tribe along with paintings and letters addressed to his son – as the Banuk remain one of the most mysterious societies within the base game, this collectable provides a perspective from an individual whose ousting from the tribe retains that mystery while also serving to mirror Aloy’s personal journey from a motherless outcast to her tribe’s “Anointed Daughter of the All-Mother.” Last, the Vantage Points – a double entendre for the high peaks scaled in order to find them as well as the name for the technology they are encoded in – are memory logs left behind by Bashar Mati, a former employee of Faro Automated Solutions, who upon discovering that his world was condemned to an “apocashitstorm” set about trekking across various locations important to him while sharing his personal thoughts and dreams with his dead mother. Bashar’s narrative in particular gives voice to one of the innumerable individuals

condemned to die by Faro and Zero Dawn, who upon discovering the imminent and unstoppable nature of an apocalypse his employer was complicit in, saw the entirety of the human race as doomed to a fate as ignominious and bleak as his own, and subsequently repurposed some long-term time capsule technology from a forgotten FAS project in order to “tell a different story” from the existential oblivion bearing down on him. Although aware of how unlikely it is for his story to be recovered, Bashar’s efforts are absolved by Aloy managing to discover and access his recordings. When contextualized against the grand scale of social elites working to repair or destroy the world, the individual narratives of civilians like Bashar Mati or fallen soldiers who died in Operation: Enduring Victory serve not just to provide a microcosm of what is otherwise the unseen human cost of the past apocalypse, but also to challenge the triumphalist framing of the main narrative of the Zero Dawn project as a necessary evil – for all of these people had died hopelessly in a disaster they had little personal complicity in causing, unaware that their fates were decided for them by experts whom they had never met. Such people would likely not have allowed the Zero Dawn project to occur had they been made aware of its true sacrificial nature. Or, perhaps more accurately, they were left ignorant in order to avert the outrage at the forces that considered Zero Dawn an acceptable contingency in response to a capitalist crisis.

Sylens’ final conversation with HADES hints at a greater conflict that Aloy is not yet aware of, implying that the signal that had caused GAIA’s self-destruction and HADES’ rampancy had been sent by some unseen ‘Masters’. *Horizon: Zero Dawn* establishes that very few people born in the tribes of the post-disaster world possess the technical capacity to access and manipulate digital technology beyond even Sylens and Aloy, implying that other methods of preserving human civilization beyond the mass-sacrifice and terraforming goals of Zero Dawn were possible. In addition, revealing that an eco-catastrophic “accident” was in actuality

intentional calls into question the nature of the original “glitch” that had turned Faro’s robots rogue in the past, allowing room to reframe the accelerated over-consumption of the planet’s resources as a logical extreme of capitalism rather than an aberration, or even as an intentionally instigated global reconstruction. While *Horizon: Zero Dawn*’s historical focus is primarily on identifying the man to blame for the old world’s end and the woman who built the new world, there is a sizable amount of data referring to the Odyssey: a colonial spaceship constructed with the funds of a futurist consortium composed of the world’s seventy-seven wealthiest trillionaires, which shared its terraforming, life-preservation, and artificial intelligence technologies with Zero Dawn. Although the Odyssey’s funders later inform Dr. Sobeck that the ship had exploded while attempting to leave the solar system, her complicity in lying to the public for the sake of Zero Dawn could indicate a further dishonesty done to feign the impression that there were no other alternatives to their personal project. In reality, private companies led by the likes of Elon Musk and Jeff Bezos have declared their agenda of mining extraterrestrial planets and establishing their manifest destiny in other worlds, justifying their ambition with the claim that the Earth is inescapably doomed while side-stepping their own complicity in such a narrative. This would provide a new dimension to Faro’s execution of the Zero Dawn crew and attempted sabotage of their databases, as their goal of providing future human populations with a modern-day cultural heritage would have complicated his desire – and those, perhaps, of other powerful individuals – to shape the trajectory of humanity and the biosphere according to their own specifications. Although such questions will remain unanswered, at least until the release of the sequel, *Horizon: Forbidden West*, the fact that Dr. Sobeck’s death is confirmed while the final fate of Faro remains unknown implies that there is yet more to be revealed of his involvement in the technological threats to the biosphere.

The primary narrative of *Horizon: Zero Dawn* is a bildungsroman where the singular journey of an exceptional young woman reveals her to be uniquely tied to the history and destiny of the world she inhabits. While the collectables and side quests offer room to explore other narratives that broaden the world beyond the narrow scope of an individual heroine's journey, the potential to properly conceive of the sheer scale of the eco-catastrophe that begat this virtual world is constrained by the fate of such a world being able to be so thoroughly shaped by a single person (or an exceptional few). The side-effect of such a reductive framing of scale ostensibly to acquire a sense of personal agency can, as Timothy Clark states, be a way to evade thinking too deeply about global problems, in a similar vein to "thinking of private vehicle use solely in terms of individual right, or environmental issues as solely a matter of green consumer choice" (*Ecocriticism* 74). What purpose does the establishing of Aloy as uniquely linked to the fate of the ecological world truly serve to foster an appreciation and desire to preserve said world? What options are available to people in addressing the ecological malaise of this world if they are not an Aloy or Dr. Sobeck? Clark suggests that this issue of properly delinking the vast scale of Anthropocentric disaster from the limits of an individualist perspective may be one bound to the conventions of the genre form, which in "politically engaged novels and films almost always dramatize the issues in the form of a confrontation or conflict between the stance of characters with opposing views, so that a reader's or viewer's engagement with intellectual debate tends to become eclipsed by familiar modes of suspense and identification" (181); a video game's interactive nature may seem to hold the potential to break away from this, although *Horizon: Zero Dawn*'s plethora of cinematics and implementation of dialogue scenes where Aloy can choose from three emotional 'modes' of response ('heart'/empathy, 'fist'/aggression, 'brain'/logic) allow for a limited range of potential interpretations of the discoveries the player

makes regarding their world. In addition, while the gameplay remains focused on Aloy's perspective rather than have her travel with companions, there is the option to complete various side-quests that provide narrative closure on certain characters and also make the final levels potentially less frustrating for players to fight through.

Horizon: Zero Dawn has largely received praise among gaming journalism outlets for its cinematic presentation, production values, and a narrative that “makes for an exciting mixture of story tropes that skim the surface of being overused but skillfully avoid sameness” (Vincent) although a common critique pertains to the gameplay loop being overcomplicated and feeling “like a grind” (Newton). One review summarizes it as “The beautiful dead-end of open world games” (Swearingen), contextualizing a critique of the repetitive gameplay and a surplus of content distracting from polishing the production values of the main narrative by identifying these flaws as evident in many other contemporary open-world adventure games such as *Grand Theft Auto*, *Far Cry*, *Assassin's Creed*, and *The Witcher 3*. Swearingen identifies an apparent paradox in the development of game narratives, where relatively smaller-budget works such as *Gone Home* and *Firewatch* get a leeway to experiment with storytelling within the medium while critically-acclaimed developers such as Naughty Dog exchange their high cinematic production values for fairly un-innovative game design. It would seem that some of *Horizon: Zero Dawn*'s narrative conceits, such as its emphasis on an individualistic power fantasy and gameplay entailing salvaging every scrap of the world and murdering thousands of beings, are a result of conforming to the features of the open-world action adventure video game genre – which would provoke an interrogation of exactly why such fantasies of individualism, theft, and killings are deemed to be necessary parts of interactive entertainment by major corporations.

Horizon: Zero Dawn's optimism about the power of technology to recover the biosphere from human devastation is tinted by the real-world exclusivity of such media – by ensuring that the game is only to be released on PlayStation 4, its producers in Sony Interactive Entertainment narrow the potential target audience of those who can access such a game in order to ultimately encourage the purchase of their game console. And just as the game glosses over the material costs required to achieve its ecological splendor, the severe material cost of producing the PS4 console and any particular game for it requires a degree of environmental and human exploitation that contradicts the utopian world offered by the game. As examples, minerals such as tungsten and tin that are used within game consoles are acquired through the exploitation of child laborers in Global South countries like the Democratic Republic of the Congo (Crecente), and the process of “crunch periods” has been for years a common practice of forcing game developers to labor for months of unpaid overtime with little regard for their health (Schreier). Far from considering decreasing the costs of producing videogames, publishers are instead intent on continually ramping up the budgets of their productions (Forbes) along with increasing the prices of future games for upcoming consoles.

The target audience for videogames is assumed by the producers to have a disposable income and loyalty to a particular brand of games, although footage of *Horizon: Zero Dawn* has also been made freely accessible on the online video-streaming platform, YouTube, for audiences to consume. This allows for a broader range of audiences privy to this story than just PS4 owners who have paid for the game, although it should be acknowledged that the uploaders of long-form video are still incentivized by the capitalist mechanisms of YouTube to include sponsorships within their videos for personal financial gain, and that a common form of comment on said videos is a recommendation that viewers purchase and play the game for

themselves. The issue of information accessibility will only increase in urgency for the goals of a media archaeologist, as the “recent turn from the epoch of electronics to that of information means that although data-processing media are still rooted in archaeologically accessible materialities (hardware, physics), their archaeology of knowledge requires competence in informatics (mathematical logic, technique, and control) (Ernst 242). This ability to freely access footage of the game will position it in starker contrast to properties owned by Disney, whose copyright bots are strict enough to either remove or demand the drastic editing of any footage of films that last more than a few seconds, therefore pushing potential audience members to spend money on consuming media owned by the corporation. It is possible that the participatory aspect of video-games is what allows long-form recordings of gameplay to be streamed for free without drawing the ire of copyright bots; video games are advertised as providing a degree of agency to the user, and as such there remains an incentive for the user to have their own ‘personal’ experience of the game. While this agency is illusory, as *Horizon: Zero Dawn* is a linear narrative regardless of what choices a player may make, this extra degree of availability for public consumption does highlight a way in which interactive narratives may come to supplant films as a narrative medium.

CHAPTER II: PRESERVING THE BALANCE IN *AVENGERS: INFINITY WAR*

Like the video-game industry, the blockbuster film industry in which *Avengers: Infinity War* was produced in April 27 2018 is a vast system in which profit drives the narrative decisions and determines what causes and solutions to climate catastrophes are allowed based on market testing. Part of the Marvel Cinematic Universe that includes other films like *Iron Man*, *Captain America*, *Spider-Man*, and *Black Panther*, which I also address in brief in this chapter, *Infinity War* and its chronological follow-up, *Endgame*, was especially dependent upon an audience that had previously consumed past films. When focusing on *Infinity War*, it is important to address the amount of control the Disney corporation has over media consolidation and the wealth of scholarly criticism involving the ideologies represented in previous *Avengers* films in order to understand *Infinity War* as a culmination of ideas set in place by many preceding narratives. What does it mean for the heroes to be unable to voice their own counterargument against the antagonist's motivations beyond reacting to his violence, to largely gloss over the visceral consequences of such mass-death, and to ultimately use time-travel to avoid dealing with the existential questions he was seeking to address?

Since 2009, Marvel comics has become a subsidiary of the Disney entertainment conglomerate, which as of 2020 owns nine film studios, holds a majority share in at least three major television networks, four streaming services, and over a dozen franchise brands. It may be simpler to list the media conglomerates that Disney does not control, in particular Comcast and Time Warner Inc. (Hallman) as well as National Amusements, News Corp, and Sony. Disney has an asset value of \$88.1 billion, with the hourly salary for its CEO Bob Iger being \$21,586.54 (WebFX Team). Although Disney has marketed itself as championing progressive values alongside retaining a family-friendly appeal, their propensity for only marginally inserting

representation of minorities in order to facilitate seamless removal for disapproving audiences has been critiqued for years, be it the removal of a lesbian kiss for non-western theatrical releases of the 2019 Star Wars film (O'Connor 2019) or their consistent censorship of queerness even in the background characters of TV shows such as *Gravity Falls* (Kaiser 2017). Furthermore, Isaac Perlmutter – former Marvel CEO and present-day Chairman – holds the honor of being one of president Donald Trump's largest financial contributors and a regular dinner guest at Mar-a-Lago (Sonoma 2019). By understanding the sheer pervasiveness of Disney's media footprint accompanied by what its leadership deems acceptable and/or unacceptable to depict, it becomes apparent that commercial and political motives inform any artistic action they release for public consumption. And with the Marvel Cinematic Universe films continuing to achieve box office records, there remains a large viewer base that has become accustomed to the characters and narratives associated with this brand.

Infinity War's choice of ecoterrorism as the stated motivation of its antagonist situates it within a larger cultural context of similar blockbuster films invoking the specter of the eco-terrorist. From the antagonist of the 2014 *Kingsman: The Secret Service* aiming to preserve the rich by slaughtering the poor, to Atlantean Prince Orm seeking vengeance on humanity for polluting the seas in 2018's *Aquaman*, to Dr. Emma Russell awakening titanic beasts to restore 'ecological balance' while still achieving a redemptive death in the 2019 *Godzilla: King of the Monsters* (Terasaki 2019), the desire to challenge a status quo complicit in structural injustices such as environmental devastation is one either displaced onto an antagonist who can be disposed of, or reworked into a hero with their subversive edges sanded off. Within the Marvel Cinematic Universe, this pattern manifests through the vilification of an African-American radical seeking to redistribute an isolationist African nation's resources to invert the global

oppression of Africans in *Black Panther*, in the supervillains of *Spiderman: Homecoming* and *Spiderman: Far from Home*, who are former Stark Industries employees who had been mistreated by Spiderman's current employer, and in *Iron Man*'s antagonist's ostensible outrage at his family's crimes being dismissed by their personal "bitter, self-serving, and duplicitous" natures (Immerwahr). Spiderman and the Incredible Hulk stand out as superheroes whose current incarnations in the *Avengers* are significantly less threatening to the status quo compared to their previous incarnations (particularly Sam Raimi's *Spider-Man* trilogy and Ang Lee's *Hulk*), with the former having been a working-class orphan whose beloved uncle has now been supplanted by billionaire playboy Tony Stark, and the latter having been an abuse survivor whose persecution by the US military has been glossed over to ensure that his destructive capacity can be converted into labor useful for the Avengers.

The contrast between the older incarnations of these characters and the corporate-friendly versions present in the *Avengers* films can be ascribed to the cultural milieu surrounding their creators: for instance, Captain America had initially been conceived in 1941 by a trio of Jewish artists whose depiction of an Aryan hero punching out Hitler was a political admonition for the US military to battle the Nazis, whereas the Fantastic Four, Hulk, and X-Men of the early 1960s were all flawed products of science gone wrong (Immerwahr) to reflect the anxieties radiating from the introduction of the nuclear weapon. On the other hand, the first film in the Marvel Cinematic Universe chose as its focal character the billionaire industrialist Tony Stark, a war profiteer whose exceptional abilities are ascribed to his wealth, inborn ingenuity, and close allegiance with the US military. The superheroes who receive stand-alone films that set up plotlines to be followed through in the *Avengers* crossovers are likewise a collection of social paragons and military officers: beyond Tony Stark, there is a prince and god in Thor, and a

symbol of militaristic pride for the ‘Greatest Generation’ in Captain America/Steve Rogers.

Although there exist lower-class figures who appear in *Infinity War*, such as ex-fugitives Wanda Maximoff and Bruce Banner, defected spy Black Widow/Natasha Romanoff, or space pirates Starlord and Gamora, *Infinity War* primarily focuses on Thor, Stark, and Rogers as defenders of the status quo that the likes of Thanos seek to overturn.

Although Thanos had appeared in prior films, including the post-credits sequence of the previous *Avengers* films and in the *Guardians of the Galaxy* films, as a mysterious interstellar warlord who had manipulated other antagonists into helping him acquire various stones of cosmic power, the decision to frame him as motivated by resource scarcity was unprecedented compared to previous depictions. Whereas the comic-book incarnation of Thanos had sought to commit mass murder out of a desire to garner the love of an anthropomorphic incarnation of Death, the Russo brothers’ decision to change his genocidal motivation to one of a disgraced scientist seeking ecological balance was framed as a desire to have something more “grounded,” likewise emphasizing his relationship with former slave/‘daughter’ Gamora to “humanize Thanos and make him more understandable than bonkers” (Buchanan 2018). The claim that a metaphysical deity would require an extra dimension of suspended disbelief seems arbitrary in a setting where one of the central figures is a living god, and likewise the assertion that the antagonist must necessarily be “understandable” brings into question what the protagonists stand for in opposing them. However questionable, this decision was effective in popularizing in public discourse ideas of resource distribution and whether Thanos’ solutions were “right” or not. Yale Climate Connections’ review of *Infinity War* critiqued the film’s use of an ostensibly sympathetic motive for its villain as ultimately toxic, making it more difficult to seriously address the real-world issues of climate change for fear of either being equated to the genocidal

extremism of Thanos or actually legitimizing his actions through not providing an effective counter-example to his solutions. In their words: “First the writers have the villain describe a chronic problem, population and the state of the environment, in such stark terms that extreme measures seem warranted. But those extreme measures then become the dramatically acute problem at the heart of the movie. When that problem is solved, by dispatching the villain, the original problem is forgotten.”

Additionally, framing environmentalism as a slippery slope to mass murder serves to poison the well from both reactionary and progressive perspectives, with the former praising “Marvel’s Conservative Turn” in *Infinity War* for framing Thanos’s actions as equally delusional to Malthus’s predictions, and the latter critiquing it for framing Anthropocentric discourse as one that views “humanity as an undifferentiated whole and ignores differences between countries, classes, and institutions” (Angus 225). On the online forum Reddit, however, the discourse surrounding audience reception to Thanos’s ideology was interlaced with irony, prompting the creation of a subreddit entitled “Thanos Did Nothing Wrong” that follows in the vein of similar forums that ‘ironically’ create memes supporting pop-culture villains such as the Star Wars Empire – according to a Vox investigation, the concept of ‘celebrating’ Thanos was taken further with periodic mass-bannings of half of his subreddit’s population, a flippant response that ultimately got coopted into promotion for the film through Anthony Russo and Josh Brolin acknowledging in TV appearances their awareness of the subreddit (Romano 2018). What seems missing from the dismissive response of Thanos jokes is how the phrase “[Villain] Did Nothing Wrong” has an etymological root in users of the anonymous message board 4Chan using the phrase to ‘jokingly’ defend Hitler – when contextualized in a political climate where neo-nazis in positions of authority have been identified by their participation in online communities which

claim to ‘ironically’ engage in such rhetoric (Palmer 2018), it becomes difficult to determine which ‘defenses’ of Thanos’ ideology are flippant and which are sincere.

In the video essay *The Ideology of the Marvel Cinematic Universe*, Jack Saint identifies Thanos’s cinematic incarnation as the logical extreme of the ideology espoused by Tony Stark. From an ecocritical standpoint, these ideologies can be described more succinctly as the Avengers’ representing a capitalist Climate Leviathan and Thanos a reactionary capitalist Behemoth (Wainwright & Mann 29). Climate Leviathan, which invokes Thomas Hobbes’s description of a multitude of people forming the entity of a state, is described as a “regulatory authority armed with democratic legitimacy, binding technical authority on scientific issues, and a panopticon-like capacity to monitor the vital granular elements of our emerging world” and capitalism is treated “not as a question but as the solution to climate change” (Wainwright and Mann 30-31). As a liberal iteration of capitalism, Stark is willing to collaborate with other nations – be it the sovereign king of Asgard, the isolationist monarchy of Wakanda, or the international body of the United Nations – in order to mitigate public outcry at the consequences of some of his past excesses, while still single-handedly controlling the largest tech conglomerate in the world and providing the technological assets for the self-appointed avengers of Earth. By contrast, Thanos’s reactionary solutions to the resource crises he witnessed on his home planet of Titan is one that addresses not the modes of production and consumption that had caused said resource scarcity but instead blames marginalized populations, resulting in *Infinity War* portraying Thanos’s victims as predominantly people of color – refugees from a devastated Asgard, the soldiers of isolationist Wakanda, and the impoverished villagers of Gamora’s homeland - even as he claims to be unbiased in who he deals death to.

In response to an accusation of his actions as genocide, Thanos defends it as being “At random. Dispassionate, fair to rich and poor alike. They called me a mad man. And what I predicted came to pass.” This admission of not addressing resource inequality in favor of a more destructive approach replicates what Jason Moore identifies as symptomatic of “neo-Malthusian tendencies” that perceives limits as externally-imposed rather than co-produced (Moore 51-52); Thanos has extrapolated the aftermath of a resource overconsumption crisis on his own planet to become representative of a flaw inherent in the universe, and has chosen a solution that would only temporarily delay the crisis he perceives as inevitable. Furthermore, his preference for brutalizing other societies in order to maintain a larger resource surplus for his chosen survivors parallels what Christian Parenti calls “*the politics of the armed lifeboat* – ‘responding to climate change by arming, excluding, forgetting, repressing, policing, and killing’” (Angus 184) as a policy being pursued by the wealthiest nations. This ideology of “exterminism” that can be seen even now through the “mass exodus triggered by fossil capitalism: by the worst droughts and highest temperatures ever recorded, and by the brutal wars rooted in the efforts of the United States, Canada, and Western Europe to protect access to oil” (Angus 180) could then be interpreted as the unspoken solution to the question that the Avengers pointedly refuse to acknowledge about their untenable system.

With regard to addressing the violence against people of color in *Infinity War*, particularly the nation of the Wakandans and the character of Gamora, it must be acknowledged that the latter is coded as a racial Other not simply because her actress is a woman of color with another ‘unusual’ skin color added on – for Thanos himself is a purple-skinned character portrayed by a white man – but through other visual markers of her people as indicated in her flashback. In a universe where anthropomorphism is so prevalent that ‘aliens’ can be practically

indistinguishable both physiologically and culturally from the Americans of Earth, Gamora's people are solely introduced and then disposed of as a frightened people screaming an unintelligible language, their clothing and architecture evoking Orientalist imagery, their environment obliterated by bombs and their lives ended by a gun-toting militia. Young Gamora is portrayed as easily convinced to abandon her doomed mother and to follow the advice of Thanos to turn away from the actual act of killing her people, serving to thoroughly perpetuate the cultural erasure wrought by genocide. Even her dialogue addressing this past trauma, where Thanos' claim that the aftermath of these killings where the "children born have known nothing but full bellies and clear skies," can only respond to his assertion with a claim that he's "insane" rather than a denial of the paradise he supposedly created.

Although she is established in the prior *Guardians of the Galaxy* films as having grown to understand and resist the indoctrination Thanos had on her, even going as far as to convert fellow child-slaves such as Nebula away from Thanos's army, Gamora's portrayal in *Infinity War* regresses her into being a sacrificial victim. Upon comprehending the prospect of Thanos's plans hinging on his recapture of her, she begs her love interest Starlord to kill her. His initial hesitation to sacrifice her, followed by his outrage at Thanos's murder of her, are both framed as detrimental to the efforts of the Avengers, as is the torture of Nebula into revealing the information Thanos needs to continue his quest of global genocide. Gamora's supposed label of "The Galaxy's Deadliest Woman" is undermined by her reduction to a helpless victim, one with no hope for survival, culminating in her murder at Thanos's hands framed as a tragedy under the conceit that he possessed a "love" for her. Her final appearance is as a child whose murder is framed as an intimate emotional sacrifice for her killer – an interpretation further confirmed by the empathetic Mantis describing his anguish and mourning following his murder of Gamora. I

argue that *Infinity War* frames the sacrifice of a woman of color in a way that infantilizes her, affirms the perspective of her colonizer, and ultimately exchanges her life for the commodity that aids Thanos in his quest for universal destruction. This denial of Gamora's humanity or freedom from Thanos even in the face of her death is an illustration of how "There is no recuperation of the captive or the captured in terms of agency within these positions and their legacy in the afterlife of slavery" (Yusoff 96).

It would also be prudent here to acknowledge the fact that Gamora's status as an Other – and the framing of the violence against her – is further informed by her status as a cyborg, albeit one who still retains more conventionally feminine features than her drastically modified sister Nebula, whose torture involves grotesque amputation of her inorganic parts. Haraway's *A Cyborg Manifesto* comes into play here, suggesting ways in which the identity of "women of color" may in itself be a cyborg identity, pointing out the prevalence of such women in the "labor force for the science-based industries, the real women for whom the worldwide sexual market, labor market, and politics of reproduction kaleidoscope into daily life" (32). *Infinity War* subjects cyborg women of color to more explicit on-screen abuse compared to the violence done to Romanoff or Wanda in combat, raising a question of whether such violence would be so easily portrayed if the victims were white able-bodied women.

The climax of *Infinity War* involves a significant human sacrifice on the part of the Avengers, made all the more glaring by Captain America insisting beforehand that "We don't trade lives." The life in question is Vision's, a being born from the installation of a cosmic stone into an android body with a preference for manifesting himself as a blond white man. As with Gamora, his insistence on self-sacrifice to deny Thanos the opportunity of completing his universally-lethal weapon is dismissed by his comrades in favor of an alternative solution;

however, said solution involves bringing him into the isolationist monarchy of Wakanda under the belief that their technological capabilities are uniquely suitable for removing his cosmic stone without extinguishing his life, thereby presenting the possibility of a non-lethal solution that was not even considered for Gamora. The Wakandans are enthusiastic collaborators, providing cybernetic tools and shields to further bolster the arsenal of the Avengers, and immediately agreeing to conduct the mineral extraction operation on the Vision without protesting the existential threat posed by bringing such a highly-coveted individual into their care. Okoye, a royal bodyguard, remarks that she had visualized Wakanda's opening to the rest of the world as involving "the Olympics, maybe even a Starbucks," thereby equating international collaboration to specifically being open for athletic events and commercial trade - the Starbucks comment appears especially ironic, considering the corporation's use of slave labor in nations such as Brazil (Canning) or Ghana and the Ivory Coast (Beasley) would render Wakanda's skepticism toward western nations as rational if such exploitation was acknowledged. When Thanos' army inevitably invades Wakanda, the royal family still allows the Avengers to remain within their borders and willingly offer up their armed forces in order to defend their city – in particular the body of a single white robot – against an overwhelming foe they had never encountered before.

The positive framing of Wakandans as contingent on their willingness to serve the martial interests of western powers had been preceded in the 2018 *Black Panther*, which featured as its protagonist a young monarch who calls out his predecessors for being close-minded about foreign interests, ultimately proving his political allegiance by siding with a white CIA agent over the pan-Africanist radical liberation prescribed by Wakandan-American Erik Killmonger. Incidentally, *Black Panther* was the first film in decades to be theatrically released in Saudi Arabia, with its narrative of a reforming young prince opening up his mineral-rich nation to the

western world serving to bolster the media campaign of then-ascendant Mohammed bin Salman (Ward 2018). While the technological knowledge of the Wakandans is stated to outclass even the knowledge of scientific geniuses such as Dr. Bruce Banner and Tony Stark, the weaponry and armor fielded by their military are distinctly framed as archaic; foregoing plated armor for colorful robes and using glowing spears and swords in lieu of guns, the martial ability of the Wakandans is shown to be easily outstripped by the modern technology of the western Avengers. In particular, the Winter Soldier wields a modern-day assault rifle and the War Machine possesses roughly the same range of weapons as an attack chopper, and both are capable of racking up far more kills than any Wakandan soldier; likewise, while an innumerable number of Wakandan men are killed in battle, their anonymity in comparison to the Avengers means their individual losses of life are deemed to hold less weight than the robot they are dying to protect. Although *Infinity War* is careful to frame the Wakandans as willing participants in this conflict and implicate Thanos as the one ultimately responsible for their devastation, the underlying moral calculus that considers countless black lives an acceptable exchange for a mineral extraction operation provides a glimpse at the way Global South nations are conceived as simultaneously inferior yet useful for the purposes of capitalist exploitation. Here we see an example of geology as a “racialized optic razed on the earth” (Yusoff 14), where the bodies of people deemed black are made to absorb the Anthropocene’s surplus “toxicity, pollution, and intensification of storms” (Yusoff 82) while their non-black exploiters reap the rewards of such sacrifice. Furthermore, depicting an African nation as the battleground for a conflict motivated by ecological anxiety parallels the very real nature of the long-term environmental toll that will be taken earliest and most heavily on the inhabitants of the most exploited nations – causing African delegates at UN climate summits to use the term “genocide” to draw attention to the

collective abuse of their populations (Klein 276). As Susan Payne, CEO of Emergent Asset Management, would say, “Africa is the Final Frontier...It’s the one continent that remains relatively unexploited [...] land and labor come so cheaply that [...] that the risks are worthwhile” (Holleman 152).

It has been acknowledged that *Infinity War* frames Thanos as pursuing a “hero’s journey” (Clode), succeeding in imposing his individual will against an ineffectual collective unwilling to plumb the moral depths he is capable of, and then retiring to a life of pastoral contemplation: a small but cozy cottage positioned atop a series of well-maintained terraces. This romantic vision of supposed ecological balance as represented by the man-made environment of farmland has a deep lineage in pastoral literature, from ancient Greek poet Theocritus’s odes to rustic simplicity (Moore 49) to the Italian Virgil’s poetry of propertied land which exhibited a “sympathy for the dispossessed” (Moore 51) to the English Alexander Pope’s portrayal of pastoral nature as “tranquil, pleasant, and full of innocence” (Moore 82). This positive framing of the pastoral life as a form of escape from the complexities of urban life, and as “the *potential* for escape into the wilds, places untouched by human hand” (Moore 197), is proposed as the opposite to the apparent failure of the technocratic Stark, who ends *Infinity War* stranded on the ruins of Thanos’s “dead” planet. However, such a glamorous perception of the pastoral life depends on an element of leisure; the appeal of the escape from civilization is one that celebrates the visual and sensory splendor of farm life and not the grueling cost and dangers that come from subsisting solely on a pastoral life – Thoreau’s work in *Walden* contains a critique of the exploitative nature of capitalist farming, wherein “the soil is property, or the means of acquiring property chiefly, the landscape is deformed, husbandry is degraded with us, and the farmer leads the meanest of lives” (Thoreau 165; Moore 147). Furthermore, the American tradition of pastoral

literature, with the nation's history of the colonial dispossession of indigenous populations and deployment of enslaved workers to till the lands, involves a further element of masculine 'mastery' over the land (Garrard 54) – in concluding a film about the colonial violence Thanos committed by showing him single-handedly maintaining a massive farm, *Infinity War* reveals that its voice of eco-criticism is still filtered through the lens of wealth; this feeds into a pre-existing assumption of environmentalism among conservative and postcolonial critics as a concern chiefly for the privileged, therefore rendering it at odds with the marginalized populations of the world. By positioning the voice of ecological critique as one cruelly destructive to all life, the casually exploitative relationship between the Global North and South is framed as a better deal.

In stark contrast to the gruesomely realistic nature of the militaristic murder methods he employs in slaughtering past populations that invoke the specter of terrorist militias in the Global South, such as his troops rounding up and systemically eliminating the adults of Gamora's homeland while abducting their children, the universal genocide he commits with the Infinity Gauntlet is a bloodless and swift affair. An entire army's worth of African soldiers and the individual companions of superheroes are subject to elimination, while Thor, Rogers, and Stark are conspicuously exempt from the supposedly "dispassionate" genocide. The human face of this suffering is individualized by the drawn-out demise of the white American adolescent Peter Parker; however, even this attempt to illustrate the cruelty of Thanos's actions is filtered through Parker's dying words, which are a plea for salvation for Tony Stark, thus underscoring that the real victim of the tragedy is Stark as witness to such a death. It is worth noting that the dramatic tension is defused, however, by a Spiderman sequel having already been announced as following *Infinity War*, therefore spoiling the inevitability of Stark's victory. It is possible that by

abstracting the gruesome violence of such large-scale violence into a form palatable for PG-13 audiences, and then ending with Thanos achieving his dream of living in a pastoral paradise, *Infinity War* contributes to an already prevalent paradigm of invisibilized ‘slow violence’ being waged by the powerful against the marginalized populations of the world. A link can be drawn between Thanos’s efficient and clean execution of the universe with the media’s framing of precision bombing – indeed, the fatalities of war – as “swift, immediate killings” while concealing their “long-term toxic and radiological impact” (Nixon 201) on perpetrator and victim alike.

The opening scenes of *Avengers: Endgame* may then be a response to this critique, as the Avengers execute the victorious Thanos in an anti-climactic home invasion only to find an emptiness in this revenge. Five years later, most of the heroes are shown to be ultimately dissatisfied in coping with the consequences of Thanos’ devastation. Thor becomes an overweight addict of video-games hiding away in a remote fishing village, Hawkeye chooses to travel the world murdering “criminals” of color, Rogers attends grief-counseling sessions with civilians who lost loved ones to the genocide, Banner continues his doctoral studies and becomes an icon to children, Romanoff devotes herself to leading the Avengers’ efforts in rebuilding the universe, and Stark quietly retires to a life of familial bliss with his wife and daughter. The ecological consequences of Thanos’s mass-killing is limited to a single exchange of dialogue when Rogers comments on seeing whales in Hudson Bay, which is immediately rebuked by Romanoff: “If you’re telling me to look on the bright side, I’m about to hit you in the head with a peanut butter sandwich.” The exchange simultaneously acknowledges that Thanos’s efforts benefited the natural world while it also condemns it for coming at the cost of human lives. It is notable, however, that Bruce Banner has achieved the public acceptance that had eluded the Hulk

for so long, and Stark remains a wealthy celebrity. The personal fulfillment of these heroes does not stop them from agreeing to the prospect of going back in time to reverse the damage wrought by Thanos's 'solution' without addressing the crisis that had motivated him. As one review states, *Endgame*'s answer to *Infinity War*'s question of "Are we willing to make personal sacrifices to save our own futures?" is a categorical refusal – a sense of inevitability and hopelessness pervades this film, with the solution arising not from human agency but from the impossible prospect of time regression, ultimately revealing a fear in the MCU that "the price of environmental salvation is too high" for audiences to seriously consider (Clode). Even the final confrontation against a pre-snap Thanos is reduced to ultimately giving the Infinity Gauntlet over for Stark to singlehandedly wield, implying that the power to decide who lives and dies can be a positive moral choice when handled by the 'right' superman. With Thanos and his followers successfully erased from the universe, *Endgame* canonizes Stark as a martyred savior, has Thor pass on the mantle of monarchy onto his companion Valkyrie before joining a band of outlaws, and shows Rogers abandoning the relationships he had established in the present to pursue a full life in the 'past', concluding with him passing the role of representing 'American values' to the African-American Falcon. Nowhere in the conclusions to these character arcs is there an acknowledgment of the ecological state of the world, as though it refuses to be an issue once the antagonist who sought to address it – however 'wrongly' - was safely disposed of.

The ecological themes of *Avengers: Infinity War* could be reduced to mere window dressing, being espoused solely by an antagonist whose contradictory and destructive actions help to delegitimize similar concerns in the real world; yet the conscious decision to provide Thanos a "grounded" motivation indicates an awareness that ecological anxiety is of a growing concern to contemporary audiences, along with a rise in discontent against a neoliberal status

quo whose internal contradictions have been made ever more apparent in the years proceeding the election of a president who seemingly embodies every facet of an archetypal greedy capitalist. This attempt to balance the attention of liberal audiences while avoiding the wrath of financiers has manifested in some muddled messages, such as the simultaneous glorification of the real US Air Force alongside a fictional imperialist ‘counter-terrorist’ antagonist in the 2019 *Captain Marvel*, and would explain the seeming unwillingness of its cultural heroes to voice a solution to the problems that the reactionary Thanos diagnoses – a campaign of denial based on the fear that offering an alternative solution would mean a further compromise to an already unstable ideological network. In the individualistic capitalistic fantasy offered by the *Avengers*, “denial enables normal life and its small routines to continue. Denial is empowering, at least for the time being” (Clark *Ecocriticism on the Edge* 168). Furthermore, this ‘climate apathy’ may be a consequence of being oversaturated in apocalyptic rhetoric that merely identifies the causes of the Anthropocene while not prescribing “the appropriate individual, social and political measures” (160) – a feedback loop may arise here, where works tinged with a nihilism regarding the future beget further works building on, or perhaps reacting against, such a world-view.

There are some similarities between *Avengers: Infinity War* and *Horizon: Zero Dawn*, from the presence of a wealthy industrialist whose hubris has existential consequences for the world to an implicit acceptance of slow violence toward the marginalized masses. Where *Infinity War* differs is in its refusal to even provide a vision of continued survival of post-capitalist societies past the apocalypse; in the face of a man-made catastrophe, Marvel would rather continue to indefinitely remain in the past than openly acknowledge that the so-called “insane” solutions of their “villains” may, in due time, be taken more seriously by a mass audience frustrated with the absence of other presented solutions. To counteract this dangerous

potentiality, an ecocritical approach focuses on the marginalized characters in *Infinity War* – the Wakandans, Gamora, and Nebula – and reconstructs their narrative purpose to work past the colonialist world-view that had characterized the Russo brothers’ handling of them. What questions would be posed to the audience if Gamora did not accept the inevitability of her death, or if the Wakandans adamantly refused to sacrifice themselves for the sake of the Avengers? Such issues of challenging the virtue of self-sacrifice when applied to populations already deemed disposable are of interest to the final work in this analysis.

CHAPTER III: ENDING THE WORLD IN *THE FIFTH SEASON*

In a January 20, 2020 interview, N.K. Jemisin described the inception of her post-apocalyptic science fantasy *The Fifth Season* as coming from a dream of a middle-aged black woman holding a volcano aloft with her mind: “a woman so angry that she was willing to move mountains [. . .] with the kind of anger that is righteous, enough to change a planet. That’s a person who has been through so much shit that she has been pushed into becoming a leader. That’s an M.L.K. I need to build a world that would explain her” (Khatchadourian). Contrasted against the adolescent white female lead of *Horizon: Zero Dawn* and the middle-aged white men of *Avengers: Infinity War*, it would seem refreshing to have the perspective of a black female savior complicating the traditional narrative of an individual hero. And of the three narratives covered in this text, *The Fifth Season* has the bleakest start, opening with a prologue that conflates the loss of the heroine’s child with a flippant description of the events preceding a global apocalypse. This prologue introduces the Stillness – a supercontinent whose seismic instability resembles an “old man” who “puckers and farts, yawns and swallows” (N. Jemisin 2) – along with its capital city of Yumenes, privileged by its positioning in the relatively stable equator of the supercontinent, and Alabaster, the superhuman who instigates the titular fifth season, an extended winter that will last not years but centuries, possibly even millennia.

Like Thanos and Faro, Alabaster, who doubles as the mentor/lover for the female lead, almost single-handedly accelerates the ecological collapse of an unstable world system; however, *The Fifth Season* will stand out in the degree to which it sympathizes with the destructive reactions of its superhuman characters to the crimes of the Anthropocene. The world of the Stillness is a complex and cruel one, with two appendices provided in the novel to first provide an academic understanding of the ecological devastation that is in this world ‘ordinary’, then to

describe the various terms used to describe politically-relevant matters such as castes, racial traits, technologies, geographical locations and – most importantly to this analysis – the term “orogene”, used to describe humans born with a gland in their skull that grants them “the ability to manipulate thermal, kinetic, and related forms of energy to address seismic events” (Jemisin 462). In the dystopian Sanzed empire that rules the Stillness, orogenes are feared for their powers and subsequently enslaved or killed, and the derogatory term ‘rogga’ is a clear metaphor for similar-sounding epithets against Africans in the real world. Enslaved orogenes are indoctrinated at the Fulcrum, a military academy in Yumenes, and kept further in line by a caste of Guardians, who are capable of negating the terraforming abilities of orogenes. As with the prior texts, it is the perspective of these physically empowered yet socially constrained humans which *The Fifth Season* will follow, rather than the perspective from the ‘ordinary’ masses.

The Fifth Season is told in three eras, each depicting an orogene woman at different ages: the vulnerable pre-adolescent Damaya, the frustrated young adult Syenite, and the introverted middle-aged teacher Essun (whose narrative is dictated in the second-person perspective by Hoa, a statue-like ancient superhuman known as a ‘stone eater’). This plurality of temporal perspectives provides a more expansive potential for comprehending the long-term processes of an ecological catastrophe; however, the potential for a narrative that also privileges a multi-generational perspective over an individual one is challenged by the revelation that all three perspectives were of the same woman in different stages of her life. As such, these seemingly temporally-separated narratives are recontextualized as the psychological journey of an individual’s disillusionment, heartbreak, and outrage at an oppressive system. This decision to reframe a heroine’s linear progression as one where memories of various eras overlap may initially seem to provide more chronological diversity than *Horizon: Zero Dawn*’s clear

distinction between the post-apocalyptic future and the pre-disaster past; yet, by remaining tied to the lifespan of a single individual, the tremendous scale of the Stillness's various apocalyptic seasons – which can range from a handful of years to centuries in duration – remains largely restricted to the Appendices or the epigraphs of chapters.

In spite of this restriction in the temporal scale of the narrative perspectives, Jemisin creates a world that is not just significantly older than recorded history but that also emphasizes histories as fallible and ultimately more representative of their creators' biases than of an objective past event. One example of this theme is the millennia-old folk tale of Misalem and Shemshena, which takes on different meanings when first told by an abusive Guardian to a frightened young Damaya and then retold to the older Syenite by Alabaster in young adulthood. When first told, Misalem is framed by an agent of the government as an irrational villain, a feral being whose actions based “purely on emotion and instinct” led to him slaughter thousands of people and hold an unexplained grudge against the emperor; from this framing, the drastic ecological devastation enacted by imperial bodyguard Shemshena to deprive Misalem of his power source renders her a cultural hero for “facing a terrible foe and defeating him with cleverness and skill” (Jemisin 92), and by extension Misalem's dehumanizing framing serves as a cautionary symbol when this history is recounted for the purpose of frightening young orogenes into internalizing the desire to be controlled for the greater good. When Syenite returns to this story later on, informed by her outrage and criminalization by the Fulcrum, her mentor explains that the violent framing of Misalem conveniently erases the prior injustices that had motivated him. The ‘true’ Misalem had “the simplest and most powerful reason of all: revenge” (Jemisin 416). In Alabaster's narrative, bolstered by a combination of piecing together various accounts and applying some critical thinking, Misalem's rampage was a direct consequence to

the imperialism of the then-new empire, whose desperation during an extended famine led to them seeking out communities of “lesser races” to cannibalize; as the sole survivor of a raid that killed his family, Misalem’s characterization as told by an orogene renders him instead as a tragic hero whose death was yet another injustice buried in a mountain of unanswered cruelties.

The fluid nature of historical recollection applies not just to oral storytelling but also to the written word (or tablet). In response to Syenite dismissing the possibility of rewriting “stonelore” to establish a status quo where “orogenes run things” instead of being lynched, Alabaster explains the following:

Stonelore changes all the time, Syenite [...] Every civilization adds to it; parts that don’t matter to the people of the time are forgotten. There’s a reason Tablet Two is so damaged: someone, somewhere back in time, decided that it wasn’t important or was wrong, and didn’t bother to take care of it. Or maybe they even deliberately tried to obliterate it, which is why so many of the early copies are damaged in exactly the same way. (Jemisin 125)

The process of historical recollection becomes a continuous and collective affair, layered with the biases of those privileged to control it and pass it down to future generations. The implication that ‘lost’ history may have been intentionally destroyed is an allusion to the ways in which conquerors had obliterated the cultural repositories of those they oppressed. Taking to heart this instruction to read against the grain, Syenite learns to realize that the demonization of the Earth by humanity – and, by extension, the belief that orogenes represent the Evil Earth’s cruelty – is an obfuscation of the actual relationship between humanity and Earth. It is not unusual in eco-fiction for the Earth to be personified as a sentient being, or for connotations of maternity to be imposed upon it such as the concept of Gaia; but Jemisin’s characterization of Father Earth

marries this personification of the planet to the aggressive and indiscriminatory wrath of the Old Testament God. According to folklore, Father Earth had once been amenable to the life-forms that grew upon him until humanity's ecological consumption rate surpassed the point of sustainability:

Then people began to do horrible things to Father Earth. They poisoned waters beyond even his ability to cleanse, and killed much of the other life that lived on his surface. They drilled through the crust of his skin, past the blood of his mantle, to get at the sweet marrow of his bones. And at the height of human hubris and might, it was the orogenes who did something that even Earth could not forgive: They destroyed his only child. (Jemisin 379-380)

Whereas the apocalypses of *Horizon: Zero Dawn* and *Avengers: Infinity War* were instigated by individuals who were either ignorant of the Earth's resource limits or seeking to avert the reaching of an ecological tipping point, *The Fifth Season* blurs the line between the real and the supernatural in identifying exactly what caused the instability of the environment; it is possible that the Earth's extreme seismic activity was a consequence of the planetary core and the moon having been interfered with, yet an encounter where Damaya witnesses the Earth possess a hapless Guardian in order to deliver a warning indicates that there is indeed an anti-biological intelligence that is rapidly losing its patience with the beings living on it (Jemisin 326). Father Earth treating all biological life as equally disposable may be a puzzling break from the traditional dichotomy of the Earth privileging non-human life over humanity, but from a scaling perspective this seeming contradiction can be understood as a deep ecological worldview: the biosphere that, to humans, seems all-encompassing, is a miniscule and short-lived layer compared to the significantly older and thicker geosphere. What may seem like a

immune response to a minor irritant to the planet becomes a torturous way of life for innumerable human generations. However, this portrayal of all human populations as collectively guilty for exploiting the world – and equally deserving of the ecological retaliation – reflects the efforts of contemporary capitalism to formulate a “we” that “negates all responsibility for how the wealth of that geology was built off the subtending strata of indigenous genocide and erasure, slavery and carceral labor, and evades what that accumulation of wealth still makes possible in the present” (Yusoff 106). Contrary to the liberal assertion that all humans on earth are in the same “spaceship” and share a “common fate and a common responsibility for the ship’s safety” (Angus 175), in reality the victims are overwhelmingly poor and disadvantaged, where “99 percent of weather disaster casualties are in developing countries, and 75 percent of them are women” (Angus 176).

What remains unclear is whether the orogenes, with their inborn ability to commune with and harness the seismic power of the Earth, are valued any differently from other lifeforms by Father Earth. Beyond that, the exact relationship orogenes possess to the ‘stone eaters’ – ancient humanoid beings whose capacity to manipulate the terrain far outstrip orogenes – remains a mystery in this first book, although there are clues when the stone eaters are shown to have been entombed in mysterious obelisks left behind by ‘deadcivs’. It would seem that just as this ancient civilization had incurred the planet’s wrath through a disruption of its metabolic rift, the Sanzed empire of Syenite’s time is on track to commit similar drastic damage to the homeostasis of the Earth. Where the deadcivs had trapped stone eaters inside obelisks in order to harness their power, the Sanzeds maintain the seismic stability of their territories in the supercontinent’s equator through the transformation of uncontrollable orogenes into “Nodes” – children who are lobotomized, immobilized, and ultimately reduced to an anguished shell only

capable of instinctively lashing out their power at any seismic vibrations they feel. This is the secret of the empire's prosperity, a reality kept hidden even from most orogenes for fear of the outrage that would arise from witnessing the logical extreme of dehumanizing workers for the sake of material wealth. The sacrifice of a powerful individual for the prosperity of a community is a scaled-down metaphor for the systemic exploitation and public erasure of minorities' suffering in order to maintain the brutal economic system. The horror of this child's abuse is given a more personalized dimension in the revelation that many of these exploited victims were Alabaster's children – children whom he was forced to conceive with fellow orogenes like Syenite, but never raise himself. Where Syenite is reduced to tears, Alabaster's reaction is of a colder outrage:

You think he mattered, after what they did to him? The only reason they don't do this to all of us is because we're more versatile, more useful, if we control ourselves. But each of us is just another weapon, to them. Just a useful monster, just a bit of new blood to add to the breeding lines. Just another fucking *rogga*. (Jemisin 143)

His profound grief and fury at this systemic injustice links him to Father Earth, whose reaction to a loss of a "child" was to inflict a similarly collective and destructive scale of violent retaliation. Said collective destruction, although framed far more sympathetically than the likes of Thanos, nevertheless is shown to wreak havoc upon all life, guilty or complicit, human or animal; and this scaling issue causes a tension in the effectiveness of orogenes as a metaphor for oppressed races.

Almost all orogenes in *The Fifth Season*, if they are not killed or controlled at a young age, are portrayed as inevitably capable of wreaking incredible amounts of violence upon 'ordinary' human communities. Besides the thousands of deaths Misalem was complicit in and

the supercontinent-wide suffering wrought by Alabaster's destruction of Yumenes, Essun is guilty of several mass-killings resulting from a loss of emotional control. Such mass-slaughters include the 'accidental' interfacing with a stone eater's obelisk that awakened an active volcano under a coastal city of almost 100,000 people (Jemisin 382); her immediate murder of numerous people and animals (several birds and worms) in her home village of Tirimo in response to a guard shooting at her, with residual aftershocks draining the rest of the population's water supply and condemning them to a slow death (57); and her drowning two ships full of people in an attempt to cover the presence of a Fulcrum-trained orogene in aiding pirate raids on marginalized settlements (379). It is notable that in the case of Essun's killings, such violence is depicted as unseen and the human toll is glossed over; her drownings of sailors are completely obscured by fog and she only hears their screams. She is transported away from Allia at the moment of its eruption and only returns to the devastation years afterwards with no signs of human habitation left, and the vengeance she wages on Tirimo is halted by "the terrified, bouncing scream of a little boy as his father runs out of a madly swaying building" (59). In an attempt to maintain reader sympathy with a mass murderer, the psychological consequences of the violence she suffers are rendered while her own violence is obscured and rationalized as resistance to "Their hate, their fear, their unprovoked violence" (58).

The Node child whose sexual abuse and death Syenite witnessed was capable of disrupting an entire fault-line when lashing out in agony, and Corundum, the child Syenite and Alabaster had together during their life on the island community of Meov, was indicated to have at the age of two years old power that could surpass the scale of his supercontinent-smashing father. Although Essun is shown to be consumed with guilt and self-loathing in acknowledging the loss of innocent life, the attempt to condemn the demonization of orogenes as irrational

becomes problematic when the text provides instances that suggest orogenes really are as dangerous and uncontrollable to the powerless majority as their oppressors frame them. Inborn physical superiority leads to social dispossession, which muddles the coherence of *The Fifth Season*'s depiction of racialized oppression. Anti-blackness in the real world manifests in conflating the subjugated and the minerals they are forced to extract as "possessing certain properties or qualities, namely, energy, reproducibility, and transformation" (Yusoff 70). However, anti-black logic is used in reality to impose a falsehood of Africans possessing physiological differences from other humans, manifesting in abuses such as doctors dismissing their health concerns, police rationalizing overwhelmingly lethal force, and ultimately genocide and slavery. The orogenes, by contrast, are not marked by a particular visible bodily trait – the gland that enables their seismic abilities is instead contained within their skulls - and they are objectively capable of exerting power on a scale that the disempowered majority cannot. Although it is extremely unlikely that *The Fifth Season* was intended to portray bigotry as having a rational basis, this may be an issue of conflating two interconnected social issues – the exploitation of marginalized populations and the environmental degradation of their homes – to a degree that the power of the metaphor overshadows the reality it was intended to shed light on. Indigenous people may bear a profound cultural link to their land, and their exploiters may use this link as the rationale for controlling them, but they do not inherently possess more destructive potential than the colonizers.

Textual evidence within the novel and its glossary also establishes the oppressive caste system to not discriminate according to a system of white-supremacy – instead, the dominant imperial race, the Sanzed, are described as "ideally bronze-skinned and ashblow-haired, with mesomorphic or endormorphic builds and an adult height of minimum six feet" (Jemisin 464),

while the blond and pale ‘arctic/antarctic’ populations who appear in *The Fifth Season* indicate that ‘white’ communities are “too poor to feed its kids well” (Jemisin 266). Essun is established as ethnically ambiguous within the cultural context of the Stillness, her skin “unpleasantly ocher-brown by some standards and unpleasantly olive-pale by others” (Jemisin 10), while the darkest-skinned characters range from Alabaster’s “skin so black it’s almost blue” (Jemisin 71) to the deep-brown coastal residents of Allia and the pirates of Meov. Asael, a bureaucrat who is “almost as black-skinned as Alabaster” (Jemisin 155), is portrayed as a bigot through her using the slur ‘rogga’, as well as “not very smart” (Jemisin 224).

Although it is no accident that the characters who bring down a system of slavery are dark-skinned, an orogene’s skin color comes across as an incidental detail rather than a component of how they are marked for dehumanization and exploitation. This detail was not lost on reviewers, one of whom praised the avoidance of an explicit white-supremacist structure by stating, “This emotion reaction of pushing back against discrimination of orogenes subtly points back to racial Othering. However, because that anxiety and tension is displaced onto a category of people which does not exist in our reality, it allows all people who feel like they have ever been excluded from society to identify with the plights of these characters” (Nyx). It is possible that *The Fifth Season*’s portrayal of slavery not based on anti-black logic is an attempt to “reformulate and reimagine material relations that have hitherto been organized by anti-Blackness” (Yusoff 106); however, as the exploitative logic of the present Anthropocene remains anti-black, *The Fifth Season*’s avoidance of directly depicting anti-black oppression, and its portrayal of people of color as equally complicit as white people in perpetuating slavery, may serve to further obfuscate the ability for readers to recognize the particular racialized reality of capitalism.

The superhuman powers of the orogene are not solely limited to violence – as Syenite’s time spent in the orogene-run communities of Meov and Castrima reveal an ability to terraform their environment to better accommodate human habitation – but the protagonists’ complicity in large-scale killings link her to the similarly tremendous body-counts racked up by the heroes in *Avengers: Infinity War* and *Horizon: Zero Dawn*. Whereas a blockbuster superhero film and action-adventure video game provide an element of visual spectacle (and interactivity in the latter’s case) to the process of witnessing simulated violence, the absence of such an element combined with the psychological realism involved in rendering the complex inner lives of the traumatized Essun and Alabaster causes the scale of such violence to be more unusual. Although the condemnation of violence against the orogenes is vividly executed, the avoidance of dwelling on the perspectives of non-empowered humans even in the wake of a global cataclysm wrought by a sympathetic destroyer becomes all the more noticeable.

Although *Avengers: Infinity War* privileges the perspectives of socially powerful superhumans and gives the non-powerful no say in determining existential crises, and *Horizon: Zero Dawn* takes care to have Aloy’s kills be animals taken for sustenance or self-defense against humans seeking to kill her, *The Fifth Season* seems to tacitly endorse obliterating a system of injustice no matter how many others are hurt in the process. Alabaster’s dismissal of his destruction of the supercontinent as “collateral damage” (Jemisin 449) unpleasantly invokes the manner in which capitalistic and militaristic systems have used similar language to downplay the severe human cost of their violence, such as the dispersal of depleted uranium leaked from “precision bombing” in the Gulf War (Nixon 212) or the blameless “billions of human beings who must live and work in places that will be hotter than anywhere on Earth has been since before our species evolved” (Angus 100). Just as Thanos’s supposedly egalitarian logic of

‘dispassionately’ slaughtering the powerful and weak alike only serves to further compound the slow violence the marginalized already suffer, the collective punishment that Alabaster visits upon the Stillness obfuscates the reality of the already-oppressed suffering the brunt of the damage. However, where Thanos was dismissed as a Mad Titan, *The Fifth Season* proclaims in its closing page that Alabaster is “not crazy at all, and he never has been” (Jemisin 449) for accelerating the global destruction of the Anthropocene – an era of suffering predicted to last “at least a thousand years. Maybe a *few* thousand” (Jemisin 274). Alabaster is narratively justified by the vague promise of restoring the Earth’s moon to possibly quell the supercontinent’s seismic instability. This rationalization of mass destruction as ultimately well-intentioned may parallel the efforts of Dr. Sobeck and Thanos to justify their own complicity in genocide, but whereas *Horizon: Zero Dawn* positions Aloy as a savior who must protect her world from the negative consequences of her predecessors’ creations, and Thanos is depicted as wrongful, *The Fifth Season* tries to justify the large sacrifices of humans by providing focal characters whose innate link to the Earth insulate them from the consequences of the apocalypse they enact.

The narrative contains very few encounters with ‘ordinary’ survivors of the apocalypse who have names. One such encounter is a brief account of survival by refugees from a wealthy community, some of them “sporting terrible burns or injuries that come from falling debris,” and others shown to have “removed most of the flowing, uselessly pretty garments that people in the Equatorial cities used to consider fashionable” (Jemisin 235). This adoption of a new fashion is called a marker of a new post-apocalyptic tribe being born, which to Essun is “Not a problem. Yet” (Jemisin 236). In response to the refugees’ leader sharing their traumatic account of surviving the event that rendered them homeless, Essun dismisses their experience as “Just an ash storm,” silently assumes an anonymous orogene saved the group, and quickly walks away

from the group “before they can ask questions in return” (Jemisin 238). Her first companion is a magical stone eater who does not need to sleep and is capable of turning creatures into statues, and her other companion would seem to represent an “ordinary” response to the disaster. Tonkee, a transwoman introduced as a ‘commless’, initially shows promise at showing a solidarity between oppressed groups. Commless people are described as:

In cities that want cheaper labor than Strongbacks – and where the Strongbacks’ union is weak – they live in shantytowns and beg on the streets. Everywhere else, they live in the spaces between comms, forests and the edges of deserts and such, where they survive by hunting game and building encampments out of scraps. The ones who don’t want trouble raid fields and silos on the outskirts of comm territories; the ones who like a fight raid small, poorly defended comms and attack travelers along the lesser quarter roads.

(Jemisin 179)

People without a community to call their own are described as social outcasts, denied even the shelter and resources that enslaved orogenes receive, and dismissed either as beggars or criminals. They remain largely unseen in the text, serving as negative figures – a cleaning commless is described as sexually abusing an orogene child in exchange for liquor (Jemisin 208), and a commless band burned and looted the settlement atop Castrima, forcing their victims into a slow death of suffocation and starvation (Jemisin 341). The appearance of a commless character to interact with Essun may have served to resist this negative stereotype of marginalized people who lack magic abilities. However, it is revealed that Tonkee is in reality a disgraced member of the leadership caste with a position in a prestigious university, and she had been specifically tracking Essun down out of a realization that the ancient deadciv ‘obelisks’ had been pursuing her and her children for years. By revealing that a supposed outcast had elite roots,

and showing this character to shrug off the horror of her entire way of life falling down by enthusiastically embracing the chance to study orogenes (Jemisin 275), the marginalized ‘commless’ refugees continue to remain unseen – at least within this first novel.

As far as *The Fifth Season*’s portrayal of post-apocalyptic communities go, societies that are shown as inevitably being destroyed are those whose members abuse orogenes: the indoctrination school of the Fulcrum is obliterated by Alabaster as payback for the death of his final son; the village of Tirimo is condemned to homelessness and starvation for the sin of Essun’s husband killing their orogene son; and the “backwater” Coastal city of Allia is destroyed for housing several assassins seeking to kill Syenite and Alabaster. It should be noted that the glossary describes Coastal communities as “resource-poor” and constantly in need of rebuilding, a state of deprivation that ensures they are rarely ever able to afford hiring Fulcrum Orogenes to assist in protecting them against environmental disasters; and that members of such communities “tend to be dark, kinky-haired, and sometimes have eyes with epicanthic folds” (Jemisin 458-459). Such details code Coastal cities as analogous to numerous black and brown coastal populations subject to the damages of unmitigated climate change, populations which constitute an “increasingly large proportion of the population not just “relatively redundant” but *absolutely surplus* to capital’s profit-making requirements” (Angus 187). With this detail in mind, the dismissive portrayal of an orogene ‘accidentally’ destroying an entire community of economically marginalized black people may reflect the limitations of depicting oppression without an internationalist outlook. By consistently focusing on orogenes’ experiences as the most pertinent and glossing over the damage they deal to other marginalized populations, *The Fifth Season* refuses to show a solidarity among the many types of victims of climate change and capitalist exploitation. Instead, the narrative justification of destroying said communities for the

abuse of minorities echoes imperialist rhetoric of invading foreign countries to “liberate” oppressed populations. This narrative sympathy towards those who wield power is shown through how the positive communities in *The Fifth Season* – the island pirate community of Meov in Syenite’s era and the underground deadciv geode of Castrima in Essun’s era – are explicitly framed as benefiting from having orogenes lead them.

Initially whisked away to Meov by stone eaters to escape the eruption of a volcano that Syenite’s desperate link to an obelisk had accidentally caused, Syenite and Alabaster discover that the island is part of a small archipelago whose remoteness and seemingly precarious location – right above a hot spot – is such that orogene leadership are heavily implied to be the only reason why they haven’t already been wiped out. Even so, their way of life “free” from the imperialism of Sanze is one built around violent resource accumulation, particularly a predation on the aforementioned marginalized Coastal communities.

“They don’t trade much with the mainland,” he continues as he works. “All they’ve really got to offer is fish, and the mainland Coaster comms have plenty of that. So Meov raids. They attack vessels along the main trading routes, or extort comms for protection from attacks – yes, *their* attacks. Don’t ask me how it works; that’s just what the headman told me.” (Jemisin 294)

Although Syenite admits that such a community is “precarious,” the presence of an isolationist economy that relies primarily on stealing from the relatively defenseless coastal communities and running an extortion racket seems to raise the question of why their orogene leaders never sought to transform their island landscape to enable a production model that does not risk attacking and incurring the wrath of a larger power. There is an acknowledgment of the irony of the “feral” power of the sexually-liberated Meov leader, Innon, being far less skilful than the

‘refined’ powers that Syenite attained through her traumatic upbringing in the Fulcrum, but even Syenite and Alabaster seem ultimately unable – or unwilling - to transform the harsh landscape of the island into something more agriculturally amenable, thus enabling the Meov to continue their unstable process of aggressive accumulation. The concept of island-dwelling pirates may have been intended to evoke the maroons of the Caribbean, who according to Sylvia Winter were “synonymous with black revolt against slavery” (Yusoff 36), but the people of Meov instead seem complacent to prey on the relatively poor Coastal communities rather than challenge the Sanzed empire, and only consider abducting orogenes from the mainland to replace their leader rather than out of concern for orogenes’ oppression (Jemisin 358). Far from being effective rebels against the Sanzed, the bandits of Meov instead seem to have a symbiotic relationship with the oppressive empire that commless are also described as having: “Quartern governors don’t mind a little of [raids]. Keeps everyone sharp, and reminds troublemakers of how they could end up. Too many thefts, though, or too violent an attack and militias get sent out to hunt the commless down” (Jemisin 179).

Overt displays of power proving unwise is reflected through Syenite’s use of her orogenic powers, ultimately bringing doom onto a community that had relied on less refined orogenes for generations. Her drowning of two ships full of potential witnesses and defusal of the active volcano smothering the ruins of Allia leads the Fulcrum to track her down and slaughter the residents of the community. Although stone eaters are present, they choose not to help the Meov residents but instead whisk Alabaster off to parts unknown, prompting Syenite to desperately smother her own child to prevent the Fulcrum from enslaving him and then activating an obelisk to blow the entire island into slag. This mercy-killing of her child frames death as one of the few venues of resistance available for populations already condemned to the

inhumanity of slavery, which in the Stillness is equated to the horrific fate of the immured Nodes; likewise, Alabaster dismisses all the children trapped in the Fulcrum and in the Nodes as unable to save, thus rationalizing their death as the only freedom from their current imprisonment. The tragic fate of Meov, whose opposition to the empire ultimately led to them being overwhelmed, serves to inform Essun's hesitance to accept any other community, including that of Castrima.

Castrima is established as another orogene-run community, this time built underground by an ancient civilization whose architecture has remained uncannily steady despite the geological instability of the surrounding area. Their leader this time is a Sanzed woman named Ykka who proudly embraces the slur "rogga" as a surname. Although there appear to be non-powerful survivors who are allowed into the community, only individuals deemed "useful" are taken in:

It's what any smart comm does at times like these: kicking out the undesirable, taking in those with valuable skills and attributes. The comms that have strong leaders do this systematically, ruthlessly, with some degree of cold humanity. Less well-run comms do it just as ruthlessly but more messily, like the way Tirimo got rid of you. (Jemisin 276)

By framing Social Darwinist logic as a pragmatic universal, it would seem that even the most hospitable settlements in the post-apocalypse would not be very amenable toward those with disabilities or those who otherwise cannot perform labor. Instead, with its leadership being composed of orogenes whose mere presence seems to be capable of activating the ancient deadciv technology located within, Castrima's success would appear to be based primarily on the inherent physical strength of their leaders. Furthermore, Ykka possesses an innate ability to lure other orogenes to her community, therefore ensuring a greater chance of defending themselves

against raids compared to the far less fortunate prior inhabitants of the area. If being a hub for orogenes was not enough, the community is also revealed to be populated with more stone eaters, whose territorial stand-offs against one another require the irritated intervention of Ykka to defuse.

The residents of Castrima survive by disregarding the ‘conventional wisdom’ of the Sanzed to treat all deadciv artifacts as useless, the logic having been that a successful civilization could not have died out. In particular, the bedrock of Castrima is established to be extremely layered with numerous foundations left from various civilizations building atop one another.

You’ve heard of Jyamaria, from the history you used to teach in creche. It was the name of a large nation, the one that started the road system Sanze later improved upon, and which once spread over most of what is now the Somidlats. It died around ten Seasons ago. The rest of the names are probably those of other deadcivs; that seems like the sort of thing geomests would care about, even if no one else does. (Jemisin 335)

It becomes apparent here that unlike in *Horizon: Zero Dawn*, none of the names of even the most ancient predecessors of Essun’s worlds appear to resemble modern-day nationalities. Although the world of *The Fifth Season* also takes place in the extremely distant aftermath of a highly-technocratic society, the avoidance of having the past society contain any cultural signifiers from the real world seems to distance the reader from the potential ecological critique of the story. Likewise, the non-human force of Father Earth is established to be one far older and more powerful than even superhumans can dream of, ultimately drawing a far less optimistic view about the technological abilities of humans.

Unlike the prior two texts, where powerful white characters considered it a virtue to sacrifice themselves for the community, *The Fifth Season* takes a more oppositional approach to

the notion of sacrifice when said community is framed as exploitative and the sacrificial figure is a marginalized individual. Despite its use of multiple narrative eras and acknowledgment of a post-apocalyptic world as remaining contingent on oppressing the marginalized in ways that effectively invoke real-life issues of exploitation, the individualistic lens and avoidance of a perspective that is devoid of supernatural power still means that *The Fifth Season* is another eco-catastrophe story that ultimately suggests that the masses lack the agency or capacity to save themselves from extinction. Most communities are portrayed as socially alienated and prone to collapse, with even the most functional and open-minded societies either subsisting on terrorizing other communities or equating superhuman powers to effective leadership. *The Fifth Season* is one that cynically concedes that mass destruction may be justified if the grievance of the perpetrator is rendered vividly enough. Burning down an oppressive system does not come across as a catharsis if it simply does not lead to an inversion of said hierarchy. It is possible that future novels may address the apparent absence of successful communal collaboration to heal the world – if Essun is destined to be a leader, it may be possible that the cycle of devastation that characterizes almost every facet of the Stillness may eventually be broken.

CONCLUSION

In summary, these three contemporary narratives of superheroes in ecological catastrophes are bound together in an implicit acceptance of the necessity and even glory of committing mass sacrifice of marginalized lives in order to achieve a brighter future. *Horizon: Zero Dawn*'s depiction of an ecological cornucopia is ironically built on a faith that human technology will restore the environment, whereas *The Fifth Season* is far more cynical about the material and human costs of even producing said technology and *Avengers: Infinity War* chooses to outright deny the existence of a social collapse in hopes that erasing the villain who acknowledges its existence will by extension solve the problem he diagnosed. Heroes and villains are present in all narratives – individuals who are capable of actions dictating the fate of entire worlds for better or for worse – but *The Fifth Season* stands out for presenting a collective society as the antagonist and providing a sympathetic perspective toward those whose desire to destroy said status quo would mark them as the villain in other narratives. *Horizon: Zero Dawn*'s status as an open-world video game enables a degree of content bloat that may not be as present in a two-and-a-half hour film or a book designed to be told in three parts.

The shortcomings of these narratives could be addressed by taking cues from other ecological narratives, particularly with a focus on exploring how a character in the margins of these epic stories may survive. For instance, reworking the multiple perspectives of *The Fifth Season* to represent three separate generations may provide an even more effective demonstration of the long-term scale of the ecological malaise they inhabit; providing a voice of ecological concern that isn't poisoned by association with villainy in the case of *Avengers: Infinity War*; and perhaps cutting down on the content load for *Horizon: Zero Dawn* to avoid having a saturation of repetitive filler content that obfuscates the compelling narrative. With

Horizon: Zero Dawn's lead writer having also served as creative director for *Fallout: New Vegas*, it may be possible to suggest having the gameplay follow the more open-ended narrative trajectory of that game – where it was up to the player which ideology they wanted to support and adhere to – while also providing the ability to collaborate with companions, whether fellow players or artificial intelligence, in order to subvert the positioning of the player-character as the sole savior of the world.

It is the hope of this analysis that a new wave of eco-critical works, created and supported by independent artists and publishers, may find a way to properly resist the callousness inherent in the fantasy of the individual hero in favor of promoting the benefits of a communal approach. Although the fantasies promoted by big-budget franchises are not going anywhere fast, it would be prudent to remain aware of what ecological narratives are being promoted on mainstream media so as to remain current in challenging and supplanting them. In addition to integrating the anti-imperialist and capitalism-critical concerns of environmental justice ecocriticism, ecomedia studies would benefit from analyzing how the growing prevalence of digital media will exacerbate the participatory relationship audiences have to literature and what impact such relationship may have on the way contemporary issues are discussed within a media ecosystem. The public outrage at the large-scale suffering wrought from the governmental response to the COVID-19 outbreak is but a stray pebble compared to the coming avalanche of global ecological disasters, which in the current media ecosystem reflect Ian Angus' modification of Rosa Luxemborg's "Socialism or barbarism" to include "*barbarism if we are lucky*" (Angus 188). In light of this future, ecomedia studies must treat speculative works about ecocatastrophes not as fantasies to comfort the empowered but as guides for how the masses may avert the grim fate being concocted for them.

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