RISING FROM THE ASHES: THE EFFECTIVENESS OF APOCALYPSE IN CONTEMPORARY ENVIRONMENTAL LITERATURE

by

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Abstract

Exploring the role environmental apocalypse has historically played in contemporary American Environmental Literature, my thesis discusses the impact of apocalyptic rhetoric in past texts and question if it remains equally impactful moving into the twenty-first century. I consider the work of ecocritics such as Greg Garrard, Lawrence Buell, and David Higgins, amongst many others, who all discuss the role apocalypse has played in texts that show an awareness of global climate change. While many of these scholars discuss the role of apocalypse in past texts, my work aims to extend their arguments with newer novels and newer climate theories, such as the Anthropocene and Capitalocene, ultimately arguing *against* the use of apocalyptic rhetoric in contemporary texts in the twenty-first century.

In the following chapters, I analyze the use and consequences of environmental apocalypse in *Silent Spring* by Rachel Carson*, Cat's Cradle* by Kurt Vonnegut*, Parable of the Sower* by Octavia Butler*,* and *White Noise* by Don DeLillo. Additionally, I present two texts that I argue offer an alternative to apocalypse, *The Overstory* by Richard Powers and *Braiding Sweetgrass* by Robin Wall Kimmerer, both of which offer messages of hope, community, and reciprocity in place of apocalyptic thinking. I begin by establishing a tradition of environmental apocalypse through the use of postmodernism, satire, and inklings of hope with *Silent Spring* and *Cat's Cradle.* I then discuss the roles humanity and capitalism have played in environmental apocalypse through readings of *Parable of the Sower* and *White Noise*. Finally, I discuss some of the flaws of apocalypse and propose some alternatives that are demonstrated in both *Braiding Sweetgrass* and *The Overstory,* highlighting that readers must believe there is a future before they can save it.

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Introduction: Rising from the Ashes: The Effectiveness of Apocalypse in Contemporary Environmental Literature

The concluding scenes of Adam McKay's 2021 film *Don't Look Up* feature teary-eyed, unnervingly calm Leonardo DiCaprio, Jennifer Lawrence, Timothy Chalamet, Melanie Lynskey, and Rob Morgan sitting around a dinner table discussing store-bought coffee as literal asteroids destroy the earth. Bon Iver's "Second Nature" plays in the background as the scene shifts to buildings, signs, cellphones, and family photos floating around the earth. The end credits, set 22,740 years in the future show politicians, lobbyists, and CEO's preserved in cryo-chambers landing on a beautiful, green, new life-supporting planet. This lasts for approximately 30 seconds, until Meryl Streep's character's face is torn off by a "Bronteroc" which seemingly kill them all.

Don't Look Up became a streaming legend with a recorded 152,290,000 hours between December 27, 2021 and January 2, 2022, and was shown to have 111,030,000 hours viewed within its first 2 days on Netflix (Yossman). In an interview with *Variety,* director Adam McKay said, "the whole movie's trying to just process the question of what the eff is going on in reality" (Yossman). Meryl Streep's satiric portrayal of former president Donald Trump as President Janie Orlean and Mark Rylance's portrayal of billionaire tech guru Peter Isherwell certainly mimic American life (and fears) surrounding the environment, media, and culture. The apocalyptic ending is comedic, but a little too real as the global climate crisis becomes increasingly prominent. McKay's film is just one example amongst many of environmental apocalypse in popular books and films. However, *Don't Look Up*, and many similar books and films only show one possible reality as our ecological future. As global climate change becomes worse, isn't it time to consider options besides apocalypse?

Apocalypse is hard to define. Its role and purpose have changed greatly since its original biblical intent. Apocalypse "has come to mean revelations or prophecies specifically of end-times, the end of history, or divine overhaul of the world order (Veldman 3) and "typically evokes a terrifying moment of cataclysmic destruction" (Huber & Mould 207). Apocalyptic texts often feature the apocalyptic event itself, but may also "[address] themes often associated with an apocalypse, such as judgment or eschatology" (Huber & Mould 208). As apocalypse has become increasingly popular, it "has also become a source of sublime pleasure, through the visions of secular apocalypse, extinction, and disaster that saturate popular culture" (Higgins 114). Apocalypse plays a variety of roles in books, television, and movies, but regardless of the literary movement or time period it exists in, apocalypse always revolves around the end of time.

Don't Look Up was not the beginning, and probably not the end of environmental apocalypse. Many scholars have written about the origins of environmental apocalypse, most citing The Bible's Revelations as the very first apocalypse and noting the secularization of apocalypse "in the late eighteenth century" (Garrard 98). However, as discussed by both Lawrence Buell and Greg Garrard, "apocalyptic rhetoric has been part of environmental discourse from the beginning" (Garrard 102), labeling Rachel Carson's *Silent Spring* as a foundational eco-apocalyptic text. Environmental apocalypse is a form of secular apocalypse but centers itself around ecological disaster. The end of life as we know it is not brought on us by robots, aliens, or flesh-eating zombies but by extinction, floods, wildfires, rising sea-levels and other environmental disasters. These depictions of the environment as apocalyptic "are locations where the meanings of climate change are formulated and contested" (Fiskio 13) because they force us to compare the environments being depicted with the environment we live in. If *Don't*

Look Up's world can end in the blink of an eye, despite the warnings of scientists and experts, why can't ours?

Many scholars have written about the structure of environmental apocalypse. Robin Globus Veldman, for example, breaks eco-apocalypse into three acts. In the first, "humans are depicted as living in idyllic harmony with nature, and in many accounts, viewing it as alive and sacred" (4). The second act "tells the story of how humans began to turn against the natural world" (4). Finally, the third "opens in the twentieth century, as humanity begins to reap the misfortune it has sewn in the forms of pollution, loss of biodiversity, overpopulation, deforestation, climate change, and other environmental ills" (4). Many eco-apocalyptic stories follow these acts ranging from Studio Ghibli's *Princess Mononoke* to Jesmyn Ward's *Salvage the Bones*. In addition to theories about the structure of environmental apocalypse stories, scholars like Janet Fiskio have noticed patterns in the way characters *respond* to environmental apocalypse. The first option, the "lifeboat" model (14) features isolated characters fighting for their own survival. The second option, the "collective," all of "humanity is imagined as essentially courageous and generous in the face of climate chaos" (14). In either scenario, according to Fiskio, environmental apocalypse features a collapse and the "rebirth" of society.

However, why must there be a rebirth? Why can't we save society as it is? Why must we wait for a collapse? In my thesis, "Rising from the Ashes: The Effectiveness of Apocalypse in Contemporary Environmental Literature" I aim to provide both a survey of the changing role of environmental apocalypse in popular texts beginning with Rachel Carson's *Silent Spring* in 1962 and concluding with Richard Powers's *The Overstory* and posit an alternative to environmental apocalypse that I believe is much needed in the twenty first century. As an actual global climate crisis approaches, my thesis questions if apocalyptic storytelling remains impactful.

In my first chapter, "Apocalypse, Postmodernity, and Hope in *Silent Spring* and *Cat's Cradle*," I aim to illustrate the impact of apocalyptic rhetoric in these texts published in the 1960's. Both texts, which use post-modern tactics in combination with a response to post-nuclear warfare culture, Rachel Carson's *Silent Spring* (1962) and Kurt Vonnegut's *Cat's Cradle* (1963) use apocalyptic rhetoric and storytelling to question large institutions, our reliance on science and technology, and blind faith in the government. In combination with satire and scattered messages of hope, both texts utilize apocalypse to show the breakdown of both humanity and the earth. These texts, I argue, remind readers that we are a part of nature, and in order to save nature we need to save ourselves.

My second chapter, "From Apocalypse to Capitalocene Dystopias: Redefining Environmental Apocalypticism in Octavia Butler's *Parable of the Sower* and Don DeLillo's *White Noise*" shows how eco-apocalypse is not limited to postmodernism or science fiction but has much broader implications. *Parable of Sower* (1993) and *White* Noise (1985), neither of which are strictly environmental texts, both features to varying degrees environmental apocalypse. Framed through theories surrounding the Anthropocene and the Capitalocene, I demonstrate how both *Parable of the Sower* and *White Noise* demonstrate an awareness that the global climate crisis is caused by human action and economic systems. This shift from public awareness to public responsibility forces society to come to terms with exactly what we need to change in order to protect both ourselves and the Earth.

Finally, in my third chapter, "Revising Apocalypse: Hope, Community, and Reciprocity in *The Overstory* and *Braiding Sweetgrass*" I question the role of apocalyptic rhetoric in the twenty first century and if it is as effective as it was 62 years ago when *Silent Spring* was published. Beginning by recognizing some potential flaws with environmental apocalypse, I

demonstrate how both Richard Powers's *The Overstory* (2018) and Robin Wall Kimmerer's *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants* (2013) respond to these downfalls of eco-apocalypse and offer valuable alternatives through messages of hope, reciprocity, and community. These texts remind us why we love the earth so much and show readers they must believe there is a future before they can save it.

Through explorations of *Silent Spring, Cat's Cradle, Parable of the Sower, White Noise, Braiding Sweetgrass,* and *The Overstory* I aim to show how environmental apocalypse has historically been effective and what changes we may need to consider for environmental literature to remain as influential as it was 60 years ago. These texts, I argue, offer us ways to both rise from the ashes and respond to the global climate crisis in ways that are both informative and impactful. Perhaps we can do more than hope for a utopia or discuss the merits of instant coffee—maybe we can save ourselves before the end. While paying homage to the environmental texts that have paved the way for contemporary authors, I hope to demonstrate a much-needed love for the Earth and for each other.

Chapter One: Apocalypse, Postmodernity, and Hope in *Silent Spring* and *Cat's Cradle*

The 1960s was a decade marked by counterculture and warfare. Hippie movements brought the rejection of societal norms into the public eye alongside movements in civil rights, which sought equality and rights for minorities, and women's liberation. These cultural moments existed alongside several political assassinations, the escalation of both the Vietnam and the Cold War, and turmoil surrounding Watergate. While these political and cultural moments may be some of the more notable ones of the era, environmentalism also rose in the 1960s, culminating in Earth Day 1970. The decade began with the Air Pollution Study and the creation of the Alaska Conservation Society, followed by the1962 White House Conservation Conference, creation of the National Wilderness Preservation System (1964), the organization of the Citizens for Clean Air Act (1964), passing of the Water Quality Act (1965), and the Air Quality Act/Clean Air Act (1967), and the subsequent phasing out of DDT. Many, but not all, these political successes have been attributed to Rachel Carson's 1962 work *Silent Spring,* which addresses head-on the dangers of DDT and pesticides. Using post-modern tactics in combination with a post-nuclear warfare culture, both Rachel Carson's *Silent Spring* and Kurt Vonnegut's *Cat's Cradle* connect environmental apocalypse with the breakdown of human institutions, illustrating that science and technology and a blind trust in the government will not solve all of our problems. Through their balance of satire, apocalyptic rhetoric, distrust of grand narratives, along with concluding messages of hope, *Silent Spring* and *Cat's Cradle* not only situate themselves squarely in popular culture but remind readers (and legislators) that technology and science alone cannot save us. This combination of rhetorical styles and use of postmodernism allows Carson and Vonnegut to both redefine apocalypse as not only the environmental collapse of the earth, but also the loss of compassion and reciprocity in humanity.

In a field previously defined by a Thoreauvian pilgrimage to romantic nature, (see *Reading the Roots: American Nature Writing Before Walden* and *American Earth: Environmental Writing Since Thoreau*), Carson has been increasingly seen as an important figure to ecocritics, especially in light of her emphasis on pollution and toxicity. She marks a turn from writing about nature to something more ecological, representing a new era of environmental literature. Unlike other environmental texts, which remained on the bookshelves of only devout environmental activists and scientists, Carson's *Silent Spring* seemed to be everywhere. By the time of its publication in 1962, "it became an instant bestseller. In the first three months, it sold more than 100,000 hardcover copies, and in two years, more than one million" (Lineberry). The opening line of Greg Garrard's *Ecocriticism* summarizes the importance of Carson's work: "It is generally agreed that modern environmentalism begins with 'A Fable for Tomorrow,' in Rachel Carson's *Silent Spring* (1962)" (Garrard 1). Like Garrard, Geoff Hamilton and Brian Jones' *Encyclopedia of the Environment in American Literature* references the importance of Carson, explaining how "*Silent Spring* introduced the concept of environmental justice, that all citizens have a right to a clean environment—a revolutionary idea in Cold-War America" (Nahas 56). Gerd Bayer continues "In spite of her detractors, however, Carson created, with *Silent Spring* a work that not only inspired generations of readers with a profound love of nature but ultimately provoked actual policy changes that positively impacted the environment. For this alone, she unquestionably belongs among the most influential nature writers of the twentieth century" (57). However, Lawrence Buell grants her the highest honor in *The Future of Environmental Criticism* as the "foremother of contemporary environmental justice" (122). These scholars are just a few who attribute modern ecocriticism and environmental activism to Rachel Carson and her text *Silent Spring.*

Whether or not Carson is the "foremother" of environmental writing, the 1960s mark a shift away from Thoreau-esque nature writing that depicts nature as separate from society and limited to male authors and explorers. Long before environmental literature became prevalent in American literature and culture, a long history of naturalist writers existed in the American literary canon. Early Euro-American explorer-writers, such as Christopher Columbus, William Bartram, and John Smith described the abundance and sublime beauty of the American landscape. These writers sought to describe the landscape and the resources found, often serving as a kind of propaganda for settlement of the New World. As American culture developed, environmental writing developed alongside it. In turn, as environmental writing developed, ecocriticism developed alongside it as an increasingly prominent critical field. Ecocriticism, born from ecology, focuses on the connections between culture and nature. Unlike some of the purely environmental writers from early American Literature, Ecocriticism acknowledges the intertwined relationship "nature" and "society." Industrialization, according to scholars such as Leo Marx, tainted every remaining part of "nature" with technology and humanity, forever entangling the two. This line of scholarship coincides with texts discussing the impact of man on nature, exemplified best through Carson's *Silent Spring,* which illustrates how manufactured chemicals negatively impact both the physical environment and our bodies.

Natures Reckoning: Environmental Apocalypse in Silent Spring and Cat's Cradle

Alongside this development, a pattern of contrasting the "pastoral" and "apocalypse" emerged in contemporary environmental literature. Pastoral often describes "a retreat from the city to the countryside" or "an idealism of rural life that obscures the realities of labour and hardship" (Garrard 37-38). In more contemporary literature, however, "pastoral peace rapidly gives way to catastrophic destruction" (Garrard 1). Based in biblical apocalypse, environmental

apocalypticism takes a secular approach to the "end of times," showing how man's current course will end in our own demise. In Lisa Garforth's "Green Utopias: Beyond Apocalypse, Progress, and Pastoral," Garforth summarizes how "environmental thought since the late 1960s has been strongly associated with prophecies of doom, apocalyptic predictions, and dystopian scenarios" (393). In "Apocalypse/Extinction," David Higgins acknowledges the increasing use of apocalypse in texts, citing apocalypse as a "source of sublime pleasure" (114). While the pastoral/apocalypse juxtaposition did not begin with environmental texts, they have certainly capitalized on the trope to express a sense of urgency in change. Literary environmental apocalypse includes ecological elements such as climate change, biodiversity loss, pollution, deforestation, ocean acidification, resource depletion, ecosystem collapse, and human health impacts. However, it also uses science fiction elements such as a dystopian setting, survival struggles, and social and moral commentary.

Despite both a long cultural and literary history of the use of apocalypse, many eco-critics and environmental scholars acknowledge Rachel Carson's Silent Spring as the foundation of post-modern use of environmental apocalypticism. Garrard classifies *Silent Spring* as an apocalyptic text when he asserts "the founding text of modern environmentalism not only begins with a decidedly poetic parable, but also relies on the literary genres of pastoral and apocalypse" (2). In *Writing for an Endangered World,* Lawrence Buell implicates Carson as an apocalyptic founder when he describes how "both Carson and her populist successors . . . revive a long-standing mythography of betrayed Edens, the American dispensation of which has been much discussed by scholars, most influentially by Leo Marx in his *Machine in the Garden"* (Buell 37). Buell extends these claims in *The Future of Environmental Criticism* where he argues, "Rachel Carson's career is especially telling as a study of one writer's rejection of the premise that nature

writing should be focused on a space apart of the social, owing to the discovery that there is not space on earth immune from anthropogenic toxification" (41). This scholarship, alongside the work of many others, has contributed to a consensus that Carson and *Silent Spring* serve as a foundation for environmental apocalypse.

Carson's use of apocalyptic rhetoric is most often cited through her book's title and its first chapter. Carson's first chapter, "A Fable for Tomorrow," is one of the book's shortest chapters, yet it is easily the most referenced. She begins by describing an idyllic town "in the heart of America" (1) filled with an abundance of flora and fauna. This town, of course, is supposed to represent all of America. Suddenly, however, "a strange blight crept over the area and everything began to change… Everywhere was a shadow of death" (2). Animals fell sick and died, adults and children became sick. Everything was silent—"The birds, for example – where had they gone?" The idyllic bird chirping was no longer, "it was a spring without voices" (2). The story ends explaining the "strange blight," "No witchcraft, no enemy action had silenced the rebirth of new life in this stricken world. The people had done it themselves" (3). In Carson's fable, the people are the direct cause of the silent spring they experience. She draws this conclusion herself in the final paragraph of the chapter where she asks "What has already silenced the voices of spring in countless towns in America? This book is an attempt to explain" (3). The rest of the book employs a variety of rhetorical strategies to explain the cause of the silent spring plundering real-life America, however, the apocalyptic tone established in the first chapter is often the most discussed and written about.

The rest of her book employs apocalyptic rhetoric more subtly than her first chapter. Throughout the next sixteen chapters, Carson is not only able to present the very real possibility that we may be losing crops and fish; she describes more than "a fear that we will deplete a

particular natural resource, lose pristine wilderness, or be poisoned" (Lutts 37). Instead, "it is the belief that we may well be facing the "end of history," that we as a species might be doomed" (37). Carson creates this sense of fear in many ways. Throughout the text, Carson cites examples of pesticides causing bodily harm, and sometimes death, to humans. In "Elixirs of Death," Carson describes a baby who "vomited, went into convulsions, and lost consciousness" (27) after coming into contact with a bug killer. Carson explains that "the hazard exists not only for the man who may spray this week with one insecticide and next week with another; it exists also for the consumer of sprayed products" (31). Carson effectively uses real-life stories as evidence of doom to come. If individuals are dying at the hands of DDT and other pesticides, it is not long before the masses start dying too.

Less subtle are her declarations of danger to come. In the concluding paragraph of "Realms of the Soil" she declares "it is almost certain we are heading for trouble" (61). She makes similar claims in subsequent chapters: "The living world is shattered" (68), "All these consequences of organic phosphate poisoning, if survived, may be a prelude to worse" (197), "There is no reason to suppose these disastrous events are confined to birds" (207), "at its end lies disaster" (277). While Carson scatters these declarations of apocalypse to come throughout the text, they are memorable—evidenced through the multitude of scholarship discussing the apocalyptic aspects of *Silent Spring.* However, despite *Silent Spring* often being labeled as an apocalyptic text, Carson employs other techniques besides apocalypse to create a sense of urgency and to communicate a need for action.

Carson was not the only author using environmental apocalypse as a rhetorical strategy during this time. Fiction writer Kurt Vonnegut employed similar tactics in *Cat's Cradle,* published only one year after *Silent Spring.* While *Cat's Cradle* is not a purely environmental

text, Vonnegut uses environmental apocalypse alongside characteristics of science fiction to make social and political commentary. In *Cat's Cradle,* Ice-Nine functions as the main agent of environmental apocalypse. Created by Nobel Prize physicist and "father" of the first atomic bomb, Felix Hoenikker, Ice-nine is a fictional substance that instantly turns any and all water into a form of ice that can only melt at 114.4 degrees. When Hoenikkers' children expose the world to this substance, disaster immediately strikes:

> There was a sound like that of the gentle closing of a portal as big as the sky, the great door of heaven being closed softly. It was a grand AH-WHOOM.
>
> I opened my eyes – and all the sea was *ice-nine*.
>
> The moist green earth was a blue-white pearl.
>
> The sky darkened. *Borasisi*, the sun, became a sickly yellow ball, tiny and cruel.
>
> The sky was filled with worms. The worms were tornadoes. (Vonnegut 261)

The rest of the novel describes this environmental apocalypse and how the remainder of humanity responds. While this environmental apocalypse only occurs within the last few chapters of the book, the extensive build up to the apocalypse and the extreme environmental conditions make it a defining feature of the novel.

Postmodernism: Grand Narratives, Satire, and Nuclear Warfare, Oh My!

The publication of both *Silent Spring* and *Cat's Cradle* coincides with the development and emergence of a postmodern turn in American literature. In an era defined by its counterculture (hippie movements, civil rights movements, women's liberation movement, anti-war protests), the emergence of a literary genre that is also countercultural is not surprising. Postmodernism, however, is notoriously hard to define. Many scholars and academics disagree over the exact time frame and definitions of postmodernism. However, characteristics such as

death of grand narratives, hybridity, fragmentation, dissolution of the "I," the use of parody and pastiche, metafiction/metanarrative, and intertextuality often serve as universal attributes of postmodern texts.

Breaking down and offering alternatives to grand narratives is a defining quality of postmodernism. David Carter acknowledges "it is clear 'postmodernist theory' implies certain critical stances: that the attempts to explain social and cultural development by means of 'grand narratives' (all-embracing theories or accounts) are no longer feasible or acceptable" (119). American culture is built on grand narratives such as manifest destiny, patriarchy, Christianity, and capitalism. Rather than accepting these grand narratives, "Postmodernity, on the other hand, saw these grand explanatory schemes as simply some among many possible narratives" (Hutcheon 124). Oppositional movements, like "war movements [protesting] against the tyranny of the grand narrative of repressive power" (124), functioned similarly to postmodern texts that protested various cultural grand narratives.

In the post-Cold War, 1960's postmodernism questions previous belief systems around science and technology and the American government. While "the calling of attention to little narratives could be seen, in part, as the result of the oppositional movements, primarily in Europe and North America, which arose during the 1960s" (Hutcheon 124), postmodern texts and American counterculture function rhizomatically—both impact each other and impact the way we perceive both movements. Literary postmodernism impacted American culture as much as the culture impacted postmodern literature. It is difficult to think of one without thinking of the other.

This cultural and political context sets the perfect stage for both *Silent Spring* and *Cat's Cradle* to start breaking down grand narratives about government (mis)use of science and

technology. In his *Kurt Vonnegut's Crusade; Or, How a Postmodern Harlequin Preached a New Kind of Humanism,* Todd Davis explains that "unlike historic Western European discourse that first placed value on human life because of its belief that humanity was created in the image of God, postmodernism feigns no assurance that 'truth' may be founded on the knowledge of providence or science or any other grand narrative that wish to establish itself as the essence or center on which may be ground" (25). Using nuclear warfare as a frame of reference, Carson and Vonnegut begin breaking down narratives of science and technology.

In *Silent Spring,* Rachel Carson uses fears and animosity towards nuclear warfare to question the belief humans and our government can control nature rather than be a part of it. Carson is able to successfully draw on the "era's hysteria about radiation to snap her readers attention, drawing a parallel between nuclear fallout and a new, invisible chemical threat of pesticides" (Griswold 5). She begins breaking down this narrative by establishing a connection between nuclear and chemical warfare and chemical pesticides. Beginning with their origins, Carson recounts:

This industry is a child of the Second World War. In the course of developing agents of chemical warfare, some of the chemicals created in the laboratory were found to be lethal to insects. The discovery did not come by chance: insects were widely used to test chemicals as agents of death for man (Carson 16). Connecting the origins of pesticides (a war against nature) with chemical and nuclear warfare (a war against humans) forces readers to ask the questions they have been asking of nuclear war of pesticides.

Carson continues to establish a connection between the two by using violent, destructive language in her discussion of the use of pesticides. For example, when she describes sprayings of the gypsy moth in Northeastern states, she uses combat-like language: "The Department's all-out

chemical war on the gypsy moth began on an ambitious scale" (158). She continues the use of this language when explaining how pesticides kill all bugs, including the "good" ones: "Thus, through the circumstances of our lives, and the nature of our own wants, all these have been our allies in keeping the balance of nature tilted in our favor. Yet we have turned our *artillery* against our friends" (emphasis added 251). Conversations about the Cold War and Vietnam War were permeating American media. Consequently, "far better known to the public, at the time, was radioactive fallout. Pesticides could be understood as another form of fallout" (Lutts 19). By using this battle-like language, Carson is able to establish that the use of pesticides is both negative and dangerous in a time where nuclear warfare has also been perceived as negative and dangerous.

Additionally, Carson continues to break down these narratives by questioning the ethical considerations behind the use of these chemicals. Carson asks, "The question is whether any civilization can wage relentless war on life without destroying itself, and without losing the right to be called civilized" (99). She continues this line of questions when she asks: "by acquiescing in an act that can cause such suffering to a living creature, who among us is not diminished as a human being?" (100). Through this line of rhetorical questioning, Carson forces readers to consider the long-term effects of our choices. By using technology and chemicals to play god, we are at risk of losing our humanity and terminating our own species alongside many others. She asserts that "even if the program succeeds in its immediate objective, it is clear that the whole closely knit fabric of life has been ripped apart" (67). If "Postmodernism has called into question the messianic faith of modernism, the faith that technical innovation and purity can assure social order" (Hutcheon 11), Carson questions similar beliefs that pesticides and scientific innovation can guarantee "social order" or even our own humanity.

Most effective, however, is her questioning of agricultural departments and the consequences of our choices. The questions and arguments Carson poses about the use of pesticides can easily be substituted with questions of militant use of chemical warfare. Carson proposes to her audience "The question that has now urgently presented itself is whether it is either wise or responsible to attack the problem by methods that are rapidly worse" (266). She also questions who has power to make these militant choices: "Who has made the decision that sets in motion these chains of poisonings, this ever-widening wave of death that spreads out, like ripples when a pebble is dropped into a still pond?" (127). She confidently answers her own question: "The decision is that of the authoritarian temporarily entrusted with power" (127). The choice to use pesticides (and nuclear warfare) is not the choice of a benevolent, ineffable political power, but instead is a weapon placed in the hands of an autocratic power, willing to risk American lives in order to needlessly kill fire ants and moths.

Like Carson, Vonnegut's *Cat's Cradle* uses nuclear warfare to break down many familiar American truths and fundamental beliefs. Vonnegut's commentary on humanity and nuclear warfare is easily interchangeable with Carson's argument on pollution. While Carson and Vonnegut are both exploring different subjects, both authors describe the dangers of science and technology in the wrong hands. Carson's pronouncement that "genetic deterioration through man-made agents is the menace of our time, the last and greatest danger to our civilization" (208), could just as easily describe Vonnegut's own commentary on the use of nuclear warfare. Both chemical pesticides and nuclear warfare have been placed into the wrong hands and pose a serious threat to humanity.

While *Cat's Cradle* results in an environmental apocalypse, it is caused by misused science and technology, speaking to the nuclear and chemical fears of Vonnegut's readers. In

"Rescuing Science from Technocracy: *Cat's Cradle* and the Play of Apocalypse," Daniel L. Zins' argues that *Cat's Cradle* forces readers to "stop and think about our most important problem, and the once we seem to have the most difficulty confronting: the increasing possibility of our destroying the world by our own stupidity and our deification of science and technology" (170). Zins continues, "we may prefer to blame our nuclear predicament on an unbridled technology, but Vonnegut suggests that it is our failure to be fully human that especially endangers us" (171). In *Cat's Cradle*, ice-nine itself does not cause the environmental apocalypse; it is the recklessness of its owners, Angela, Frank, and Newt, who do.

Like Carson, Vonnegut questions our trust in the government as it is. For Todd Davis "Vonnegut demystifies and decenters the grand narratives of America while beginning to offer inevitably provisional answers, the only kind there are to the questions of a postmodern condition" (58-59). In "Dark Humor in *Cat's Cradle*," Blake Hobby extends Davis's argument, asserting: "In this way, *Cat's Cradle* helped foster the counterculture of the 1960s. At stake in the novel is the increasing paranoia over the Cold War and the very real threat of nuclear annihilation. Ice-Nine—the substance that ends the world in *Cat's Cradle*—can be better understood as a technology that, in attempting to better the world, actually has the power to end all life on the planet" (58). Through his characters and ice-nine, Vonnegut is able to question our trust in technology, and present the possible consequences of this trust.

The origin of ice-nine begins breaking down some of these well-known narratives, such as the power of technology and trust in the military. When John interviews Dr. Breed, the vice-president of the Research Laboratory of the General Forge and Foundry Company that employed Dr. Felix Hoenikker, Dr. Breed recounts the inspiration behind ice-nine. Dr. Breed tells John "There was a marine who was hounding [Hoenikker] to do something about mud" because "after

almost two-hundred years of wallowing in mud, [they] were sick of it" (Vonnegut 42). He continues: "What the general had in mind was a little pill or a little machine. Not only were the Marines sick of mud, they were sick of carrying cumbersome objects" (43). While Dr. Breed does not know that Hoenikker actually goes on to create ice-nine, this anecdote asks readers to question our beloved "truths." Is the military benevolent? Is all technology good? What is an improvement? Davis explains:

> It is much more comforting to believe that the United States is somehow divinely anointed for providential business, to perceive the nation's leaders as somehow beyond reproach, than to recognize the limitation of our national vision and the existence of other national dreams. (22)

The origin of ice-nine exemplifies Davis's description of America. This marine general who finds mud inconvenient indirectly causes an environmental apocalypse. This begs readers to rebuke our government and its military—in this scenario the military is not all good nor should it be all powerful—they are lazy and rely on technology. This extreme scenario encourages real questions for a real institution: should our institutions have this much power? Should we rely this heavily on technology?

In addition to apocalyptic rhetoric and the breaking down of grand narratives, both Carson and Vonnegut use satire and parody in their texts. In "On Satire and Parody: The Importance of Being Ironic," Roger Kreuz and Richard Roberts defines satire as "the ridicule of a subject to point out its faults" (100). However, satire requires the audience to have outside points of reference. In satire, Kreuz and Roberts explain, "the multiple representations are constructed only when the audience goes beyond the narrative and consider issues external to the story" (101). The authors go on to define parody as "an imitation, intended to ridicule or to

criticize" (102). While satire and parody often work together, they are different. Both use humor and comedy to identify issues in a topic, but parody specifically mimics another frame of reference, whether it be another author, director, or art style.

Carson's use of satire not only helps her avoid reading as too moralizing, but also helps readers to reconsider their bias towards bugs and rodents. In "Carson's Can of Worms: Grotesque Satire and Abjection in Rachel Carson's *Silent Spring,*" Donnie Secreast argues "the satirical portions of Carson's text, her appreciation for the abject and willingness to play with grotesque images make her writing more of a precursor for the current trends" (2). She continues that "grotesque, the abject, and satire work together to produce environmental writing that revels in the tension resultant from the boundary cross between the comic and the horrific…nodding toward a more inclusive, and less anthropocentric environmentalism" (4). By blurring the lines between comedy and horror, Carson also blurs the lines between human and animal and clarifies the difference between right and wrong.

In *Silent Spring*, Carson asks her reader to reconsider the binaries we have imposed onto nature. She reexamines the classification of some plants as weeds, the need to "eradicate" some insects like fire ants and moths and presents an alternative for spiders: "Carson's text shows how a similar concession could be made to spiders and other alleged-abject beings—their personal natures are not responsible for the abjection: it is government propaganda and the chemical poisons which benefit more from the classification, and she gestures toward the need for that shift to take place" (Secreast 10). Carson describes a "concerned housewife who abhorred spiders" (Carson 227-228). Her distaste for spiders led her to spray her home three times. Consequently, "she was found to be suffering from acute leukemia" and died (228). While

leukemia is no joking matter, Carson is able to use the grotesque and abject to satirize previously accepted binaries.

Amidst her abject descriptions of vomit and bugs, Carson also parodies fairy tales. While the opening line to the text "There was once a town in the heart of America" (Carson 1) may be the most obvious example of this parody, she employs this satirical technique again in "Elixirs of Death." Carson proposes:

It is a world where the enchanted forest of the fairy tales has become the poisonous forest in which an insect that chews a leaf or sucks the sap of a plant is doomed. It is a world where a flea bites a dog, and dies because the dog's blood has been made poisonous, where an insect may die from vapors emanating from a plant it has never touched, where a bee may carry poisonous nectar back to its hive and presently produce poisonous honey. (32-33)

By presenting a warped fairy tale, Carson "rejects hierarchic notions of reality that privilege some entities as subjects and others as objects" (Secreast 13). This poisonous forest is not the setting to a grotesque fairy tale, but the setting of our actual world, a setting Carson is able to highlight in her upside-down parody.

Less subtle than Carson, Kurt Vonnegut's *Cat's Cradle* is filled with satire and parody. *Cat's Cradle* is viewed as a "satire of the arms race" (Jubouri Al-Ogaili & Babaee 92). The novel's own summary on the back cover describes it as a "satirical commentary on modern man and his madness. An apocalyptic tale of this planet's ultimate fate…" For example, the fictional religion Bokononism and other religious allusions parodies the book of Revelations in the Bible. In "Cat's Cradle: The Apocalyptic Creativity of Kurt Vonnegut," Jesús Lerate de Castro argues that Vonnegut makes this parody through "the image of water, which is undoubtedly a key image, but also through other explicit allusions to the final book of the New Testament" (26). Lerate de

Castor continues "these references and allusions to St. John expand the apocalyptic framework of *Cat's Cradle*, but also contain in the final instance a parodic intent. Vonnegut makes this aspect clear in the marked dissimilarity between the Christian and Bokonist bible" (27). He quickly establishes this dissimilarity in the opening pages of the novel. The narrator, John, says "The book was to be factual." He continues "it was to be a Christian book. I was a Christian then" (Vonnegut 1). The following page, however, immediately parodies this association of Christianity and Truth, saying "I am a Bokonist now. I would have been a Bokonist then, if there had been anyone to teach me the bittersweet lies of Bokonon" (Vonnegut 2). This sense of parody and satire remains throughout the entire novel.

Using satire and parody, "Kurt Vonnegut responds to the frailty of our lives, the futility of our utopian dreams, and the absurdities of science and religion" (Hobby 57). By creating an "experimental, fantastical [world] populated with grotesque characters" (Hobby 58), Vonnegut addresses current politics and culture. For example, Felix Hoenikker reads as a satire of World War II scientists. In *Silent Spring*, Carson tells the scientific history of DDT, which was "first synthesized by a German scientist in 1874" (20). Its insecticide properties went undiscovered for another 65 years by "Paul Müller of Switzerland, who won the Nobel Prize" (Carson 20). While a "Nobel Prize physicist," "one of the so-called 'Fathers' of the atomic bomb," (Vonnegut 6) Dr. Felix Hoenikker may not be a direct parody of Müller, he is a satire of irresponsible scientists of which our history has plenty.

In *Cat's Cradle*, Dr. Hoenikker is admired by other characters in the novel for his child-like innocence and curiosity, however, his innocence and curiosity can easily be read as ignorance and apathy—posing a real threat to humanity. Dr. Breed's brother, Marvin Breed, voices this reading. Marvin expresses an awareness of how Hoenikker has been perceived by the

public: “I know all about how harmless and gentle and dreamy he was supposed to be, how he’d never hurt a fly, how he didn’t care about money and power…” (67). However, Marvin quickly shares his real opinion of Dr. Hoenikker, asserting “how the hell innocent is a man who helps make a thing like an atomic bomb? . . . Sometimes I wonder if he wasn’t born dead. I never met a man who was less interested in the living. Sometimes I think that’s the trouble with the world: too many people in high places who are stone-cold dead” (68). By creating a parody of scientists who have created real-life dangers, Vonnegut creates characters who “collectively suggest how modern society worships technology and science, how we all desire power and control, and how easily power and knowledge can corrupt and deform” (Hobby 60).

Crafting Optimistic Bliss: Hopeful Alternatives to Apocalypse

In addition to the use of parody and breaking down of grand narratives, and in despite of their use of environmental apocalypse, both Rachel Carson’s *Silent Spring* and Kurt Vonnegut’s *Cat’s Cradle* conclude with messages of hope, showing readers humanity still has a chance. After the environmental apocalypse caused by ice-nine, revealing that people survived: “for we had survived the storm, were isolated, and then the living became very easy indeed. It was not without a certain Walt Disney charm” (276). Todd Davis reflects on Vonnegut’s humanism, illustrating “Vonnegut’s efforts to connect with his audience as an act of good citizenship, a connection he hopes ultimately leads to the construction of better realities for humanity” (Davis 7). John and Newt and the other survivors are left with a chance to contribute to a humanity that has been forced to remember the need for empathy and reciprocity.

Like *Cat’s Cradle, Silent Spring* offers humanity alternatives to environmental apocalypse. Killingsworth and Palmer identify these varying messages of hope in *Silent Spring*: “the conflicting narratives of apocalyptic doom and millennial hope strive for dominance” (190).

Using contrasting themes of hope and apocalypse makes both that much more persuasive as readers come to terms with the possibility of an apocalypse or the possibility of an empathetic humanity.

As early as chapter 7, Carson begins presenting solutions other than chemical insecticides and pesticides. In "Needless Havoc," Carson explains how the female *Tiphia* and Milky disease were effective killers of the Japanese beetle (96-97). However, these hopeful solutions are not limited to "Needless Havoc." Instead, "these moments of hope appear throughout the rest of the book and are brought together in the hopeful and passionate conclusion in chapter 17, 'The Other Road'" (Killingsworth and Palmer 189). Carson offers a variety of solutions in her book's conclusion. She offers that "insects have many natural enemies – not only microbes of many kinds but other insects" (291). She continues "Examples of successful biological control of serious pests by importing their natural enemies are to be found in some 40 countries distributed over much of the world" (292). In the final few paragraphs, she explains that "only by taking account of such life forces and by cautiously seeking to guide them into channels favorable to ourselves can we hope to achieve a reasonable accommodation between the insect hordes and ourselves" (296). While apocalypse and the end of humanity is one road, responding to nature with nature is another. Providing solutions that are better for nature is better for people, and better for humanity. By offering a hopeful message, *Silent Spring* does more than warn against impending doom, it reinvigorates readers with love for life and forces them to question some essential "truths" in order to maintain it.

These texts mark the beginning of a new kind of apocalypse, of an apocalypse that is more than the end of time. In these texts, apocalypse extends past an environmental apocalypse at the hands of man to the end of humanity. Both of these books present the consequences of

leaving humanity behind for technology. When we remove empathy from humanity, and humanity from science, we're with nothing. In order to resolve these threats to society, whether those threats be nuclear warfare or DDT, these texts remind us how being human means more than domineering the earth with science and technology—it means remembering we too are a part of nature, and in order to save nature we need to save ourselves.

Chapter Two: From Apocalypse to Capitalocene Dystopias: Redefining Environmental Apocalypticism in Octavia Butler's *Parable of the Sower* and Don DeLillo's *White Noise*

Big hair, big music, and big fashion (and Reaganomics) all define the 80s. However, aerosol hairspray was not the biggest environmental issue plaguing the 80s. In the years right before the news was filled with the election of Ronald Reagan, the assassination of John Lennon, or the release of Pac-Man, environmental crises like the Love Canal Disaster (1978) and The Mile Island Nuclear Accident (1979) filled the news. In 1978, toxic waste dumping in Love Canal was discovered, highlighting the dangers of hazardous chemicals. Less than 300 miles away in Harrisburg Pennsylvania the partial meltdown of the nuclear reactor at Three Mile Island took over headlines. These environmental disasters, and fears of apocalypse set the stage for the publication of Don DeLillo's *White Noise* (1984) and Octavia Butler's *Parable of the Sower* (1993). These texts, among others from the 90's and 80's not only illustrate developing environmental apocalypse in post-modern and science fiction texts, but also serve as demonstrations of the Anthropocene and Capitalocene concepts developed by academics in the 2000's.

Defining the Anthropocene

Anthrop, from the Greek *anthrōpos,* means pertaining to man or human beings. Combine with the suffix -cene, used to indicate periods in geology, the Anthropocene describes our current geological period which has been determined by the results of human action. First used in the 1970s and 1980s, Nobel Prize winning chemist and physicist Paul Crutzen popularized the term in 2000. The duo of Crutzen and Eugen Stoermer has published various groundbreaking pieces about the Anthropocene, changing the way we perceive geology and climate change. In "The Anthropocene," published in 2000, Crutzen and Stoermer how explain "during the Holocene

mankind's activities gradually grew into a significant geological, morphological force, as recognized by a number of scientists" (483). Due to the rapidly increasing human population and unprecedented use of non-renewable resources, Crutzen and Stoermer declared a new geological era: the Anthropocene. The impact of human activities would be evident in the geological record. The duo continues to explain how our current actions will "remain a major geological force for many millennia, maybe millions of years, to come" (485).

Since Crutzen's work in the early 2000s, the concept of the Anthropocene has been extended to many fields outside of geology. In addition to the geological and ecological consequences being studied and predicted by scientists, academics in the humanities have started to consider the consequences of the Anthropocene in a variety of fields. In the introduction to *The Anthropocene: Approaches and Contexts for Literature and the Humanities*, Seth Reno explains that "understanding how to adapt, and how to live, in this changing world will be essential. And the Anthropocene concept it necessarily interdisciplinary; to study it, we need to know a bit about geology, climate science, environmental justice, and literature, especially in the form of *stories*—the story of the Anthropocene itself" (2). "However,: he continues, "scholars in the social sciences are less interested in golden spikes [in time] than the social, political, economic, and philosophical events and perspective that have produced this new Age of Humans" (5). The Anthropocene not only implies geological, ecological, and biological consequences, but also political, social, mental, and financial ones as well.

Reno's claims about the interdisciplinary nature of the Anthropocene is clearly reflected in the number of scholars outside of scientific fields writing about it. Wendy Arons, a professor of dramatic literature and area chair of Dramaturgy at Carnegie Mellon University's School of Drama, for example, explains the Anthropocene "had the virtue of succinctly conveying a piece

of geophysical news: that the planet had, at some point in the recent geological past, entered into an 'Age of Man,' in which human beings had managed to effect the kinds of large-scale changes to atmosphere, soil, mineral composition, species distribution, and climate that had previously been attributable to such large-scale geophysical events such as volcanic eruptions or comet impacts" (Arons 35). Similarly, Shannon O'Lear, Director of Environmental Studies at the University of Kansas, writes that "the Anthropocene acknowledges that human activity since the Industrial Revolution and the widespread practice of using nitrogen-based fertilizers have effectively shifted the planet into a new geological era in which we cannot separate human activity from an idealized, external environment (if we ever could)" (O'Lear et al. 5). Even author and YouTuber John Green has written about the Anthropocene in one his most recent publications and first non-fiction book, *The Anthropocene Reviewed.* In his introduction he credits his wife with stating "in the Anthropocene, there are no disinterested observers; there are only participants" (Green 5).

In addition to the work of O'Lear, Arons, and various others, Jason W. Moore, environmental historian, historical geographer, and sociology professor at Binghamton University, has also discussed the Anthropocene in various publications: "The geological Anthropocene – a useful, formal concept to the scientific community – has, however, been eclipsed by the Popular Anthropocene: a way of thinking the origins and evolution of modern ecological crisis" (Moore 72). While these three writers are barely the tip of the iceberg of scientists, artists, political scientists, sociologists, teachers, economists, literary critics, and many more researching and discussing the Anthropocene, they show the widespread popularity and recognition the Anthropocene has had on various fields and walks of life.

Despite the word Anthropocene not coming into popularity until the 2000s, various works of literature have shown human's impact on the environment and on each other. 80s and early 90s literature began to sense this oversized human impact on the planet and consciousness. Through the incorporation of ecological themes, portrayal of human-nature relationships, and depictions of environmental degradation literature has the potential to communicate to non-scientific communities the impact humans are having on the earth, illustrating the Anthropocene (even before the vocabulary existed).

Anthropocene in White Noise and Parable of the Sower

In his review of Elise a. Martucci's *The Environmental Unconscious in the Fiction of Don DeLillo,* Jerry Varsava writes that "Don DeLillo is not widely regarded as an 'environmental novelist,' that is, one whose fiction examines the generally malign impact of humankind on the natural world. He is a writer of a different and more ambitious sort, one who—while occasionally examining environmental spoliation—in fact portrays a myriad of social and political issues, in serial fashion from one novel to the next" (153). What Varsava does not consider, however, is how "environmental spoliation" impacts the "myriad of social and political issues" he values more than the environmental aspects of DeLillo's texts. In "Don DeLillo's Postmodern Pastoral" Dana Phillips argues that "what has been less noticed, and less thoroughly commented on, is DeLillo's portrait of the way in which postmodernity also entails the devastation of the natural world" (200). DeLillo's 1985 novel *White Noise* talks about a "myriad of social and political issues" as well as cultural and economic issues. However, *White Noise* also illustrates a myriad of environmental issues, including toxic spills, leaching chemicals, and an altered atmosphere that are caused by human action.

In *White Noise*, DeLillo's characters live through a variety of (un)natural phenomena, ranging from an Airborne Toxic Event after a train crash releases lethal poison into the air to sublime sunsets amplified by the man-made air pollution. These human disasters not only have long-term effects on the environment, but also have long-term effects on the novel's main character Jack Gladney and his family's way of interacting with the environment around them. In *The Encyclopedia of the Environment in American Literature,* Geoff Hamilton explains how *White Noise* "[focuses] in particular on the myriad of ways in which technological control of the environment has transformed the natural world into an extension of the human" (85). He continues to explain that "nature seems no longer to have any claim beyond the human, for natural scenes not only seem to be generated by human interventions, but continually remind Gladney and other characters of something they have witnessed previously on television or in the movies" and "romantic conceptions of nature as an inspiration have, as a result of such control, been seriously compromised. "Natural" spectacles are associated with the corrupting human touch" (Hamilton 86).

When considering the atypical behavior (and hairline) of his son Heinrich, Gladney wonders:

> Am I at fault somehow? Have I raised him, unwittingly, in the vicinity of a chemical dump site, in the path of air currents that carry industrial wastes capable of producing scalp degeneration, glorious sunsets? (People say the sunsets around here were not nearly so stunning thirty or forty years ago.) Man's guilt in history and in the tides of his own blood has been complicated by technology, the daily seeping falsehearted death. (DeLillo 22)

While Gladney himself may not specifically be at fault, he does express an awareness of mankind's "guilt" for the current environmental factors that may or may not be the cause of Heinrich's prematurely receding hairline. Man would only feel guilty in if he had done something, and it seems Gladney is beginning to come to terms with the impacts of man on earth.

When Gladney later finds Heinrich on their roof with binoculars, his wife Babette tells him "a neighbor had told her the spill from the tank car was thirty-five thousand gallons. People were being told to stay out of the area. A feathery plume hung over the site" (DeLillo 112). Gladney does not express concern about this "feathery plume," believing his job and socio-economic class protects him from ecological disasters. However, as the language shifts from "feathery plume" to "airborne toxic even," his attitude changes. While evacuating their homes Gladney considers the fear they are experiencing:

Our fear was accompanied by a sense of awe that bordered on the religious. It is surely possible to be awed by the thing that threatens your life, to see it as a cosmic force, so much larger than yourself, more powerful, created by elemental and willful rhythms. This was a death made in a laboratory, defined and measurable, but we thought of it at the time in a simple and primitive way, as some seasonal perversity of the earth like a flood or a tornado, something not subject to control. (DeLillo 127)

His fear is so accelerated due to the fact this natural disaster is not natural at all, it is a man-made disaster. The geological forces he lists such as "floods or a tornado" would naturally occur without human interference. An "airborne toxic event," however, is a fictional example of the human impacts on geology Crutzen discussed in his theories about the Anthropocene fifteen years after the publication of DeLillo's novel.

Only seven years before Crutzen's first publications on the Anthropocene, Octavia Butler also creates a fictional anthropogenic world. Octavia Butler's 1993 novel *Parable of the Sower* is undoubtedly an intersectional text. In addition to themes of class, gender, and race, the novel displays characteristics of the Anthropocene through its portrayal of ecological deterioration at the hands of human inhabitants. In "An Ecofeminist Reading of Octavia Butler's *Parable of the Sower* and *Parable of the* Talents, Hatice Övgü Tüzün considers the intersectionality of the text, arguing "Butler employs an ecofeminist perspective to examine the conditions that cause and perpetuate the subordination of both women and nature in a post-apocalyptic setting" (11). She connects humans treatment of the environment with the treatment of women, states *Parable of the Sower*'s "visceral portrayal of connections between harmful practices that exploit the environment and social structures that oppress women among other groups" (12), making it an ecofeminist text. While *Parable of the Sower*, and most of Butler's other work, is considered science fiction, Övgü Tüzün points out that "science fiction as a genre has always been related to ecocritical ways of thinking" (12).

In Lawrence Buell's discussion of "Space, Place, and Imagination" in *The Future of Environmental Criticism* he summarizes *Parable of the Sower,* this way: "a devastated United States seeks to recover from disruption caused by civic breakdown aggravated by global warming, [where] emplacement is seen not simply as a now-lost condition but a trap" (91-92). The devastation in Butler's fictionalized America is evident within the opening chapters of the novel. The narrator, a teenage girl named Lauren Olamina describes her day-to-day life and the destruction around her, She explains the degradation of the earth around her, primarily through fire and water. In addition to fires being set by people outside the walls of her community, Lauren outlines a hurricane on the Gulf: "There's a big early season storm blowing itself out in

the Gulf of Mexico. It's bounced around the Gulf, killing people from Florida to Texas and down into Mexico. There are over 700 people dead so far. One hurricane" (Butler 15). This one catastrophic hurricane contrasts with the catastrophe Lauren is facing: no water. After stating "the cost of water has gone up again" (17), she explains "We saw a dust-dry reservoir and three dead water peddlers with their heads cut halfway off. And we saw whole blocks of boarded up buildings in Los Angeles. Of course, no one would waste water trying to put such fires out" (Butler 18). When Lauren thinks about the chances of survival in Mississippi she remembers "they have plenty of water down there, but a lot of It is polluted" (Butler 53). While one coast is struggling to survive with too much water, the West Coast is struggling to survive with no water at all. She explains the longevity of this crisis when it begins to rain for the first time in "six years. I can remember the rain six years ago, water swirling around the back porch, not high enough to come into the house, but high enough to attract my brothers who wanted to play in it. Cory, forever worried about infection, wouldn't let them" (Butler 47).

As explained by various scholars, the Anthropocene is more than geological changes and changes to the climate. They are instead changes caused by human activity. In addition to describing the deterioration of the world around her, Lauren Olamina connects this deterioration to the action of humans. When an astronaut exploring the possibility of life on Mars dies, Lauren thinks "Mars is a rock—cold, empty, almost airless, dead. Yet it's heaven in a way. We can see it in the night sky, a whole other world, but too nearby, too close within the reach of the people who've made such a hell of life on Earth" (Butler 21). This perception of the recently deceased astronaut on Mars is striking for two reasons: (1) it shows the degradation of the environment on earth and (2) blames humans for the damage to Earth. Lauren's understanding of Mars is not only terrifying but sounds lonely and unfertile. Mars is so dry life is almost incomprehensible.

This, however, is heaven compared to life on Earth. Additionally, Lauren explicitly blames humans for the disasters on Earth when she says people "made" planet Earth the way it is.

Lauren repeats these sentiments again when comparing the state of the world to the Medieval Bubonic Plague. Lauren tells one of her classmates, Joanne:

Things are changing now, too. Our adults haven't been wiped out by a plague so they're still anchored in the past, waiting for the good old days to come back. But things have changed a lot, and they'll change more. Things are always changing. This is just one of the big jumps instead of the little step-by-step changes that are easier to take. People have changed the climate of the world. Now they're waiting for the old days to come back. (Butler 57)

Once again, Lauren directly places blame on people for the current state of the environment and the world. In her conversation with Joanne, Lauren illustrates the same assertion John Green makes in his review on "Humanity's Temporal Range": "for many forms of life, humanity *is* the apocalypse" (17). Humans, according to Lauren, have wreaked havoc on Earth's life systems.

Anthropocene to Apocalypse

It's hard to be a fan of a concept predicting the beginning of the end. Yet, we still rave over novels and films that depict the end of time: From Cormac McCarthy's *The Road* (2006) and Margaret Atwood's *Oryx and Crake* (2003) to Roland Emmerich's *The Day After Tomorrow* (2004) and Adam McKay's *Don't Look Up* (2021) all have their fair share of enthusiasts. What is it about environmental apocalypse, literary and cinematic depictions of the Anthropocene, which keeps readers reading? The shift from Anthropocene to apocalypse is not hard to imagine. In fact, they seem linked. Texts like *Silent Spring* and *Cat's Cradle* offer both fiction and non-fiction illustrations of the world ending in environmental apocalypse at the hands of humans. Don

DeLillo's *White Noise* and Octavia Butler's *Parable of the Sower* do more than depict a changing geology at the hands of human activity, they associate this anthropogenic change with the end of life as we know it.

In *Parable of the Sower* Octavia Butler connects the degradation of the natural world with the degradation of humanity. In "Dystopian Critiques, Utopian Possibilities, and Human Purposes in Octavia Butler's Parables," Peter Stillman considers the habits of Butler's dystopian works: "Like other dystopian writers, Octavia Butler perceives dangerous tendencies in contemporary society and intensifies them in her imagined futures in order to forewarn of the perils latent in the present and to encourage readers to think and prevent possible dystopian futures" (Stillman 15). With consideration of the Anthropocene and *Parable of the Sower,* it seems the "dangerous tendencies" Butler perceives end in environmental apocalypse. Stillman highlights how Butler "maps a United States where governments at all levels have lost even the minimal ability to maintain order, defend human rights, and protect the environment; where multi-national corporations act freely and repressively without fetters; and where extreme income inequalities exist" (Stillman 15).

Like Stillman, Eva Federmayer draws a connection between environmental apocalypse in *Parable of the Sower* as it extends to the Anthropocene. In her summary of the parable novels, Federmayer writes that: "Affected by a shocking, concatenation of ecological, economic, and political disasters" Butler's characters "seek to cope with apparently insurmountable difficulties" (347). She argues:

> Besides her palpable engagement with ecological problems that tie in with social problems, the storyworlds of Butler's novels, once read side by side with each other, yield a fascinating but also horrifying fictional mapping of the Anthropocene Age,

> dramatizing the near-contemporary global ecological-social crises, and exploring anthropogenic, that is, human-induced, devastation in full swing through the prism of survivors in post-industrial California. (347)

Here, Federmayer directly connects the actions of the humans in *Parable of the Sower* with the apocalypse they're in. She continues to explain "Butler's *Sower* likewise portrays the world on the brink of ecological-political collapse but posits a black heroine who is capable of finding a niche in the post-industrial Armageddon" (353). Federmayer's use of the word Armageddon implies a long-term, negative change. Considering the religious associations with Armageddon and the end of the world, describing *Parable of Sower*'s world as a "post-industrial Armageddon" shows Lauren is not only living through an environmental apocalypse, but a world-ending environmental apocalypse caused by the adults around her.

Jim Miller complicates Butler's use of apocalypse in "Post-Apocalyptic Hoping: Octavia Butler's Dystopian/Utopian Vision." In his article, Miller finds Butler's tendency to "[stare] into the abyss of the dystopian future" as a way to reinvent "the desire for a better world. In doing so, she places herself firmly within a rich tradition of feminist utopian writing" (336). While Miller and Stillman perhaps label what kind of apocalyptic text *Parable of the Sower* is, they both agree Butler is able to show readers the problems with our world and our Anthropocene through Lauren's world and her Anthropocene.

Butler's main character, Lauren, navigates various challenges and disasters in *Parable of the Sower,* finding her way through anthropogenic apocalypse These challenges range from economic collapse and a drug epidemic to a proliferation in homelessness and, most importantly, climate change. Throughout the novel, Lauren explains the various ways climate change, which

she has established has been caused by humans, is affecting water in various ways. This, consequently, is leading to more environmental collapse through fires.

When the community Lauren's family lives in begins to separate and fall apart, Lauren learns of the privatization of the coastal city Olivar because the government has left it behind. While Olivar is considered rich, "parts of it crumble into the ocean, undercut or deeply saturated by salt water. Sea levels keep rising with the warming climate and there is the occasional earthquake" (118). Even though Olivar is more financially stable than other parts of the country, the consequences of climate change are making it dangerous and unlivable, showing signs of an impending environmental apocalypse.

In Lawrence Buell's "Toxic Discourse" he explains the necessity to highlight the pastoral in order to emphasize the toxicity of environments (648). This juxtaposition, most famously illustrated in *Silent Spring,* "inverts and democratizes the pastoral ideal: a nurturing space of clean air, clean water, and pleasant uncluttered surroundings that is ours by right" (648). The environment of *Parable of the Sower* is anything but pastoral. Lauren's own situation with water, while different from Olivar, is not much better. When Lauren has to leave her community after it is burned and raided, the scarcity of water becomes more apparent. Due to drought, water has become a highly valued, hard to find source. In order to find clean water, Lauren and her group must stop at a "commercial water station" because it is the only place to find "clean, safe water" (Buter 201). She explains, however, "there aren't enough water stations. That's why water peddlers exist. Also, water stations are dangerous places. People going in have money. People coming out have water, which is as good as money" (201). The contrast between the lack of drinking water and abundance of undrinkable water with rising sea levels makes the situation

appear that much more dire, showing how the toxicity Buell described results in scarcity, a common component of apocalypse.

Due to the extreme drought, “fires are illegal” (Butler 180). Because of the dryness, “there’s always a danger of campfires getting away from people and taking out a community or two. It does happen . . . They give comfort, hot food, and a false sense of security” (180). Because of climate change, the subsequent fires contribute to the environmental apocalypse Lauren and her followers must navigate to survive. The fires not only burn down communities and people, but also advertise the location of people hiding in the woods. The inability to use fires is especially dangerous when the need to boil water is so high. Without water, they cannot set fires to stay warm enough to survive.. However, without fires, they cannot drink water. The changing climate of the planet is making it unlivable, killing the very people who have made the earth the way it is.

Like *Parable of the Sower*, Don DeLillo’s *White Noise* utilizes toxic discourse to indicate environmental apocalypse. In “Toxic Events: Postmodernism and DeLillo’s ‘White Noise,’” N.H. Reeve and Richard Kerridge explain how toxic events get woven into bodies and lives:

The novel’s world is divided up into ‘events’, on the one hand, and ‘toxic events’ like this one, events which add to their brilliance as spectacles a direct—if hidden or delayed—effect on those caught up in them. A toxic event is literally a spillage, something that breaks out of the boundaries set round it which permit controlled reactions to function. Instead of staying safely inside the cultural world, as part of the circulation of signifiers and deferrals, a toxic event can cause irreversible physical changes, changes to the human body which, unlike a cultivated ugliness or a sadistic laugh, cannot be abstracted or engineered at will. (Reeve & Kerridge 311)

While the environmental apocalypse illustrated in section II of *White Noise* is the shortest of the novel's three sections, it illustrates the fears and tribulations the Gladney family grapples with for the rest of the novel. Section II, "The Airborne Toxic Event" describes the crash and subsequent consequences of a train car crash that releases Nyodene Derivative into the air.

In ten pages, the toxicity of the substance becomes more apparent through the language news broadcasters and government officials use to describe the crash. In "After the Event: Don DeLillo's *White Noise* and September 11 narratives," Richard Devetak explains "When statements are made by public officials or broadcast by news agencies they appear to carry a degree of authoritativeness which then frames the way in which the event is interpreted or meaning is attached to it by others" (802). When the train first crashes and spill Nyodene D. into the air, "the radio calls it a feathery plume" (DeLillo 111). Just a few hours later, Heinrich informs his father Jack "They're not calling it the feathery plume anymore," now it is "the black billowing cloud" (115). After the Gladney family evacuates their home, Heinrich tells them "They're not calling it the black billowing cloud anymore" (116). Instead, they are calling it "the airborne toxic event" (117). When Heinrich makes this announcement Jack acknowledges how Heinrich "sensed the threat in state-created terminology" (117). As the language becomes more ominous, fear increases. While they do not seem to understand the serious implication of this pollution, the authority of newscasters and radio hosts indicate to them they should fear whatever is coming.

As the language surrounding the event changes, the list of symptoms changes as well: "At first they said skin irritation and sweaty palms. But now they say nausea, vomiting, shortness of breath" (111). As the billowing cloud becomes the airborne toxic event, the symptoms develop. Heinrich announces, "It doesn't cause nausea, vomiting, shortness of breath like they

said before," and instead causes "Heart palpitations and a sense of *déjà vu*" (116). Soon, a consumer affairs editor begins to announce, "the medical problems that could result from personal contact with the airborne toxic event… 'Convulsions, coma, miscarriage,' said the well-informed and springy voice" (121). As the terminology used to describe the event becomes more serious and technological, the associated symptoms become more dangerous. The terminology becomes so powerful they begin to experience symptoms as they are announced.

The way Nyodene D. functions nearly satirizes the descriptions of DDT in Carson's *Silent Spring.* When the Gladney's reach their evacuation center, Heinrich begins to tell crowds of people what he knows about Nyodene D:

Once it seeps into the soil, it has a life span of forty years. This is longer than a lot of people. After five years you'll notice various kinds of fungi appearing between your regular windows and your storm windows as well as in your clothes and food. After ten years your screens will turn rusty and begin to pit and rot. Siding will warp. There will be glass breakage and trauma to pets. After twenty years you'll probably have to seal yourself in the attic and just wait and see. I guess there's a lesson in all this. Get to know your chemicals. (131)

Heinrich's message "get to know your chemicals" seems to be the very thesis of Rachel Carson's work in *Silent Spring.* Similar to Nyodene D., Carson explains how "In the less than two decades of their use, the synthetic pesticides have been so thoroughly distributed throughout the animate and inanimate world that they occur virtually everywhere… Residues of these chemicals linger in soil to which they have been applied a dozen years before" (15). The research Carson uses to describe the long-term effects of DDT and Heinrich's announcement of the life span of Nyodene D are too similar to ignore. Humans are simultaneously killing themselves and the environment with the use of human made chemicals.

When Jack gets in line to learn about the consequences of being exposed after pumping gas, a SIMUVAC official informs him this is a "whole new generation of toxic waste. What we call state of the art. One part per million can send a rat into a permanent state" (DeLillo 139). Not only is the idea of a "state of the art" toxic pollutant terrifying, the affect Nyodene D. has on rats is also eerily reminiscent of the effects of DDT on birds and small animals. In "And No Birds Sing," Carson explains the impact of DDT on bird populations, writing "the sprayed area had become a lethal trap in which each eave of migrating robins would be eliminated in about a week" (106), reiterating the potential impact of chemicals not only on humans, but on every aspect of our ecosystem.

It is here, when Jack learns about the advanced nature of this chemical that he also learns about the worst symptom of all: death. The SIMUVAC official tells Jack he should feel good if he makes it fifteen years considering Nyodene D. has a life span of "thirty years in the human body" (DeLillo 141). When Jack learns he is not destined to a slow, unstoppable death he begins to worry:

I think I felt as I would if a doctor had held an X-ray light showing a star-shaped hole at the center of one of my vital organs. Death has entered. It is inside you. You are said to be dying and yet are separate from the dying, can ponder it at your leisure, literally see on the X-ray photograph or computer screen the horrible alien logic of it all. (DeLillo 141-142)

While Jack's own predetermined death is upsetting to him, the knowledge hundreds, if not thousands of other people also have this predetermined death makes it hard to not imagine the long-term, possibly apocalyptic impacts of Nyodene D Carson also implies of DDT in *Silent Spring*.

Defining the Capitalocene

Parable of the Sower and *White Noise* are not the first or last texts to illustrate the Anthropocene and the possible apocalyptic outcomes. However, what makes them especially striking is their awareness of the role capitalism plays in the environmental disasters, making a case for what many recent scholars have deemed the 'Capitalocene.' The Capitalocene is an extension of the Anthropocene; however, instead of being oriented around human impacts, it is oriented around capitalism. This delineation takes away the blame from *all* humans on earth and places the brunt of it on people who have a hand in excess capitalism and the devastation it has wreaked on our ecological systems. In "We Should be Talking About the Capitalocene," Arons explains the purpose of the Capitalocene, stating "the 'Capitalocene' provides a framework for understanding human impact on the global environment in terms of social and political history, that is, in terms of struggles for control over resources and in terms of conflicts over what constitutes fully enfranchised ecological 'beingness' in the social, political, and economic arenas" (37). Jason Moore, one of the most well-known writers of the Capitalocene clarifies that "the Capitalocene signifies capitalism as a way of organizing nature – as a multispecies, situate capitalist world-ecology" (6).

While the Anthropocene and Capitalocene are certainly related, proponents of the Capitalocene find issues with the Anthropocene they believe the Capitalocene addresses. However, it is important to clarify that "The Capitalocene is therefore precisely *not* an argument about geological history . . . The Capitalocene *is* an argument about thinking ecological crisis. It is a conversation about geo-history rather than geological history (Moore 73-74). So, while the Anthropocene is a geological term that has been applied to a variety of fields as a framework of

understanding, the Capitalocene is not intended to replace the geologic framework, but to extend and critically think about our application of the Anthropocene to every other field.

Scholars across disciplines have various problems with the Anthropocene. First, "the Anthropocene argument shows Nature/Society dualism at its highest stage of development" (Moore 3). Rather than considering man a part of nature, the Anthropocene framework distinctly separates man and nature, a distinction many ecocritics advise against—we may be impacting ecology, but we are also a part of it. Additionally, on the surface, the Anthropocene places equal blame on all humans when we have not all played an equal role. As Wendy Arons explains, the Anthropocene "implies that humanity as a whole is responsible for the changes wrought by human activity on the planet, and as such fails to account for the socioeconomic divisions that have made the majority of people throughout human history…victims rather than perpetrators of ecological violence against the earth" (35). Arons also contends "the notion of the "Anthropocene" also has the drawback that is can be readily aligned with the discourse of individualism; that is, its universalizing of responsibility for changes to the earth's climate also, paradoxically, plays into campaigns that suggest solutions lie in (collectivized) individual actions" (36). These academics, amongst others, understand the importance of the Anthropocene as a starting point for critically thinking about human impact on the environment, but also see room for improvement.

This improvement has come in the form of the Capitalocene. Unlike the Anthropocene, which distinctly divides Human/Nature, the Capitalocene "provides an ideological framework for dramatizing social, racial, and gender eco-inequalities" (Arons 38). Additionally, the Capitalocene attempts to proportionality place accountability where accountability is due: "Theoretically, shifting focus from the Anthropos, or the human, to capital could mitigate (if not

avoid) the universalization inherent in the historically flattening Anthropocene, which assigns responsibility evenly to a homogenous 'humanity'" (Polefrone 491). According to Jason Moore, "*How* [the Anthropocene] unifies earth-system and humanity within a singular narrative is precisely its weakness, and the source of its falsifying power" (7). While the idea of a unified community is repeatedly mentioned in environmental literature, the Capitalocene addresses the idea that not every human, such as Indigenous communities, deserves to be a part of the community that has directly caused the environmental apocalypse we have found ourselves in. Instead, the Capitalocene addresses the impact capitalism, rather than humanity as a whole, has had on both our climate and institutions.

Capitalism in White Noise and Parable of the Sower

The connections Butler draws between capitalism, environmental devastation, and apocalypse in *Parable of the Sower* illustrates the same arguments scholars are making about the Capitalocene. Butler shows how cornerstones of capitalism, such as privatization and unchecked power of corporations, which result in issues such as extreme economic inequality and economic disparity impact the way humans interact with the environment and each other. Jim Miller, for example, posits "the deification of capitalist and unquestioned growth that Butler notes here are the seeds of environmental disaster, a dystopian future from which, if we let it happen, we may never recover" (353). What Miller seems to be describing resolves many of the problems the Anthropocene as a critical lens poses—humans are not causing environmental disaster, but the reverence for capitalism and corporations is.

As previously mentioned, Lauren and the other people in America are struggling with water scarcity. This is in part due to the role capitalism has played in access to water. After explaining how poor people are able to purchase water from water peddlers, Lauren states "Dad

says water now costs several times as much as gasoline. But, except for arsonists and the rich, most people have given up buying gasoline" (17). Gas is so expensive only the elite can afford it. While this is hard to imagine as a reader living in a car-oriented society, water being even more expensive than a luxury for the elite is terrifying and shows how capitalism plays a role in the misuse of Earth's resources.

Water, however, is not the only resource becoming unaffordable due to capitalism and privatization. Food, for example, is also difficult to come by: "Food prices are insane, always going up, never down. Everyone complains about them" (80). While the price of food increasing may not seem inherently apocalyptic, the extreme price is. Lauren worries "I packed a few hundred dollars in savings – almost a thousamd. It *might* feed me for two weeks if I'm allowed to keep it, and if I'm very careful what I buy and where I buy it" (Butler 80). A thousand dollars possibly not being enough to cover the cost of food for one person for two weeks is almost incomprehensible and shows the role capitalism plays in people's access to resources.

In addition to resources, public institutions such as police and firefights have become privatized. Not only does this lead to an increase in violence and theft, but it also leads to an increase in fires. When one of Lauren's neighbors, Mr. Yannis, is shot and killed "the police investigated, collected their fee, and couldn't find a thing. People get killed like that all the time" (19). When another neighbor, 4-year-old Amy is shot and killed, the privatization of the police proves problematic once again: "The family has spent money it could not afford to get the police involved to try to find the killer" (51). Lauren's father explained "We can't afford their fees, and anyway, they're not interested until after a crime has been committed" (71). Due to the extreme perpetuation of capitalism in America, basic safety precautions such as the police only care about money rather than safety or protection.

Like the police, the fire department has also become a luxury good rather than a public institution. When the Dunn family's home catches on fire, Lauren thinks "Of course, no one called the fire department. No one would take on fire service fees just to save an unoccupied garage. Most of our households couldn't afford another big bill anyway. The water wasted on putting out the fire was going to be hard enough to pay for" (Butler 32). In "Crip Collectivity Beyond Neoliberalism in Octavia Butler's *Parable of the Sower*," Jess Whatcott provides important socio-economic context for the time Butler was writing in:

The already flimsy social safety net was systematically dismantled through the end of the twentieth century through privatization and disinvestment. At the same time, growing wealth inequality ground down the middle class by pushing all but the super-rich into competition for scarce resources. It was in this context that Butler wrote *Parable of the Sower*, fictionalizing her portrayal of a multiracial neighborhood forced into extreme self-reliance. (Whatcott 4)

The extreme prices Lauren must navigate, such as the price of food and water, as well as the dismantling of public services, like the privatization of the police and fire departments, illustrates the "disinvestment" and "extreme self-reliance" Whatcott describes.

Like *Parable of the Sower*, *White Noise* demonstrates an awareness of the connection between capitalism, privatization, and apocalypse. In her article "What a 1985 Novel Can Tell Us About Life in the 2020's: Almost Everything," Dana Spiotta champions how "'White Noise' is proto-cli-fi, with man-made environmental contaminations. 'White Noise' is a critique of corporate capitalism, from branding to malevolent pharmaceutical products." By bringing awareness to privatization, free-market economics, and branding, for example, DeLillo is able to highlight how our obsession with consumerism plays a role in environmental apocalypse, making *White Noise* a proto-Capitalocene text in addition to Spiotta's label as "proto-cli-fi."

Consumption permeates every aspect of the novel, even in the midst of a (man-made) disaster. When everyone from the College-on-the-Hill has to evacuate, products, brandings, and consumerism taint the scene. In addition to necessities like water and food, evacuees brought material goods such as “blankets, beach chairs, and extra clothes” (DeLillo 129). Rather than finding comfort in reliable necessities, people found comfort and protection from their material goods. Similalrly, after Jack learns of his death sentence, he finds Babette reading tabloids and advertisements to a crowd of people: “Babette read an ad. The Stanford Linear Accelerator 3-Day Particle-Smashing Diet” (145). While Jack recognizes “We’d become part of the public study of media disaster” (146), Babette “read an ad for diet sunglasses” (147). As the crises becomes more serious, the reliance on consumerism for comfort increases as well.

Geoff Hamilton also recognizes this pattern when he writes how in “the hyper-consumerism of the postmodern world creates, DeLillo implies its own illusions about the triumph of human over nature. To consume in America is to partake in the illusion of overcoming natural death by encountering a seemingly endless supply and variety of things” (86). The Gladney’s can overcome the fear of death by man-made pills called Dyler and overcome environmental disasters through reading advertisements. By attempting to overpower nature through consumption, DeLillo’s characters show how capitalism continues to pollute the environment.

Regardless of categorization or preference, Anthropocene or Capitalocene, *Parable of the Sower* and *White Noise* illustrate the ways the literature of climate and environmental apocalypse changed from the 50’s and 60’s into the 80’s and 90’s. As public discourse moves past basic public awareness (such as the understanding that chemicals in fertilizers are bad for our bodies and the environment) to more nuanced discussions (such as the role politics, economics, and

culture play in geology and climate change), texts such as *Parable of the Sower* and *White Noise* serve as examples of how representation of the environment and climate have changed in postmodern and science fiction texts. This change allows writers to highlight how our impact on the earth's ecological systems not only impacts the climate, but can also disproportionately affect different groups of people, forcing us to consider what we need to change in order to protect the Earth and ourselves.

Chapter Three: Revising Apocalypse: Hope, Community, and Reciprocity in *The Overstory* and *Braiding Sweetgrass*

In the last twenty-four years we have survived multiple predicted or cataclysmic events: Y2K, 9/11, the end of the Mayan calendar in 2012, Ebola, and the COVID-19 pandemic, to name a few. However, the apocalypse irreversible climate change will bring is looming. Seal levels are rising, forests are being cut down, temperatures increasing, animals going extinct. As an environmental apocalypse moves further away from scientific fiction and a little closer to reality, how should contemporary authors respond? Regardless of the specifics rhetorical techniques of the environmental apocalypse, contemporary literature highlights a solution that has been woven into climate conscious texts for the last seven decades: community. Rather than relying on the impending doom of the Anthropocene or Capitalocene as a call to action, texts such as Richard Powers' *The Overstory* (2018) and Robin Wall Kimmerer's *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants* (2013) posit community, reciprocity, and hope as solutions to the environmental apocalypse we have found ourselves living in, leaving fear-based rhetorical techniques in the past.

Despite my own association of the Anthropocene and Capitalocene with earlier texts, many authors and scholars are currently taking this approach to discussions surrounding climate change and climate-conscious texts. Phillip R. Polefrone's "The Stock Ticker in the Garden: Frank Norris, American Literary Naturalism, and Capitalocene Aesthetics," published only four years ago, argues Frank Norris' *The Octopus* (1901) and *The Pit* (1903) function as a proto-Capitalocene texts. Like Polefrone, many other contemporary scholars are writing about the Anthropocene and Capitalocene. Wendy Arons' "We should be Talking About the Capitalocene" (2023), John Green's *The Anthropocene Reviewed* (2021), Shannon O'Lear's "Disaster Making

in the Capitalocene" (2022) are just a few of the works published in the last four years about discussing the impacts of humans and capitalism on the environment. What these texts have in common, despite their varying arguments, is a belief that the earth is dying, and it is humans (or our institutions) that are bringing the end. However, are theories and narratives about the doom to come the most impactful forms of storytelling to create a sense of urgency in contemporary audiences?

The Problem with Apocalypse

As these discussions surrounding the Anthropocene and Capitalocene continue, newer arguments about the impact of apocalypse-based rhetoric have started to appear. Scholarship such as Rebecca Evan's "The Best of Times, the Worst of Times, the End of Times?: The Uses and Abuses of Environmental Apocalypse," Timothy Gilmore's "After the Apocalypse: Wildness as Preservative in a Time of Ecological Crisis," and John Thieme's *Anthropocene Realism: Fiction in the Age of Climate Change* (2023), all offer rewritings or alternatives to typical environmental apocalypse narratives. Evans, for example, reviews the previous usage of apocalypse in environmental literature and proposes a revised use of apocalypse which indicates a serious threat, but not a definitive end. Rather than a prediction of the future, apocalypse, Evans argues, is instead a critique of society, representing what needs to be changed rather than what is sure to be lost, highlighting a need for a "*permeable apocalypse*, an *open* apocalypse, one that threatens, but does not resolve neatly in a cathartic finality (502-503). Gilmore offers another alternative, arguing in favor of resurrecting the idea of "wildness" within environmental literature. Reorienting nature with this sense of "wildness" will help deter the sense of control and understanding Western cultures have placed on the natural world. Viewing the world as wild, according to Gilmore, forces a sense of deep-rooted complexity that is often ignored. Gilmore

takes issue with the apocalyptic tradition because it implies human nature can end. Like Evans and Gilmore, John Thieme also proposes that realist fiction, rather than "cli-fi" offers a more useful alternative to environmental apocalypse as it treats climate change as something that has "*already* changed the face of the planet and is continuing to wreak havoc on a daily basis" (2, emphasis mine). This small glimpse into the scholarly alternatives for environmental apocalypse shows an increasing awareness of the shortcoming of environmental apocalypse to a twenty-first century audience. It is not only scholarly texts, however, making a move away from apocalyptic rhetoric. Texts such as Richard Powers' *The Overstory* and Robin Wall Kimmerer's *Braiding Sweetgrass* both offer alternative approaches that are just as effective (if not more so) than their environmentally conscious predecessors.

Apocalyptic writing often draws a clear distinction between the protagonist and antagonist, which can cause some readers to feel "othered" or polarized. In Greg Garrard's definition and discussion of ecocriticism he writes "Apocalypse provides an emotionally charged frame of reference within which complex, long-term issues are reduced to monocausal crises involving conflict between recognizable opposed groups" (114). In *Cat's Cradle,* readers can place blame on the irresponsible Hoenikkers or the tyrannical Papa Monzano. In *White Noise*, the tanker truck can be blamed for exposing everyone to Nyodene D and the government officials are undeniable dislikeable. This, however, is a problematic representation of environmental apocalypse because it is not only false, "but tends to polarize responses, prodding skeptics towards scoffing dismissal and potentially inciting believers to confrontation and even violence" (Garrard 114). This representation of the collapse of the natural world being caused by an individual or group of antagonists is flawed and may not be compelling to a wide audience.

Rachel Carson's *Silent Spring* assigns morality to the institutions and people described in her text. Carson attaches morality to environmental activism when she asserts: "In short, the Department of Agriculture embarked on its program without even elementary investigation of what was already known about the chemical to be used – or if it investigated, it ignored the findings" (92). In her explanation of the environmental consequences of pesticides, Carson labels the Department of Agriculture as the villain by describing them as ignorant and apathetic. In her researched-based descriptions, Carson uses powerful, objective language to make morality seem obvious. Throughout her book "the environmentally sensitive 'Good Guys' are named, admired, and cited without demurral, whilst the 'Bad Guys' who promote pesticides are 'faceless bureaucrats and salesmen' whose claims are cited sardonically, with frequent reference to their commercial sources of research funding" (Garrard 103-104). While this tactic proved successful for Carson, it may not be quite as effective with contemporary audiences who are already deeply polarized over environmental issues. While "differing understandings of evidence" may polarize readers, "cultural and individual [factors] such as personality, identity, philosophical beliefs, and political sympathies" (Higgins 116) may also impact Americans. Rather than feeling inspired to join forces to protect the earth, this association of morality and disregard for the complexities of beliefs may lead modern readers to feel villainized, increasing the polarization of Americans over environmental issues.

In *The Overstory*, Richard Powers avoids having distinct heroes and villains. When Nick and Olivia camp out in the tree Mimas, the loggers seem like the obvious villains. Nick initially expresses, "They're so big … All the laws are on their side, backed by the American people. We're a bunch of unemployed vandals, camping out in the woods" (Powers 251). Nick sees them as the underdogs fighting against an evil institutional power. However, as the story continues,

Powers presents the loggers as human. When one of the loggers sees Olivia he says to her "'Hey! Take your cap off for a second." She does. His shock is obvious from two-thirds of a football field away. "Shit! You're gorgeous'" (Powers 287). Rather than being presented as an evil mastermind, Powers depicts a boy in awe of a girl. The loggers are also impressed by the trees. They ask Nick and Olivia "For real? You got huckleberries up there? . . . And a pool with fish in it?" (Powers 287). After a massive storm, the loggers come to check on the activists, saying "You two all right? A lot of windthrow last night. Big trees down. We worried about you" (296). The loggers are not heartless robots—they are empathetic and curious. Powers considers the loggers' humanity and need for survival.

When Nick and Olivia confront the loggers with the consequences of their jobs, Powers avoids presenting them as ignorant or apathetic. Instead, he acknowledges their individual values. One of the loggers says to Olivia "You're killing our livelihood… I need to feed my kids" (288). Rather than presenting Americans with blue-collar jobs as eco-villains, Powers acknowledges the humanity and real concerns of these people. Despite the loggers being minor characters that could easily be reduced to bad guys, Powers presents them as multi-faceted individuals that readers relate to and feel represented by. In Adam Grener's analysis of the role of scale and realism in *The Overstory* he writes "the acts of ecotage committed by the group of five characters are, of course, at the core of the novel. Although the characters who survive come to see their actions as misguided at best, the novel as a whole develops a complex attitude towards these acts that cannot be reduced to a binary endorsement or repudiation (58). In the same way Powers avoids labeling these individual workers as villains, he also avoids representing these individual activists as perfect heroes. Everyone in the novel, logger or arsonist, is a complex character with wants and needs.

In *Braiding Sweetgrass*, Kimmerer also avoids assigning a valence of morality to groups of people. In the opening chapter, "Skywoman Falling," Kimmerer tells the indigenous creation story of Skywoman as well as the Christian story of Eve, writing "One woman is our ancestral gardener, a cocreator of the good green world that would be the home of her descendants. The other was an exile, just passing through an alien world on a rough road to her real home in heaven" (7). Despite this contrast, Kimmerer does not frame Eve, or Christianity as antagonistic. Instead, she shows empathy, describing Eve as "poor Eve" (9) and "[imagining] the conversation between Eve and Skywoman: 'Sister, you got the short end of the stick'" (7). While Kimmerer tells us what we can learn from Skywoman, "reciprocity, the give and take with the land" (9), she does not vilify Eve in favor of Skywoman. Instead, she offers teachings of empathy and love.

Kimmerer expresses love and empathy again in "Epiphany in the Beans." Kimmerer recounts the life of a man she "once knew and loved" (125) who constantly traveled. When she asked him "where he found his greatest sense of place?" he told her he found it in his car because it had music, and everything was adjustable. In his car he was "safe. It always takes [him] where [he wants] to go" (125). "Years later," Kimmerer tells us, "he tried to kill himself. In his car" (125). Rather than judging him for his love of comfort in technology or for his mental illness, rather than blaming car manufacturers or the lack of walkable communities, Kimmerer expresses a deep level of empathy and love for this man she knew. She reflects "He was like one of those little withered seeds you find in the bottom of the seed packet, the one who never touched the earth" (126). Rather than placing blame or finding a "bad guy" in this sad story, Kimmerer orients the memory around the earth and a sense of place, forcing readers to ask themselves where their "greatest sense of place" is and to reconsider how much time they spend in their cars.

When texts place blame on a particular group or issue, environmental apocalypse does not always hold political institutions and corporations adequately accountable. David Higgins heavily critiques the role of institutions in "Apocalypse/Extinction," asserting "one of the dangers of apocalyptic discourse, then and now, is that it can occlude or downplay the significance of political change" (Higgins 119). While many texts hold these institutions accountable for the damage they have done, they often ignore the potential that public policy, corporations, and local, state, and national government have in positively impacting the environment. In *Parable of the Sower*, for example, the government crumbles, and it is Lauren Olamina and Earthseed that offer solutions to the apocalypse. While Lauren is certainly heroic, collective action through large institutions is needed for long-term solutions and impacts. By holding institutions accountable for their actions rather than presenting them as background noise or destitute forms of government as environmental apocalypse does, alternative forms of environmental literature have the potential to cause much-needed structural reform.

The Overstory shows the short comings of American institutions such as the police force. For example, When Mimi and Douglas participate in a group protest where everyone is chained together with their arms in steel tubes, the police use illegal forms of violence to break up the protest. When the police tell the protestors "we intend to use pepper spray to compel you tocomply," a protestor says "It's forbidden under United States law for any public official to use pepper spray unless he's in danger. Look at us! We can't even move!" (299). The police, however, use pepper spray anyway. Starting with a middle school teacher, the "officer with the swab brings it down into the woman's right eye. He struggles to get a little more into her left. Chemicals pool under the lid and stream down the side of the woman's tipped-back face" (301). When the teacher is in so much pain she cannot unlock herself, the officer threatens to use Mace.

This detailed description of the torture of protestors is not the only example in the novel. When Douglas chains himself to a tree in peaceful protest, American law enforcement cut off his pants and use "triple-action pepper spray—capsaicin mixed with CS gas" (274) on his bare genitals. The officers used multiple canisters of pepper spray on his genitals before they realized he had dropped the key and was unable to unchain himself. By the time they are done "his meat is a vibrant salmon" and "his skin stays orange for a week" (275). Rather than acting as bystanders or crumbled institutions of the past, such as in *Parable of the Sower* or *The Road,* Richard Powers shows American institutions playing an active role in the degradation of the environment. These scenes of police brutality are some of the most detailed in the novel, making them nearly unforgettable. It is as difficult to ignore the role the officers in *The Overstory* play in the text as it is to not cringe in horror at the descriptions of Douglas' injuries.

In addition to the lack of accountability, environmental apocalypticism often inaccurately presents environmental crises as having a single solution. Under environmental apocalypse, "climate change is viewed as an urgent problem or a set of problems that can be solved by expertise" (Higgins 122). Garrard acknowledges "the news media often report environmental issues as catastrophes…because news more easily reports events than processes" (Garrard 113-114). Like the media Garrard cites, fictional accounts of environmental apocalypse make a similar mistake. Alongside the Hoenikkers and train conductors, single chemicals cause environmental apocalypse in both *Cat's Cradle* and *White Noise*. Whether it be ice-nine or Nyodene-D, the premise that a single issue, a single event, a single chemical can cause the environmental apocalypse is ineffective. In apocalypse there is one right way to be an environmentalist or survivor, ignoring the complexities and multi-faceted issues that surround

climate change. Climate change is composed of a multitude of problems with an abundance of valid responses.

Through her sharing of indigenous practices, Kimmerer also offers multiple solutions and responses to climate change. In "The Gift of Strawberries," for example, Kimmerer explains the difference between a "gift economy" and private property: "From the viewpoint of a private property economy, the "gift" is deemed to be "free" because we obtain it free of charge, at no cost. But in the gift economy, gifts are not free. The essence of a gift is that it creates a set of relationships" (28). Under the gift economy, the relationships established through giving create "an obligation of sorts to give, to receive, and to reciprocate" (25). Most importantly, under the gift economy, the earth is a gift giver as well. As Kimmerer explains, when we purchase something from Walmart or Target, we do not establish a giving relationship with those stores, but when we pick wild strawberries, we enter a giving relationship with the earth. If we can learn to be gift-givers and gift-receivers, the world becomes a gift. This shift in perspective transforms "strawberries and humans alike" because it can "increase the evolutionary fitness of both plant and animal… the stories we choose to shape our behaviors have adaptive consequences" (30). Instead of being the leader of an apocalypse survival-group, Kimmerer offers us another option: to change our perspective.

Like "Strawberry Fields," Kimmerer offers indigenous practices as another form of activism in "The Honorable Harvest." While recounting finding a patch of leeks, she explains to the leeks "why I've come and ask their permission to harvest, inquiring politely if they would be willing to share" (175). When she finds "ragged papery sheathes where the bulbs should be" (176) she puts the leeks back, interpreting this as a polite decline from the leeks. While this simple anecdote may not seem like much, Kimmerer illustrates how to "take only what is given"

(177), a practice ingrained in her since childhood. While this is a practice of kindness, it is also a practice of conservation: "Asking permission shows respect for the personhood of the plant, but it is also an assessment of the well-being of the population" (178). Mixed with stories about leeks, Anishinaabe elder Basil Johnston, the guidelines for the Honorable Harvest, ricing, and the wastefulness of university cafeterias, Kimmerer tells her readers "The traditional ecological knowledge of Indigenous harvesters is rich in prescriptions for sustainability" (179). Kimmerer directly states the indigenous practices are not only steeped in tradition but are ways to combat environmental crisis. Practices such as the Honorable Harvest and gift economy are just two examples of the alternatives that Kimmerer offers in *Braiding Sweetgrass* to the single solutions apocalypse narratives often imply in environmental crisis.

Like Kimmerer, who avoids presenting a single issue with a single solution, *The Overstory* presents multiple, valid ways to be an environmentalist. In the novel Nicholas Hoel, Mimi Ma, Adam Appich, Douglas Pavlicek, and Olivia Vandergriff all become radical activists participating in sit-ins, riots, and eventually committing arson. However, there are multiple activists represented in the book. Video game designer and CEO Neelay Mehta is one of the activists represented in the novel. Neelay is an Indian man who is paraplegic. While he is not living in trees his activism is equally important and as genuine as the others. Instead, he designs a video game, *Mastery*, which sparks international interest in the environment. Neelay does not participate in riots or arson but still makes a difference. Scientist Patricia Vandergriff, who research trees is another activist in the novel. She publishes work on how trees can speak to each other and starts a tree seed bank. Patricia represents a more scientific approach to activism that differs from the scientific manipulations we see in other apocalyptic works such as in *Cat's Cradle* or Margaret Atwood's *MaddAddam* trilogy. Ray Brink and Dorothy Cazaly are

community theatre actors. The married couple grows to love plants and embrace the wilderness. The HOA demands Dorothy tames her yard, but Dorothy defends the plants and animals that have come to be a part of the ecosystem in her backyard. Dorothy and Ray may not be fighting the police or publishing research, but their version of activism is presented as equally important.

Considering Rebecca Evans' call for a revision to apocalypse to include "a *permeable* apocalypse, an *open* apocalypse, one that threatens, but does not resolve neatly in a cathartic finality" (502–503), Powers' depiction of *activism* is permeable and open. Rather than having a single solution or conclusion, Powers presents multiple activists with many answers and endings. This variety shows readers countless ways to be environmentalists—some of which do not even involve leaving your home. This message is much more approachable than the typical apocalypse because the weight of the world is not on one person's shoulders. Characters and readers alike do not have to single-handedly prevent the end of the world to be an environmentalist.

Traditionally, environmental apocalypse does not feature women or people of color, therefore representing and appealing to only a portion of American audiences. When I think of the environmental apocalypse, texts such as Cormac McCarthy's *The Road* (2006) or Ronald Emmerich's film *The Day After Tomorrow* (2004) come to mind. While not every environmental apocalypse narrative is white and male centered, some of the most prominent examples are. Environmental apocalypse affects us all, but its stories (and heroes) often represent only "a small portion of its audience, therefore [feeding] huge inequalities" (Higgins 121). Steven Charleston's *We Survived the End of the World: Lessons from Native America on Apocalypse and Hope*, for example, discusses the apocalypse Indigenous people have survived and what we can learn from them. However, Indigenous stories and characters are rarely featured in environmental

apocalypse. If everything is ending in an environmental apocalypse, shouldn't we at least represent everyone?

The Overstory is filled with a diverse ensemble of characters. The first section of the novel, "Roots" is divided into eight sections, each dedicated to one of the main characters of the text. In these sections, Powers describes eight characters with unique backgrounds, varying heritages, and all genders. Artist Nicholas Hoel, for example, comes from Norwegian immigrants; Mimi Ma, a second generation immigrant Chinese American woman who orients her life around her job until she becomes a part of the movement; Adam, whose mother describes him as "socially retarded," who goes on to study psychology and eventually become a professor (48); Ray Brinkman, "a junior intellectual property lawyer" and Dorothy Cazaly, a "stenographer" (66), who get married and enjoy community theatre until Ray experiences a brain aneurysm which leaves him unable to move or verbally communicate; Douglas Pavlicek, initially introduced as a participant in an experiment reminiscent of the Stanford prison experiment, who becomes disabled after time in the Airforce and eventually gets a job planting tree seedlings into "stripped land" (88); Neelay Mehta, a Gujarati man who becomes paralyzed from the waist down after falling out of a tree as a child, eventually becomes a video game designer who brings people together from all across the globe; Patricia Westerford, a hard of hearing female scientist who fights for her place in the scientific community; and finally Olivia Vandergriff, an almost graduate with a degree in actuarial science who begins to hear trees after being electrocuted and dying "for a minute and ten seconds" (157). These characters, with seemingly nothing in common, all break the mold of the typical apocalypse hero. Perhaps it is time for the Rick Grimeses, the Jack Gladneys, and the Paul Redekers of the world to step aside: Richard Powers has a diverse array of characters to take their place.

While Robin Wall Kimmerer's *Braiding Sweetgrass* does not feature a diverse team of fictional characters, she does highlight many diverse voices in her writing. For example, in "*Wisgaak Gokpenagen:* A Black Ash Basket," Kimmerer shares the work of John Pigeon, "a member of the large, renowned Pigeon family of Potawatomi basket makers" (141). Describing the process of learning how to make a basket from a Black Ash Tree Kimmerer explains that "The Pigeons' teaching of this linkage [between harvester and harvested] is part of a growing movement to revive traditional basketry, tied to the revitalization of Indigenous lands, language, culture, and philosophies" (149). In "Learning the Grammar of Animacy" Kimmerer writes about the *nine* people left who speak Potawatomi. Kimmerer recounts Jim Thunder's message "What will happen to a joke when no one can hear it anymore? How lonely those words will be, when their power is gone. Where will they go? Off to join the stories that can never be told again" (51). Jim Thunder's message inspires Kimmerer to try and start learning Potawatomi herself, causing her to cover her home in sticky notes in the language. In the same chapter, she writes about Justin Neely, "a young man devoted to language revival" who teaches a Potawatomi language class; Stewart King, "a knowledge keeper and great teacher" (54); Michael Nelson, "an ethicist who thinks a great deal about moral inclusion" (56); Bill Tall Bull, a "Cheyenne elder" who told Kimmerer that the plants and places she love can her hear her speaking to them through her heart. Nearly every chapter in *Braiding Sweetgrass* is scattered with the stories and teachings of a variety of people, allowing the text to act as a platform for diverse voices.

Additionally, secular apocalyptic writing, unlike biblical apocalypse, is flawed because it implies an unstoppable doom. In Revelations, apocalypse serves several functions. It reveals the impending judgement of God upon the earth and warns humanity against sin and evil. However, Revelations also promises a *new* heaven and earth, a beacon of hope that secular environmental

apocalypse is missing. In Tasleem War's "Apocalypse Then and Now," War asserts "Modern man's secular imagination pictures an apocalypse of despair, in which the end of the world will be final, without the promise of any renewal. No new heaven or earth will follow" (2). While this difference may not seem important, it changes the purpose behind apocalyptic messages. Rather than acting as a reminder or as a symbol of hope to come, War sees "disaster as the primary interest" rather than what is to come after. Like War, Lawrence Buell notes the contrast between religious apocalypse and secular environmental apocalypse, stating "It was a revelation of an apocalypse human beings created for themselves; that revelation, moreover, might very well not be a saving one" (16). Similarly, Evans argues "the form of apocalypse offered by environmental SF thus engages the disastrous possibility of climate change without the eschatological enclosure that suggests historical predestination" (503). While the new heaven and earth promised in *The Bible* have often been cited as reasons to *not* take responsibility of our actions on Earth, the hope they represent is an important aspect of biblical apocalypse, which secular apocalypse is often missing. Without hope, there is nothing.

Hope

Hope and perseverance are ubiquitous ideas in American culture. Franklin Roosevelt's 1933 Inauguration speech illustrates the belief in hope when he famously stated "This great nation will endure as it has endured, will revive, and will prosper. So, first of all, let me assert my firm belief that the only thing we have to fear is fear itself" (Roosevelt). Over eighty years later, Donald Trump's inauguration speech concluded with similar themes when he said "Your voice, your hopes, and your dreams will define our American destiny. And your courage and goodness and love will forever guide us along the way" (Trump). Ignoring Trump's less than hopeful political platform, hope, apparently, has trumped both time and political party. However, in the

face of climate change, many previous writers have left hope behind for fear-based tactics. In a period of political turmoil, pandemics, and economic decline it is time for hope to make a revival.

Many prominent online periodicals have discussed the need for hope in conversations about climate. German Lopez' 2022 article for *The New York Times* "Climate Optimism," for example, talks about the need for optimism and hope to make effective change. In his writing he quotes Katharine Hayhoe, a climate scientist who told Lopez "Fear is useful to wake up and make us pay attention . . . but if we don't know what to do, it paralyzes us." In Katharine Hayhoe's "Why hope and optimism are crucial for fighting climate change" for New Scientist she writes "We need hope, desperately, *because if we believe it is too late, it will be*" (emphasis added). She asserts a need for "rational, stubborn hope," a hope Kimmerer and Powers exemplify, to make change. She continues to claim, "the most powerful conversations begin with our hearts, not our heads." The same year *The Guardian* published Rebecca Solnit's "Dare we hope? Here's my cautious case for climate optimism" in which she argues that doomist mentality is a different way to say, "we don't have to do a damned thing," concluding her article saying, "that we cannot see all the way to the transformed society we need does not mean it is impossible." Hope, according to these writers, is a necessary component on the path to sustainability.

Popular online publications are not the only sources writing about the need for hope. Many scholars are publishing works mirroring similar ideas. For example, in Catriona McKinnon's "Climate Change: Against Despair," McKinnon takes a philosophical approach to the roles of hope and despair, arguing "personal despair about tackling climate change is not philosophically justified" (34). In arguing against despair, she asserts "on coming to believe that

an objective is contracertain or extremely improbable, a person is likely to give up trying to achieve it" (35). She explains the role hope has the potential to play: "Hope keeps open a space for agency between the impossible and the fantastical; without it, the small window in time remaining for us to tackle climate change is already closed" (45). Like McKinnon, Janet K. Swim and John Fraser advocate for the role of hope. Directed towards educational institutions, such as museum, zoo, and aquarium employees, Swim and Fraser discuss ways to create uplifting educational experiences about climate change that also alleviate some of the emotional labor these educators carry. The authors explain "hopeful people have skills to generate a variety of routes to their objectives and are motivated to reach their goals through routes they envision" (289). Hopeful educators, they argue, will cause a "ripple [effect] to visitors and may increase visitors' willingness to talk to their colleagues and friends about climate change, which has social consequences well beyond their institutions" (294). Taking a hopeful approach, according to these scholars, will inspire action rather than cause inaction.

In "Climate Change Inaction and Optimism," Philip J. Wilson takes a more critical role of optimism in the face of climate change. However, he does acknowledge "Fear-arousing approaches to climate change have proved ineffectual or counter-productive because the audience feels disempowered without the means to deal with the problem" (Wilson 5). In the introduction to *Anthropological Optimism: Engaging the Power of What Could Go Right,* editor Anna J. Willow also believes that fear-based practices can be debilitating rather than a call to action. Willow writes "We need to *act,* But we also need to *hope*" (3, original emphasis). She advocates that "accepting the inherent dynamism of all cultural beliefs and practices means having faith that people can change—and catalyze change" (4), ultimately stating "optimism opens practical pathways by which action can triumph over despair" (23). Without the belief that

we can make positive change, why try? Hope and optimism are important outlooks in contemporary conversations about climate change.

If scientists, journalists, and scholars agree on the role of hope in discussions about climate change, why would that approach not apply to climate-conscious texts? While many apocalyptic texts end with messages of hope or redemption, *Braiding Sweetgrass* and *The Overstory* are embedded with messages of optimism throughout their writing, showing the vital role hope plays in contemporary climate conscious texts. In "Apocalypse: The Mystery and Miracle of Survival," Steven Charleston explains how Indigenous people have already survived an environmental apocalypse and shares the hope that helped them to survive: "We lost everything—everything, that is, except the one thing they could not take from us: hope" (3), and continues, "My ancestors are a case study in survival. Not the grim survival of bunkers and bomb shelters, but the liberating and hopeful survival of a spiritual community" (4). In *Braiding Sweetgrass*, Kimmerer shows multiple ways Indigenous practices of hope and liberation not only allowing for survival of past generations but also as inspiration for future generations.

In an interview for *The New York Times*, interviewer David Marchese asked Kimmerer "What are the keys to communicating a sense of positivity about climate change and the future that's counter to the narrative we usually get?" Kimmerer responds, "the story we have to illuminate is that we don't have to be complicit with the destruction." She elaborates "I can't topple Monsanto, but I can plant an organic garden . . . So much of what we think about in environmentalism is finger-wagging and gloom-and-doom, but when you look at those examples where people are taking things into their own hands, they're joyful." Throughout *Braiding Sweetgrass*, Kimmerer fights the doom-gloom narrative with joy and hope, creating a sense of optimism in her readers.

Through descriptions of the surviving Indigenous wisdom that continues to be passed through multiple generations, Robin Wall Kimmerer creates a sense of hope that these sustainable practices will continue to be passed on. For example, in "Allegiance to Gratitude," Kimmerer recounts the third graders at the school by her house saying, "the Words That Come Before All Else," an address that "sets gratitude as the highest priority" (107). It is also, however "a material, scientific inventory of the natural world" (108), functioning as a "lesson in Native science" (108), "an economic model" and a "civics lesson" (111). This group of eight-year-olds are celebrating, according to Kimmerer, "respect toward all our nonhuman relatives, not one political entity, but to all of life" (112). Braided in with her description of the children's reading is the address itself. While reading, I am simultaneously filled with the gratitude the Words That Come Before All Else inspires and hope for the earth knowing that these eight-year-olds will one day be impacting it.

Kimmerer also creates a sense of hope through her descriptions of her own students. Throughout the novel, Kimmerer describes the evolving perspectives her college-students have while studying environmental biology with her. In "Sitting in a Circle," for example, she describes Brad, a student in her ethnobotany class who is dressed inappropriately for a wilderness field station and expresses some apathy about nature and includes an iPod on his list of survival essentials. After multiple days of field research, climbing through marshes, weaving their own mats, and studying cattails, the students begin a discussion about what we owe plants. Some students argue we do not owe them anything, but Brad feels differently. He "proposes a permit system in we do pay for what we take, a fee to the state that goes to support wetland protection" (239). Kimmerer recalls being "humbled by their creativity" (239). I am filled with hope. If Kimmerer can transform Brad from an iPod loving, ecologically indifferent student to a

botanist advocating for wetland protection in a few days, imagine how she can transform the millions of people reading about Brad.

Like Marchese's question to Kimmerer in "You Don't Have to be Complicit in Our Culture of Destruction," Amy Brady asked Richard Powers a similar question about hope in their 2018 interview for Chicago Review of Books: "Where was your mind set when you set out to write this book? Did you approach it from a place of hope? From despair?" Powers replies to Brady with another question: "Hope or despair *for what*?" He continues "Trees have survived cataclysmic changes in climate and several periods of mass extinction, and it's a good bet that many will survive our current, man-made Holocene extinction. I'm very hopeful for trees." By placing his faith in trees, Powers is able to create a hopeful narrative about the survival of the planet.

Richard Powers implements themes of hope in *The Overstory*. Rather than concluding with doom, *The Overstory* ends with optimism and a promise of a lasting future. Despite the obstacles and tragedies Powers' characters face, the novel ends with persistence. In the concluding scenes of the novel, artist-activist Nick completes his final art installation of the novel. In the middle of the woods, Nick creates a message of rotting sticks and branches reading STILL. His message is "legible from space" (502). This final work shows a sense of persistence that is larger than life. Nick has seen environmental travesties and experienced grief, but still believes in the future. Powers' description of the earth following Nick's art as already changing shows "still" is not about a lack of motion, but instead means always or continually: "Already, the earth is greening. Already, the mosses surge over, the beetle's lichen and fungi turning the logs to soil" (Powers 502). Nick's creation shows his belief the world will continue, giving readers hope rather than filling them with despair. The novel concludes:

> He stares off into the north woods, where the next project beckons. Branches, combing the sun, laughing at gravity, still unfolding. Something moves at the base of the motionless trunks. Nothing. Now everything. *This*, a voice whispers, from very nearby. *This. What we have been given. What we must earn.* This *will never end.* (Powers 502)

Powers tells readers the world is a gift and will persevere. While Powers does not include any religious imagery, Powers' conclusion and biblical apocalypse share themes of hope and redemption. Richard Powers' hope, unlike typical environmental apocalyptic doom, gives readers the belief they have time to make a change and persist. If we can have hope for trees, maybe we can have a little hope for humanity too.

Community

As climate change becomes increasingly catastrophic, the need for community has increased. In *All We Can Save: Truth, Courage and Solutions for the Climate Crisis,* editors Ayana Elizabeth Johnson and Katharine K. Wilkinson have organized a collection of essays, poetry, and artwork into eight sections: Root, Advocate, Reframe, Reshape, Persist, Feel, Nourish, and Rise. Throughout all of these sections featuring varying authors and activists, the necessity of community is a reoccurring discussion. As the effects of climate change become increasingly present, the need for strong and resilient communities increases as well.

Under the "Advocate" section of *All We Can Save*, a quote from Alexandra Ocasio-Cortez is paired with Heather McTeer Toney's "Collards Are Just as Good as Kale." Ocasio-Cortez recognizes the potential power of community: "Where we suffer greatly or build together – it is our choice. . . Our greatest choice is to move towards a cooperative, collaborative world that aligns with scientific consensus" (74). Toney echoes Ocasio-Cortez's message in her own

essay. In her discussion of the role of "nature with Black culture, poverty, and the rural south" (76) she asserts that "Community is the lens so often left out of the environmental discussion, but it's vital for identifying real solutions" (76). Both Ocasio-Cortez and Toney correlate community with successful solutions. To make effective change, we must work together.

Elizabeth Yeampierre and Kate Knuth continue this argument in "Reframe." Before Kate Knuth's "Becoming a Climate Citizenship," Elizabeth Yeampierre is quoted as saying "Leaderful means there is room for all of us. Seeing everyone roll in together is much more powerful than having one or two people speak for everyone. . . We need to do this together, and we can do it lovingly" (128). Kate Knuth also highlights a need for togetherness as 'climate citizens.' She explains "Citizenship, at its core, is a sacred trust between the individual and collective. As we face the climate crisis, this trust—and how we understand and act on it—is more critical than ever" (132). She further explains the role of citizenship and community, championing that "When I claim and allow myself to be claimed by the citizenship, I declare that I am inextricably part of my community," ultimately arguing that "As part of Earth's community, we are all called to responsibility in and for it. That is the meaning of climate citizenship" (132). Rather than situating leadership and citizen by state or nation, these activists propose situating ourselves in a world-wide community that is responsible for the wellbeing of the earth we all share.

All We Can Save's final essay reiterates the importance of community in the effort for positive change. The final section, "Rise," ends with Christine E. Nieves Rodriguez's "Community is Our Best Chance. Discussing her experience of prepping for surviving Hurricane Maria in Puerto Rico, she recalls her partner Luis's words of comfort that "Even if it's the worst here, I know we have community. People know where food is and how to care for each other" (364). Once the hurricane hit, she realized "people knew what to do" (365). After building a

community kitchen to feed hundreds of displaced Puerto Ricans, she began to understand community as vital for survival: “When everything collapses, the life-saving infrastructure is our knowledge of one another’s skills, our trust of one another, out capacity to forgive our neighbor, and mobilize” (366). She emphasizes that “*The times we will be facing are going to require us to recognize that the most important thing around us is community”* (366, original emphasis). Nieves Rodriguez’s connection of survival and community makes this sentiment feel obvious.

The writers in *All We Can Save* are not the only people recognizing the importance of community in contemporary responses to climate change. NPR, for example, published “The communities experimenting with how to be more resilient to a changing climate” in late 2023. In this article they list the ways different communities are coming together to adapt and respond to climate change, such as Seattle Children’s Hospital’s reduction of anesthetic gases impacting the climate by 87% in just five years (The NPR Network) or Hawaii’s mandate to “transition to 100% renewable energy by 2045” (The NPR Network). Even NASA has published on the role community has played in combatting climate change. In Carol Rasmussen’s “Just 5 questions: Community initiatives against climate change,” published in January of this year, she interviews Dr. Ron Brunner, who recognizes the shortcomings of national governments and celebrates how “many local communities have focused independently on their own climate-related problems.” Brunner says “We have paid too much attention to barriers—to research problems that have yet to be solved. It’s time to pay attention to these success stories.” However, it is not just essays and articles published about the role community can play. *Braiding Sweetgrass* and *The Overstory* both highlight real and fictional communities fighting to combat climate change.

Rather than emphasizing the deterioration of homes, towns, and nations, *Braiding Sweetgrass* and *The Overstory* illuminate the importance of community. When Mimi and

Douglas join a protest, one of the tree fellers asks them "Why don't you take care of your own business, and let us get on with ours?" (244). Douglas tells him "This is everybody's business" (244). What Douglas is telling the feller, like Kate Knuth but in different words, is he is a climate citizen. Protecting these trees is more than the feller's business or Douglas's business—it is the business of everyone that is a citizen of the earth. Nick, Olivia, and Adam find a community living in *Mimas*. When Adam meets Nick and Olivia living in the massive tree, he originally wants to interview them for a project on the psychology of environmental activists. However, he ends up becoming a part of their community and staying: "The investigator lies in his swaying hammock, afraid to move a finger. 'I'd like to see the darkness from up here'" (324). Their community continues, even after *Mimas,* in jail together.

These two small communities, (1) Douglas and Mimi and (2) Oliva, Nick, and Adam, eventually all come together to form one community in Oregon. These characters build supportive communities that help them navigate the world around them. Nicholas Hoel, Mimi Ma, Adam Appich, Douglas Pavlicek, and Olivia Vandergriff create a community when they come together through environmental activism. The group loves each other almost as much as they love the earth. When Adam joins them all, he participates in an initiation ceremony, promising to "commit [himself] to respect and defend . . . the common cause of living things" (336): a promise to be a climate citizen.

The community grows again with a presentation scientist Patricia Westerford gives on her seedbank. At her presentation are "five hundred attendees, seven warring factions, scores of objections to every plan to save the planet" (451). She tells the audience "Men and trees are closer cousins than you think. We're two things hatched from the seed, heading off in opposite directions, using each other in a shared place" (454). People and trees, according to Patricia, are

a part of one community. Unbeknownst to Patricia, however, is that amongst these warring factions, her presentation brings people together. Mimi Ma is in the audience of Patricia Westerford's presentation, "transfixed" by her words. She reminisces of memories when "the five of them shared [Westerford's] discoveries over campfires" (463). Video game designer Neelay Mehta is also at her presentation, the only person to shout when Patricia nearly drinks the poisonous plants. Even in her death, Patricia brings people (and trees) together.

Robin Wall Kimmerer also illustrates the role of community in her discussion of trees. In "The Council of Pecans" she explains how Pecan Trees know when to release pecans. The trees all fruit at once because they need to create an overabundance of nuts in order to survive and repopulate. If the trees fruited individually, squirrels would eat all their nuts and there would not be enough to plant new trees. When they fruit at once, however, they guarantee their survival. By working together, Kimmerer explains, these trees are a part of a community: "The trees act not as individuals, but somehow as a collective. Exactly how they do this, we don't yet know. But what we see is the power of unity. What happens to one happens to us all. We can starve together or feast together. All flourishing is mutual" (15). What can we learn from these trees? How to work together, maybe. We can learn that protecting the community protects the individual, that we need community to survive.

Pecan trees are not the only plants we can learn a lesson on community from. In "The Three Sisters," Kimmerer shows us the potential we all have in community. When discussing how corn, beans, and squash all work together, she highlights the "beauty of the partnership" because "when the individuals flourish, so does the whole" (134). She connects the Three Sisters with community: "Being among the sisters provides a visible manifestation of what a community can become when its members understand and share their gifts" (134). As much as individuals

need communities, communities need individuals. It is only when we come together that we can build positive, productive communities.

When Kimmerer is working on creating a swimming hole in "A Mother's Work," she reflects on the role of community, and how that extends to future generations. Considering Paula Gunn Allen's *Grandmothers of the Light*, Kimmerer reflects on what it means to serve a community, and who that contains: "our strengths turn now to a circle wider than our own children, to the well-being of the community . . .the sphere of a wise woman is beyond herself, beyond her family, beyond the human community, embracing the planet, mothering the earth" (97).The swimming pond she creates will not serve her immediate family, but it will serve a larger community. Her grandchildren will swim there, "and others whom the years will bring." She realizes "the circle of care grows larger and caregiving for my little pond spills over to caregiving for other waters . . . everybody lives downstream" (97). In her efforts to be a good mother, she becomes a mother to a larger community: "there are grandchildren to nurture, and frog children, nestlings, goslings, seedlings, and spores" as well as her neighbors and generations to come. When Kimmerer realizes her place in this larger community, her years of work become that much more valuable.

By orienting their writing around community rather than deterioration, both Kimmerer and Powers demonstrate the future of environmental literature. Rather than focusing on one survivor or one leader, both *Braiding Sweetgrass* and *The Overstory* show how we need each other to survive and offer lessons from nature as examples of successful communities. Rather than looking towards fictional examples of collapsed governments (or very real examples of failing politicians and legislators), Kimmerer and Powers offer us an alternative: trees and beans.

These plants have been surviving together for generations, showing us how community may be the thing we really need.

Reciprocity

Finally, reoccurring messages of reciprocity show us how selfless giving is a more impactful option than hoarding or selfish survival tactics. In the opening chapter of *Braiding Sweetgrass* Kimmerer sets up reciprocity as a pillar of Indigenous wisdom, defining their relationship with the earth through reciprocity. She opens:

> When Skywoman arrived here, she did not come alone. She was pregnant. Knowing her grandchildren would inherit the world she left behind, she did not work for flourishing in her time only. It was through her actions of reciprocity, *the give and take with the land,* that the original immigrant became Indigenous. For all of us, becoming Indigenous to place means living as if your children's future mattered, to care of the land as if our lives, both material and spiritual, depended on it. (9, emphasis mine)

By connecting the opening of the book and the origin of Skywoman with reciprocity, Kimmerer establishes reciprocity as a cornerstone of both Indigenous belief systems and of her own teachings. The subsequent three hundred and eighty pages and *ninety* mentions of the word reciprocity makes the necessity of reciprocity seem obvious. If we want to keep living on this earth, we need to start taking care of it.

Reciprocity is a consistent thread throughout the text. In her analysis of Mary Oliver's *Upstream* and Kimmerer's *Braiding Sweetgrass*, Alexis Westrick highlights how both texts "praise the kinship between the natural world and humans through discussions of motherhood, unlikely friendships, and reciprocity, showing that this fellowship brings us not only closer to nature, but also closer to one another" (96). Additionally, Kimmerer does not prioritize human

relationships over relationships with the natural world: “Friendship and fellowship are built largely on reciprocity” (97). In order to connect with each other, we also need to show each other, and the planet, a little reciprocity. In an interview with James Yeh, Kimmerer explained “Most people don’t really see plants or understand plants or what they give us . . . so my act of reciprocity is, having been shown plants as gifts, as intelligences other than our own . . . I want to help them become visible to people. People can’t understand the world as a gift unless someone shows them how it’s a gift” (Yeh). By showing us how to view the world with reciprocity, Kimmerer offers a grateful alternative to apocalypse.

In “The Gift of Strawberries” Kimmerer explains how both humans and strawberries benefit from reciprocity, showing her readers how strawberries are a gift. By being so delicious, animals (including us) spread the fruit around. Paired with the understanding of the world as a gift (30), “The relationship of gratitude and reciprocity thus developed can increase the evolutionary fitness of both plant and animal” (30). She continues to explain how “A species and a culture that treat the natural world with respect and reciprocity will surely pass on genes to ensuing generations with a higher frequency than the people who destroy it” (30). By treating strawberries with reciprocity, they gift us their fruit. If we treated everyone and everything the same way Kimmerer argues we should treat strawberries, we all might be a little better off.

In addition to her goal of showing us how to view the world as a gift, Kimmerer also shows us how to view each other as a gift. In “Allegiance to Gratitude,” for example, she writes “cultures of gratitude must also be cultures of reciprocity. Each person, human or not, is bound to every other in a reciprocal relationship” (115). She illustrates this through a simple example. When her daughters thank her for packing their lunch, Kimmerer feels more inclined to make better lunches, to give them fresh baked cookies (115–116). When they head to school without

showing their thanks, she feels “a tad miserly” (115). This relationship, between mother and daughter, shows “the power of gratitude to incite a cycle of reciprocity” (115). She illustrates how “appreciation begets abundance” (116). When we show our thanks to each other, we can begin a cycle of reciprocity that will bleed into everything.

Like Kimmerer, Powers also illustrate how reciprocity, for each other and the world, can lead to positive change. In Antonella Riem’s “‘At the Speed of Trees:’ Richard Powers’ *The Overstory,*” the author explained “[*The Overstory*] unmistakably reinforces the fundamental values of the *partnership* paradigm, which focuses on the caring potential of love and human reciprocity (28). The author continues to explain “humans and plants (all other forms of life, including minerals) need to join forces to overcome the globalizing, aggressive, exploitative dominator model ruling the planet and our lives” (29). In *The Overstory*, according to Riem, “Apocalyptic visions are replaced with visions of fluid regeneration, new seeds are planted, seeds of a new conscious humanity” (37). Katarzyna Ostalska makes a similar argument to Riem. Ostalska reads *The Overstory* as an “[argument] that human civilization needs to develop in sync with other beings, not regardless or against them” (289). By showing the connectedness between people and trees, Powers shows us how reciprocity might benefit us all.

In an interview with Emma John, Richard Powers talks about the value of trees and the need for reciprocity with plants. When defining environmentalism he explains “[trees are] not our resources; and we won’t be well until we realize that” (John). By having a reciprocal relationship with trees rather than a commodifying one, then we can begin to heal. He continues “Every form of mental despair and terror and incapacity in modern life seems to be related in some way to this complete alienation from everything else alive. We’re deeply, existentially

lonely" (John). Through the reciprocity Powers demonstrates in *The Overstory*, we do not have to be lonely any longer—we can find friendships in trees.

While Olivia finds actual human friends in trees through Nick and Adam, Olivia also participates in a reciprocal relationship with trees when she starts listening to them. After being electrocuted in a house full of roommates who will not even check on her, Olivia begins a reciprocal relationship with trees. After leaving college she begins to hear trees: "*You were worthless,* they hum. *But now you're not. You have been spared from death to do a most important thing*" (163). After hearing the trees, she realizes she must do something to help them.

This desire to do something helps Olivia just as much as it helps the trees. Through her desire to help, she becomes deeply involved in activism. This activism not only gives her purpose, but also introduces her to a group of people who become deeply intertwined with each other. Long after Olivia's death, the people's lives she touched are still listening. In the final pages of *The Overstory*, Nick can hear Olivia: *"What we have will never end. Right? What we have will never end."* (493). She continues to tell him "*The most wondrous products of four million years of life need help*" (493). Nick realizes, however, "Not them; us. Help from all quarters" (493). People need help, and they can only help each other.

From the first nature explorer-writers to today's eco-critics, environmental literature is developing alongside America. As tensions rise between increasingly polarized political parties in America, the rhetoric used to discuss the environment and climate change is increasingly important. In the same way environmental literature has adapted past the focus on abundance and the sublime, environmental literature needs to adapt to the needs of the time. Rather than glorifying martyrs and extremist activists, *The Overstory* and *Braiding Sweetgrass* glorify the earth. Richard Powers and Kimmerer show the strength of hope, community, and reciprocity,

providing many ways regular people can ensure humans persist among these natural giants. Most importantly, however, *The Overstory* and *Braiding Sweetgrass* show readers they must believe there is a future before they can save it.

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