

# Introduction

## Reclaiming Enemy-Occupied Territory: Saving Middle-earth, Narnia, Westeros, Panem, Endor, and Gallifrey

I used to think the top environmental problems were biodiversity loss, ecosystem collapse, and climate change. I thought that with thirty years of good science we could address those problems. But I was wrong. The top environmental problems are selfishness, greed, and apathy, and to deal with those we need a spiritual and cultural transformation. And we scientists don't know how to do that.

—Gus Speth, founder, Natural Resources Defense Council

The struggle of justice against oppression, hope against despair, is hard. But it has long been the work of humanists, and of literature in particular, to put before the world both terms in each of these dyads—justice as well as oppression, hope as well as despair—to help people commit to the first in each case. . . . It is out of fashion to say this, but it is nonetheless true: liberal activist texts have transformative power. They play a profound role in the fight for human justice and planetary healing that so many of us recognize as the urgent struggle of our time. Words on the page more than reach our minds. They call up our feelings. They call out our spirits. They move us to act.

—Elizabeth Ammons, *Brave New Words: How Literature Will Save the Planet*

### Margaret Atwood and the Newfound Importance of Climate Fiction

In “Climate Fiction: Can Books Save the Planet?” (August 14, 2015), *Atlantic* columnist J. K. Ullrich described the unexpected rise of popularity of “cli-fi,” a subgenre of speculative fiction created by Jules Verne in the nineteenth century, further developed by J. G. Ballard in the 1960s, and recently named and popularized by environmentalist

Dan Bloom and novelist Margaret Atwood via the power of social media. Thanks to growing awareness of the environmental, social, and economic consequences of climate change, the subgenre has grown in popularity in recent years. Evidence of its omnipresence may be found in hashtags, Facebook groups, Goodreads lists, and the fact that, as Ullrich observed, “searching for the term ‘climate fiction’ on Amazon today returns over 1,300 results.” According to Ullrich, “Unlike traditional sci-fi, its stories seldom focus on imaginary technologies or faraway planets. Instead the pivotal themes are all about Earth, examining the impact of pollution, rising sea levels, and global warming on human civilization. And the genre’s growing presence in college curriculums, as well as its ability to bridge science with the humanities and activism, is making environmental issues more accessible to young readers—proving literature to be a surprisingly valuable tool in collective efforts to address global warming.”<sup>1</sup>

Ullrich cites as key examples of canonical cli-fi the films *The Day After Tomorrow* (2004), *Snowpiercer* (2013), and *Interstellar* (2014); Young Adult novels *Breathe* (2012) by Sarah Crossan, and both *The Drowned Cities* (2013) and *Ship Breaker* (2011) by Paolo Tadini Bacigalupi, as well as the shows *Game of Thrones* and *The Handmaid’s Tale*, adapted from books by George R. R. Martin and Atwood. Other key texts in the genre not cited by Ullrich include the short story “That Bus Is Another World” (2015) by



Fig. I.1. *The Hunter* (2011) is an Australian film based on a novel by Julia Leigh. A military biotech firm hires Martin David (Willem Dafoe) to get a DNA sample from the last surviving Tasmanian tiger before killing it. During his quest to find the tiger, Martin experiences a crisis of conscience, finding himself wanting no part of these plans. The book and the film both form a part of a growing canon of multimedia works of climate fiction taught in university courses. Magnolia Pictures.

Stephen King, the comic books *Dark Fang* (2017) by Miles Gunter and Kelsey Shannon, and both *The Silver Surfer: Rebirth of Thanos* (1990) and *Infinity Gauntlet* (1991) by Jim Starlin and Ron Lim, as well as the books *Walden Two* (1948) by B. F. Skinner, *A Canticle for Leibowitz* (1959) by Walter M. Miller, *The Drowned World* (1962) by Ballard, *The Wall* (1962) by Marlen Haushofer, *The Lorax* (1972) by Dr. Seuss, *Ecotopia: The Notebooks and Reports of William Weston* (1975) by Ernest Callenbach, *Woman on the Edge of Time* (1976) by Marge Piercy, *The Children of Men* (1992) by P. D. James, *The Tropic of Orange* (1997) by Karen Tei Yamashita, and *Green Earth* (2015) by Kim Stanley Robinson. Additional climate fiction narratives include the television shows *The Fire Next Time* (1993) and *Treme* (2010–2013) and the films *La Jetée* (1962), *Silent Running* (1972), *Soylent Green* (1973), *Long Weekend* (1978), *C.H.U.D.* [“Contamination Hazard Urban Disposal”] (1984), *The Stuff* (1985), *On Deadly Ground* (1994), *Safe* (1995), *Idiocracy* (2006), *Wall-E* (2008), *Promised Land* (2012), *The East* (2013), *The Only Lovers Left Alive* (2013), *Asterix: The Mansions of the Gods* (2014), *Moana* (2016), *Wonder Woman* (2017), *First Reformed* (2017), the filmography of Hayao Miyazaki, and multiple *Godzilla* and *Mothra* films, including *Godzilla* (1954) and *Shin Godzilla* (2016).

Texts such as these have appeared on English classroom reading lists around the world in recent years as the social and intellectual import of the genre has become more widely known. In addition, several notable works of scholarship have also been published that deal with climate fiction in whole or in part, including the anthology *Green Planets: Ecology and Science Fiction* (2014), edited by Gerry Canavan and Kim Stanley Robinson, and the monographs *Anthropocene Fictions: The Novel in a Time of Climate Change* (2015) by Adam Trexler, *Environmentalism in the Realm of Science Fiction and Fantasy Literature* by Chris Baratta (2012), and *Apocalyptic Transformation: Apocalypse and the Postmodern Imagination* (2008) by Elizabeth K. Rosen.<sup>2</sup> It is also significant that, in 2017, Amy Brady debuted the cli-fi column “Burning Worlds” for *The Chicago Review of Books*. In the first few months of the column, Brady examined texts such as *Flight Behavior* (2013) by Barbara Kingsolver, *Odds Against Tomorrow* (2014) by Nathaniel Rich, *Not Dark Yet* (2015) by Berit Ellingsen, and *California* (2015) by Edan Lepucki, as well as *The End We Start From* by Megan Hunter, *South Pole Station* by Ashley Shelby, and *Mr. Eternity* by Aaron Their, all published in 2017.

For Atwood, “climate fiction” is most effective when it is more about character and story than it is about sermonizing and assaulting the audience with sobering scientific data and doomsday prophecies. As she explained in a February 6, 2015, interview with *Slate* reporter Ed Finn: “It’s rather useless to write a gripping narrative with nothing in it but climate change because novels are always about people even if they purport to be about rabbits or robots. . . . In the *MaddAddam* books, people hardly mentioned ‘climate change,’ but things have already changed. For instance, in the world of Jimmy, who we follow in *Oryx and Crake*, the first book, as he’s growing up as an adolescent, they’re already getting tornadoes on the East Coast of the United States, the upper East Coast, because I like setting things in and around Boston. It’s nice and flat, and when the sea rises a bunch of it will flood. It’s the background, but it’s not in-your-face a sermon.”<sup>3</sup>

On March 21, 2016, *The Chronicle of Higher Education* published “The Subfield that is Changing the Landscape of Literary Studies,” an article about climate fiction by Rio Fernandes, which argues that the genre is “changing the curricula of English departments across the country” and around the world.<sup>4</sup> The full professors and graduate students quoted in the piece include those who have presented panels on climate fiction at conferences, run seminar classes, and included climate fiction in their courses: Ted Howell, Temple University; Richard Crownshaw, the University of London; Sina Farzin, the University of Hamburg; and Wai Chee Dimock, Yale University. Among the books that are staples of courses on climate fiction are the *MaddAddam* trilogy, *The Stand* (1978) by Stephen King, *The Road* (2006) by Cormac McCarthy, and *Solar* (2010) by Ian McEwan. Not all the above books would pass muster with the champion of the traditional Western Canon, Harold Bloom, as being of high literary quality and worthy of study, but many of these professors see value in contrasting how both high-brow and low-brow art confront similar themes. Fernandes addresses the popularity of the courses, their importance in the revitalization of freshman seminar and core course requirements, and the evolution of the English major. The article also raises the specter of complaints that these courses have received from conservative students and climate change deniers who regard the genre of cli-fi as fundamentally propagandistic and dangerous. However, the professors interviewed express that they are aware of their moral responsibility to promote the truth and continue educating their students despite such complaints.<sup>6</sup> Indeed, Elizabeth Ammons writes in *Brave New Words: How Literature Will Save the Planet* (2010) that teachers have a moral imperative to tell students the truth, which most students have already grasped, and discuss the ramifications of climate change with them, which they haven’t come to terms with.

Five centuries of Western colonialism, capitalism, enforced Christianity, racism, systemic sexism, and ever-more-sophisticated warfare have brought the globe to a perilous brink. Soil depletion so destroyed agriculture in Haiti even pre-2010 that street vendors in Port-au-Prince sell pies made of clay, salt, and shortening as food. Arctic ice melts and with it the habitats of bears who have lived there for millennia. Life expectancy for an indigenous person on the Wind River Reservation in the United States of America is forty-nine years. Worldwide desertification now consumes an area larger than Canada and the U.S. combined. . . . As George Monbiot explains in *Heat*, the United States needs to cut carbon emissions by 90 percent by 2030 . . . to avert irreversible global catastrophe.

Many of my students know and fear these truths. Others try not to know out of feelings of despair and powerlessness. What can any one person or even group of people do to halt, much less reverse, devastation of such magnitude? Still others cling to technology. . . . Science will have the answers. Deep in our hearts, however, we know that science and technology

do not have the answer. The crisis is one of values. It can be met . . . only by a radical shift in belief, a profound realignment of thought and spirit.<sup>7</sup>

Interdisciplinary education, modeled by the Association for the Study of Literature and Environment (ASLE), is vital to the effort to foster this profound realignment of thought and spirit that Ammons argues for. It is in the tradition of such interdisciplinary education that this book fits.

### The Inklings and Religiously Informed Ecological Fiction

This book focuses on the works of two of the innovators of environmentalist fantasy and science fiction, J. R. R. Tolkien and C. S. Lewis, and considers how they confront the evils of pollution, deforestation, and warfare in their religiously and morally informed writings, including their heroic fiction, scholarly essays, and personal correspondences. This book then explores the works by authors, filmmakers, and writers of television serials who were inspired by Lewis and Tolkien to write environmentalist speculative fiction of their own, sometimes expressing concern for the earth in equally religious terms, sometimes employing secular arguments.

Lewis and Tolkien wrote speculative fiction imbued with forms of Christianized Norse and Greco-Roman Mythology that promoted environmental ethics and the values of sustainability within the fantasy and science fiction genres. They could not have, themselves, referred to their works as being part of the “climate fiction” or “cli-fi” subgenre, since the subgenre has been identified only recently. However, they did indeed write an early species of climate fiction, and its use of apocalyptic imagery from mythology to warn of the potential ecological collapse of the planet was as idiosyncratic and groundbreaking as it was inspiring to many authors who followed. The two academic colleagues, friends, and fellow Inklings belonged to different branches of the Christian faith, had competing visions of what Christian allegory could (and should) do in novel form, and had a falling out over personal, religious, and professional conflicts mid-career. Their differences aside, they were united in their interest in countering fascism, utilitarianism, and the excesses of industrial capitalism with a Christian environmentalist ethic that they explored in their Narnia and Middle-earth sagas. This monograph examines how different writers on both sides of the Atlantic revisited and rewrote these Inklings’ apocalyptic fantasy tropes and environmentalist ethics, especially novelists Margaret Atwood, Octavia Butler, Suzanne Collins, George R. R. Martin, Philip Pullman, and a variety of writers and producers who have shaped more than five decades’ worth of multimedia *Doctor Who* adventures. Notably, these authors often express starkly different religious views than the Inklings’ that inspired them, and yet mirror their predecessors’ ecological and genre concerns. Pullman, Collins, Martin, and the *Doctor Who* scriptwriters all revisit the Inklings’ fascination with the Norse conception of Ragnarök: the ice and fire cycle of

apocalypse and renewal. Philip Pullman used Ragnarök imagery to call for a halting of climate change and the abolishing of authoritarian organized religion in the trilogy of novels *His Dark Materials*. Collins's *Hunger Games* trilogy used Ragnarök symbolism ("the Girl Who Was on Fire" versus "President Snow") to condemn war, racism, and the enormous wealth disparity found in contemporary America. Martin's *A Song of Ice and Fire* (a.k.a. *Game of Thrones*) calls for a balancing of oppositional social, natural, and religious forces in the world, and warns that unchecked sectarianism and totalitarianism, and an endless, unbroken cycle of intergenerational violence creates a society divided against itself that descends into chaos and summons monsters.

One recurring source of tension within scholarly, religious, and fan communities is the question of whether to embrace a work of speculative fiction as good art and ethical storytelling depending on whether the work being examined appears to promote religious or secular values. Anecdotally, cultural commentators in the mass media and on social media appear to be divided over which fantasy books and authors to favor and which to condemn as being unsuitable for young minds. Atheists sometimes seem to champion the critic of establishment Christianity Philip Pullman, while being dismissive of Christian apologist C. S. Lewis. For their part, Christians tend to be predictable in their favoring of Lewis and condemnation of Pullman.<sup>8</sup> For example, Lewis scholar Alister McGrath's concern about whether certain fantasy texts promote secular humanism or Christianity stems from his position as a Christian apologist; he has adopted the role of contemporary public Christian intellectual that Lewis played so well in his lifetime. Nevertheless, there are more interesting questions to ask than whether climate fiction authors somehow "harm" Christianity by promoting secular humanism. *Fire and Snow* is about *what kind of secular humanism* and *what kind of Christianity* the authors promulgate in the texts and subtexts of their environmentalist writings. There are benign and pernicious species of secular humanism just as there are benign and pernicious species of Christianity. Significantly, several of the authors already identified share deep ecological concerns with Lewis, even if they don't share his Christian worldview. The connective ecological thematic framework of Lewis's imitators and Tolkien's imitators is of far greater import than the questions of how to best pit their respective religious beliefs against one another on behalf of the contemporary American culture wars. In contrast to McGrath, fantasy aficionados concerned more with good storytelling than with ideological content tend to embrace all the finest books by Lewis and Pullman as good art. This monograph will argue that the fantasy fans who unreservedly enjoy reading all the canonical works of the fantasy genre may have stumbled upon a truth that has been lost because of the various ideological factions that have claimed one author over another as a champion: there is more commonality of ecological sentiment and ethics uniting these works thematically than any divisive ideological label should be allowed to undermine. *Fire and Snow* uses thematic criticism as a means of building rhetorical bridges between sometimes fiercely divided religious factions in the interests of finding a common ground for environmentalists of different personal belief systems. Despite their sometimes (in)significant ideological differences,

these very similar and very different authors may be regarded as, essentially, working in solidarity with one another on the same ideological project: using spiritually informed genre fiction to help save the planet from annihilation. (Notably, another scholar who has argued for the importance of studying genre fiction from an ecocritical perspective is Anthony Lioi, who examines “green” multimedia science fiction, horror, and fantasy narratives in 2016’s *Nerd Ecology: Defending the Earth with Unpopular Culture*.)

Scholar Farah Mendlesohn describes thematic criticism as a potentially “powerful and threatening” interpretive approach most often taken to works of fantasy by both scholars and fans alike. She notes that “Thematic criticism is a form of archaeology that excavates the layers of a text and compares that text with those found in other excavations.” Elaborating, Mendlesohn notes that thematic criticism is “often deployed in comparative work, in order to create clusters of texts which can be discussed together.” What is accomplished when works considered part of the same genre are clustered together and examined thematically? Mendlesohn writes, “The process of thematic criticism can be understood as a deconstructionist route into a text’s deeper meaning, finding it richer and more meaningful than it might otherwise be read. . . . Thematic criticism is also, however, a mode of reader response criticism and as such contributes an extra layer to the text, the role of the reader who brings to the text his own prior reading and may slot the text into a pattern of thematic reading which the author did not envisage. . . . For both author and reader, thematic criticism can feel like a challenge to the ‘ownership’ of a text.”<sup>10</sup>

Mendlesohn observes that, even though many authors are hostile to thematic criticism, some are particularly worthy subjects of it, especially authors, such as Tolkien, who embed recurring themes in their work. Mendlesohn suggests Tolkien as a case study because he was opposed to allegorists reading his works as straightforward moral parables even as he himself clearly wove environmentalist messages into his fiction. Indeed, his private correspondences were filled with ecological allusions and allegories, and Tolkien referred to the pollution in Britain as a “Mordor in our midst.” He also offered a pointed condemnation of some of his unquestioningly pro-war and pro-pollution fellow Catholics when discussing the moral significance of the “Scouring of the Shire” epilogue of *Lord of the Rings*, in which even Hobbits began despoiling their own land. Tolkien observed that those in the Shire who attempted to use the magic and technology of Mordor to achieve “good” aims were as morally misguided and destined to inevitably advance the cause of evil as Catholics who, with the best of intentions, research poison gases.<sup>11</sup>

This monograph marries thematic criticism to ecocriticism, and uses both as a means of interpreting climate fiction. In “Literary Studies in an Age of Environmental Crisis,” which serves as the introduction to *The Ecocriticism Reader: Landmarks in Literary Ecology* (1996), Cheryll Glotfelty defines ecocriticism as “the study of the relationship between literature and the physical environment.”<sup>12</sup> Glotfelty observes that it took far longer for ecological criticism to develop in the thinking of academics, especially in the humanities, than it did to become a concern to scientists and the broader populace, but—in recent decades—the different branches of the humanities have developed independent responses

to the ecological crisis appropriate to their respective fields. These different, autonomous branches have come together in the blossoming field of ecocriticism, especially thanks to the work of scholarly organizations such as Association for the Study of Literature and Environment and the work of ecologically minded and interdisciplinary scholars. The branches of the humanities of most interest to this book include literary studies, philosophy, and religious studies. As Glotfelty argues, “Literary scholars specialize in questions of value, meaning, tradition, point of view, and language, and it is in these areas that they are making a substantial contribution to environmental thinking.”<sup>13</sup> Philosophy’s subfield of ecofeminism has, in part, informed the thinking of the author of this text because, as Glotfelty explains, ecofeminism understands and critiques “the root causes of environmental degradation and [formulates] an alternative view of existence that will provide the ethical and conceptual foundation for right relations with the earth. Theologians, too, are recognizing that. . . . While some Judeo-Christian theologians attempt to elucidate biblical precedents for good stewardship of the earth, others re-envision God as immanent in creation and view the earth itself as sacred. Still other theologians turn to ancient Earth Goddess worship, Eastern religious traditions, and Native American teachings, belief systems that contain much wisdom about nature and spirituality.”<sup>14</sup>

Glotfelty’s discussion of the overlap in approach to ecocriticism between the disciplines of philosophy and theology suggests a kinship between the perspective of ecofeminism and of Stewardship of the earth—a kinship that *Fire and Snow* explores as it suggests that the Christian Stewardship of the earth advocated by Lewis, Tolkien, Pope Francis, and St. Francis of Assisi has enormous spiritual and thematic resonance with the writings of ecofeminist philosophers, artists, theologians, writers, journalists, and activists, ranging from Rosemary Radford Ruether, Sallie McFague, and Naomi Klein to Margaret Atwood, Ursula K. Le Guin, and Octavia Estelle Butler.

Climate fiction reaches into several different genres and is identifiable in its dramatizing of issues such as deforestation, pollution, climate change, sustainability, animal welfare, extinction-level events, the evils of industrialization, the ecological ravages caused by large-scale and extended military conflicts, the preservation of nature, the rights of indigenous peoples, the sins of capitalism, the equitable care and allocation of natural resources, and the oppression of women and ethnic minorities to create a self-contained “ecosystem” of oppression. Some of these issues might seem far afield from the question of the ethical stewardship of the Earth. However, these concepts radiate outward from a central concern of maintaining a well-balanced ecosystem without polluting it, squandering it, destroying it, or keeping all its bounty for the privileged few. In a sense, for a climate fiction narrative to be centrally concerned with the environment is for climate fiction to be centrally concerned with life itself. As Atwood observes, therein lies the problem of the somewhat limiting umbrella term of “climate change” when discussing these issues: “I would rather call it the ‘everything change,’ because when people think climate change, they think maybe it’s going to rain more or something like that. It’s much more extensive a change than that because



when you change patterns of where it rains and how much and where it doesn't rain, you're also affecting just about everything. You're affecting what you can grow in those places. You're affecting whether you can live there. You're affecting all of the species that are currently there because we are very water dependent. . . . The other thing that we really have to be worried about is killing the oceans, because should we do that there goes our major oxygen supply, and we will wheeze to death."<sup>15</sup>

Since climate fiction—or everything fiction—straddles multiple genres, genre criticism terminology is important to clarify as well. When the real-world issues of the wages of pollution are depicted as taking place in a reality much like our own, but the story itself is a narrative conceit, the work is climate fiction but not speculative fiction. When these issues that touch us in our reality are dramatized as taking place in Westeros, Panem, Middle-earth, or other such invented worlds, the climate fiction is taking place within the realm of a speculative fiction narrative, but we have the right to draw several notable parallels between the events taking place in these fictional worlds and the ones unfolding in our own. It is also possible to find works of climate fiction by climate change deniers—with the late Michael Crichton's *State of Fear* (2004) being the most notable work by the world's most famous climate change denier. However, most works in this vein accept the truth of climate change and consider its ramifications in a series of “what if” scenarios. This does not always mean that a well-meaning environmentalist cli-fi writer will always get the climate science right—*The Day After Tomorrow* has often been ridiculed for its bad science and good intentions—or offer a solution that climate change activists would approve of—for example, the defeatist and improbable plan to abandon the Earth in *Interstellar*.

Returning to the issue of terminology: several of Lewis's fantasy novels set in the land of Narnia may be considered speculative fiction because they featured worlds that he designed, but they are also climate fiction because of their apocalyptic ecological concerns. Notably, the Narnia novels are not science fiction. However, Lewis also wrote *The Space Trilogy* (aka *The Ransom Trilogy*), a series of Christian science fiction novels. These books are also treated as works of climate fiction in this study, with book three, *That Hideous Strength*, a frequent touchstone.

Whether the climate fiction narrative in question is “secular” or “religious,” or whether the original book or the filmed adaptation is the focus of analysis, the multimedia cli-fi text provides rich fodder for discussion in these environmentally troubled times. The goal of this book is to show how these popular franchises are recognized (or not recognized) by the broader public as climate fiction narratives offering critical moral instruction on the urgency of conservation. The moral urgency of these stories may be underpinned by overt or covert Christian ethics, a Native American spirituality, or by a species of secular humanism, but the shared interest in saving our forests and saving our planet transcends ideological differences and bridges gaps between science fiction and fantasy texts. Each of these narratives offers up—almost like a musical refrain—images of trees being destroyed: cut down, burned to the ground, or devoured by monsters. None of the authors of these works support the mass destruction of trees. The Christians,

atheists, and agnostics who penned these works all agree that we need to put aside our cultural differences and transcend our personal, socioeconomic circumstances to work together to save our environment. These stories show us how.

(Un)Intentional Cli-Fi Authors: Philip Pullman,  
Octavia Butler, and George R. R. Martin

Whether their works lean more toward the fantasy genre or science fiction, or more toward dystopian or postapocalyptic, several of the authors of speculative fiction set out to craft narratives that are a conscious climate change allegory and intentionally written to be part of the climate fiction subgenre. Other authors have different concerns when they begin their projects, and the climate change commentary seems to manifest itself in the narratives more subconsciously, or even wholly unintentionally. In still other instances, readers identify a given narrative's relevance to a world with a changing climate when the authors themselves are resistant to seeing their works branded "cli-fi." Octavia E. Butler, Philip Pullman, and George R. R. Martin represent this spectrum of climate fiction writers: Butler wrote her climate change commentary intentionally, Pullman partly subconsciously, and Martin unintentionally.

One of the most respected authors of climate fiction and the winner of a 1995 MacArthur Fellowship, Butler wrote two volumes of a planned trilogy, *Parable of the Sower* (1993) and *Parable of the Talents* (1998), before her death in 2006. *Parable of the Sower* is a dystopian novel about Lauren Olamina, a teenage empath who leads a multiethnic assemblage of suburban refugees north along the highways of California to find a new sanctuary after drug-addicted pyromaniacs destroy their walled-off community, Robledo. In an interview, Butler explained that her books project a speculative future extrapolated from the social and political trends of her present, "I looked at the growing rich/poor gap, at throwaway labor, at our willingness to build and fill prisons, our reluctance to build and repair schools and libraries, and at our assault on the environment. . . . There's food-price driven inflation that's likely because, as the climate changes, some of the foods we're used to won't grow as well in the places we're used to growing them. . . . I considered spreading hunger as a reason for increased vulnerability to disease. And there would be less money for inoculations or treatment. . . . I imagined the United States becoming, slowly, through the combined effects of lack of foresight and short-term unenlightened self-interest, a third world country. And the only way of cleaning up, adapting, and compensating for all this in *Parable of the Sower* and *Parable of the Talents* is to use our brains and our hands—the same tools we used to get ourselves into so much trouble."<sup>16</sup>

Philip Pullman's *His Dark Materials* trilogy is also informed by his passionately held personal and ideological beliefs. It includes the books *Northern Lights* (aka *The Golden Compass*, 1995), *The Subtle Knife* (1997), and *The Amber Spyglass* (2000), and is about a multiracial insurrection led against an imposter "God" who has supplanted

the Creator God and ruled all species across the multiverse with a merciless, totalitarian hand. The series includes a subplot in which the melting of arctic lands robs the heroic King Iorek Byrnison of his kingdom, and leaves his people—an armored, articulate race of polar bears—without food or shelter. In the process, a once proud and resilient race is reduced in stature to splintered, nomadic refugees. Pullman claims that the polar bear diaspora storyline was a partly conscious commentary on the melting of arctic lands in the real world, noting that the ecological catastrophe in his fantasy multiverse “wasn’t an entirely unconscious echo.”<sup>17</sup> Pullman is also interested in the role that religion plays in confronting the challenges of a changing climate: “[T]he stories that the global warming prophets tell us (let’s call them that, to distinguish them from the sceptics), take their place right slap-bang in the middle of the prophetic tradition, along with the prophets of the Old Testament. But the prophets of the Old Testament were not very successful because they were generally hounded out of the city and cast adrift on the waves. People don’t like hearing what prophets tell them: it’s generally uncomfortable. It’s full of doom; it’s full of warnings; it’s full of denunciations and threats to mend their ways or suffer for it. So it’s not a popular message. And the struggle that the climate-change prophets have had to undertake to get their message heard, I suppose, is similar.”<sup>18</sup>

Like *His Dark Materials*, the book series *A Song of Ice and Fire* works well as a climate change allegory, though Martin has said that he did not intend the books to



Fig. I.2. In Philip Pullman’s *His Dark Materials* trilogy, the melting of arctic lands robs the polar bear Iorek Byrnison of his kingdom and reduces his people to starving refugees. Pictured are Lyra Belacqua (Dakota Blue Richards) and Iorek (voiced by Ian McKellen) from the adaptation of Book One, *The Golden Compass* (2007). New Line Cinema.

be regarded, first and foremost, as climate fiction. In Martin's books, magical forces threaten to engulf the fictional realm of Westeros in an eternal winter, setting the stage for an invasion of ice zombies that will transform all humanity into the frozen undead. As Martin has explained in interviews, he was most concerned with crafting an original universe inspired by the real-world history of the Wars of the Roses and the genre fiction he read in his formative years. While Martin may have been prepared for his readers to make note of his deliberate tributes to the Inklings, he seemed surprised when he first learned that viewers of the HBO television series *Game of Thrones* have grown inclined to see the Westeros narrative writ large as a climate change metaphor. Uncommon when Martin began the decades-long journey towards completion of his Westeros series in the early 1990s, mighty superstorms, lengthy droughts, record hot summers, blistering cold winters with record snowfalls, and devastating brushfires have become common in recent years. Martin's readership and viewers of the HBO adaptation of his books have noticed these weather patterns and seen echoes of them in his grand narrative. Initially, Martin seemed reluctant to grant the climate change interpretation of his books credence or own that climate change concerns were a primary motivating force in his writing the Westeros books. Consequently, during a question-and-answer session for fans at Dymock's Literary Luncheon in Sydney, Australia, in 2013, he said, "Like Tolkien I do not write allegory, at least not intentionally. . . . [I]f I really wanted to write about climate change in the 21st century, I'd write a novel about climate change in the 21st century."<sup>19</sup> More recently, the liberal Democrat and frequent critic of the Trump administration has embraced the interpretation. In a 2014 interview with *Al-Jazeera America*, he said that his work has tremendous contemporary relevance because climate change is "ultimately a threat to the entire world. But people are using it as a political football instead of . . . [getting] together."<sup>20</sup>

As the thoughts of Butler, Pullman, and Martin illustrate, science fiction and fantasy narratives have enormous potential to educate the public, inspire them, and galvanize them into action. This is true whether the writer of that book series *intended* to craft a climate allegory, *somewhat* intended to, or wrote one *almost entirely by accident*. In "Cli-Fi; Climate Change Fiction as Literature's New Frontier?" (July 23, 2015), *Huffington Post* columnist Bethan Forrest argues that entertaining speculative fiction narratives have the potential to educate the public about environmental issues in a way that juried journal articles and PowerPoint presentations have failed to do: "In our glib, 24-hour-news-cycle world, the unrestrained drip of an iceberg in the Arctic or the slow encroachment of water onto the land of southern hemisphere islands, debated in lengthy terms by austere scientists at dry conferences, doesn't strike us with the immediacy and urgency that it deserves. Perhaps that's where the responsibility of true challenge to an uninformed and inactive audience has fallen, as it always has, to the arts."<sup>21</sup>

However imperfect the science may be or how subtle the social message, these cli-fi stories still have the potential to educate the public on environmental issues—and the potential to inspire activism. The one-third-complete film adaptation of Pullman's *His Dark Materials*, *The Golden Compass* (2007), was a financially unsuccessful film that

has yet to achieve the success of other fantasy multimedia franchises. The DVD release of the movie was a fixture of bargain basement outlet stores in the years following the film's failure, but even this failed adaptation may have played a part in educating the few that saw it. For example, the home video version begins with a public service announcement on behalf of the World Wildlife Fund narrated by actress Dakota Blue Richards, who addressed the young fans of the series in character as series heroine Lyra Belacqua. "Lyra" talked of her armored polar bear friend Iorek, exhorting the children of our reality to protect the polar bears of our world—to "be their armor"—and join the WWF in defending them from global climate change, which "is reducing the size of their home and shortening the season in which they are able to find food. World Wildlife Fund works every day to study how global warming impacts the earth and what we can do to stop it. . . . You can help save it and our entire planet. For bears, for yourself, and for future generations."<sup>22</sup> The World Wildlife Fund blurred the line between fiction and reality when it asked a child actress to voice a fictional character, Lyra Belacqua, to make a plea on behalf of real polar bears in the name of the fictional Iorek. Ecological organizations are forever looking for charismatic champions to enter the public discourse to bring a sense of urgency to the causes they are fighting for, and to make their messages more marketable. Appropriately, several actors associated with film and television adaptations of climate fiction brought the issue of pollution greater attention by participating in a high-profile advertising campaign in Great Britain. Sixty celebrities took part in activist and fashion designer Dame Vivienne Westwood's *Save the Arctic* initiative with Greenpeace. These celebrities included actors famous for playing characters from the lands of Westeros, Middle-earth, and Gallifrey on film and television. Among the participants were those who played the Doctor on *Doctor Who* (Peter Capaldi, David Tennant, and John Hurt), Gandalf in *Lord of the Rings* (Ian McKellen), Loki in *The Avengers* (Tom Hiddleston), and Arya Stark and Brienne of Tarth in *Game of Thrones* (Maisie Williams and Gwendoline Christie). The actors were photographed wearing *Save the Arctic* T-shirts and their likenesses were displayed near the corporate offices of Shell as part of a campaign to discourage the oil company from drilling in the Arctic. Shell representatives decried the initiative as a public relations stunt, but the intent of the campaign is clear. It is one thing for celebrities to protest environmental devastation. It is another to imagine that the beloved fictional characters that they play on television and in films are the ones denouncing Shell.<sup>23</sup> In an interview, Williams explained her motivation in participating in the campaign: "The Arctic is a unique and beautiful ecosystem, providing a home to both Indigenous Peoples and endangered species. Now it's under threat and we must act."<sup>24</sup> In speaking these words, Williams is not the only one issuing a climate change warning; Arya Stark of Westeros is as well.

This blending of fiction and reality cuts both ways, of course. *Atlantic* columnist J. K. Ullrich notes that the potential problem with using speculative fiction to comment upon real world problems is that it is too easy for the fans to think it is all just an entertaining story and not a parable with real world applications. Still more troubling, the fantasy elements of multimedia cli-fi narratives sometimes make the vast problem

of climate change seem as fictional and grotesque as the menace posed by the ice zombies in *Game of Thrones*. For example, George Marshall, founder of the Climate Outreach Information Network, has expressed concern that cli-fi adds more fuel to the fire of climate skepticism than it does educate the uniformed.<sup>25</sup> In a related critique, Amitav Ghosh calls upon global literary fiction—not just popular fiction or speculative fiction—to present the world with *realistic* models of collective action to help us rethink our relationships to one another and to the world. In *The Great Derangement: Climate Change and the Unthinkable* (2016), Ghosh is concerned with distinctions between high and low art, and the creation of new literary representations that conform to a particular, respectable artistic tradition of realism. His concern is, arguably, overstated, especially since critics such as Jesse Oak Taylor have attested that the “pure” realist novel becomes almost impossible to achieve after the first major manifestations (and literary representations) of the Anthropocene in Victorian England. However, Ghosh’s argument that individual action on climate change is laudable but likely insufficient—and that all of us must work together toward more sweeping societal change—is an important one made from a global perspective.

Cli-fi stories have another significant problem: they tend to be operationally depressing. As Ursula K. Le Guin wrote in her 1969 introduction to her novel *The Left Hand of Darkness*, “Science fiction is often described, and even defined, as extrapolative. The science fiction writer is supposed to take a trend, or phenomenon of the here-and-now, purify and intensify it for dramatic effect, and extend it into the future. ‘If this goes on, this is what will happen.’ A prediction is made . . . [that generally arrives] somewhere between the gradual extinction of human liberty and the total extinction of terrestrial life. This may explain why many people who do not read science fiction describe it as ‘escapist,’ but when questioned further, admit they don’t read it because ‘it’s so depressing.’”<sup>26</sup> There is, indeed, the problem of the bleakness of the narratives causing the readers to shut down emotionally, overwhelmed by the scope of the problem. Ullrich observes, “Cli-fi, like the science behind it, often presents bleak visions of the future, but within such frightening prophecies lies the real possibility that it’s not too late to steer in a different direction.”<sup>27</sup>

Apocalyptic as these stories are, fans of Young Adult fiction gravitate to them, and postapocalyptic, dystopian narratives from *The Hunger Games* trilogy to the *Divergent* series to *The Maze Runner* books and films are voraciously consumed by young readers who at least enjoy the thrilling adventures—and charismatic heroes such as Katniss Everdeen—even if they might not always embrace the notes of fatalism and the specter of death hanging over the main story. Of course, some young readers like the books precisely because of the apocalyptic content, and are not averse to meditating on the ramifications of climate change through these adventures. Some readers even hope to write apocalyptic fiction of their own. The genre of cli-fi has now become so popular that there is a handbook for prospective writers of the genre, *Saving the World One Word at a Time: Writing Cli-Fi* (2015) by Ellen Szabo. Szabo’s book shows emerging writers how to use “knowledge of science and climate to imagine and create apocalyptic



Fig I.3. A scene from the original *Godzilla* (1954), directed by Ishirō Honda, in which the invincible prehistoric beast sets Tokyo aflame with its radioactive breath in an allegorical reenactment of the atomic bombings of Hiroshima and Nagasaki. The climate fiction film spawned several environmentalist sequels, including *Godzilla versus Hedorah* (1971), *Godzilla vs. Biollante* (1989), *Shin Godzilla* (2016), and Gareth Edwards’s American *Godzilla* (2014). Toho.

or dystopian worlds with the goal of changing how humans think about, inhabit and interact with our planet,” thereby “taking the issue out of politics and into the realm of the personal.”<sup>28</sup>

This monograph is designed to complement existing scholarship on green topics, some of which theorize ecology, others focus on taking the political temperature of international relations in an era of climate change and globalization, while still others examine how ecological concerns are treated in the arts and popular culture. Some notable works of extant ecocriticism include *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination* (2005) by Lawrence Buell, *Ecology Without Nature* (2007) by Timothy Morton, *Living in the End Times* (2010) by Slavoj Žižek, and *Slow Violence and the Environmentalism of the Poor* (2011) by Rob Nixon. There are several notable collected editions of ecological writings. One of the enduring examples of this library edition–style publication is *The Ecocriticism Reader: Landmarks in Literary Ecology* (1996), edited by Glotfelty and Harold Fromm. More works in this vein come

out each year. Morton's work is more theoretical than mine and Nixon's is more a work of political science, but traces of their influence can be found in these pages. *Fire and Snow* is written in the style of extant works of literary and film criticism, such as *The Child to Come: Life After the Human Catastrophe* (2016) by Rebekah Sheldon and the two monographs on the ecological sensibilities of the Inklings co-written by Matthew Dickerson and published for the University of Kentucky Press: Dickerson co-wrote *Ents, Elves, and Eriador: The Environmental Vision of J. R. R. Tolkien* (2006) with Jonathan Evans and *Narnia and the Fields of Arbol: The Environmental Vision of C. S. Lewis* (2009) with David O'Hara. This book is indebted to the work already done on the Inklings and literary environmentalism, and seeks to build upon extant scholarship by showing how the precedent set by the Inklings was followed by the later writers of speculative fiction, who took the environmental concerns of the Lost Generation and placed them in the context of the twenty-first-century climate crisis.

The environmentalist and scientific writers and thinkers who are addressed in these pages include Carol J. Adams, Elizabeth Ammons, Wendell Berry, William R. Cook, John Elder, Bill Gates, Joy Harjo, Michio Kaku, Naomi Klein, Ursula K. Le Guin, Sallie McFague, Bill McKibben, Timothy Morton, Rob Nixon, Pope Francis, Rosemary Radford Ruether, Mark Ruffalo, Neil deGrasse Tyson, and Karen Warren. Some of these thinkers contribute activist-styled ecological commentary to middlebrow venues such as PBS, NPR, or periodicals such as *The Atlantic* and *Rolling Stone*, while others have published more scholarly works in journal articles and monographs released by academic presses.

The book is organized into eleven chapters and an epilogue. Chapter 1, “*Star Wars*, Hollywood Blockbusters, and the Cultural Appropriation of J. R. R. Tolkien,” is an assessment of how the film adaptations of Tolkien's Middle-earth saga downplay the author's ecological sensibilities while lengthening the percentage of narrative time spent on depicting armed combat and romanticizing war. Consequently, in the wake of the “war on terror”-era Peter Jackson film adaptations of *The Hobbit* and *The Lord of the Rings*, Tolkien's original work has been perceived as an imperialist text by cultural critics on the left and right political wings of the spectrum. Fortunately, literary critics and environmental activists such as John Elder and Matthew Dickerson are aiding in the effort to return readers' attention to the ecological core of Tolkien's work. Indeed, despite Tolkien's opposition to writing transparent, pedagogical allegory, his Middle-earth stories work well as environmentalist fables that explore how industrialization destroys nature in both the real world and Middle-earth. This chapter also considers how big-budget genre films now tend to be “action movies” modeled after both *Star Wars* and a transparently limited understanding of Joseph Campbell's monomyth theories. This ubiquitous storytelling model, dictated by Hollywood marketing gurus, is another reason the Jackson film adaptations of Tolkien's works were repurposed as action movies. This marketing mandate is also part of the reason why it is so difficult to make a thoughtful climate fiction movie in this cultural moment.<sup>29</sup>

Chapter 2 is “Of Treebeard, C. S. Lewis, and the Aesthetics of Christian Environmentalism.” It offers contrasting biographical interpretations of the nature of the



friendship between Tolkien and Lewis and ponders the extent to which their personal relationship shaped their religious beliefs and genre fiction writing. Two central figures in this chapter are Professor Ransom, the Christian hero of Lewis's *Space Trilogy* (whom Lewis modeled partly after Tolkien), and Treebeard, the supernatural champion of trees that Tolkien based somewhat on Lewis. The chapter also concerns Lewis's efforts to encourage Tolkien to publish faster, and to build textual links between the Middle-earth, Arthurian Romance, and *Space Trilogy* adventures, thereby designing one ecological narrative in the same "shared universe."

Chapter 3, "The Time Lord, the Daleks, and the Wardrobe," is about the apocalyptic, centuries-long conflict between the Doctor and the space fascists known as the Daleks. The alien time-traveler protagonist of the British science fiction television series *Doctor Who* has seen planet Earth consumed by fire and has been responsible for the destruction of both his own home world, Gallifrey, and the Daleks' home planet of Skaro. He considers himself an enemy of fascist and totalitarian regimes, but fears that he has more than enough blood on his hands to be considered a genocidal Nazi himself. To atone for his past mistakes, he endeavors to save as many lives as he can. In one adventure that is relevant to this book, "The Green Death" (1973), he stops an evil corporation from continuing to pollute the community of Llanfairfach in South Wales. In another, "The Doctor, the Widow, and the Wardrobe" (2012), he transports the souls of trees to the stars shortly before their forest is destroyed. This "Christmas special" was the *Doctor Who* adventure most overtly inspired by the writings of Lewis. This chapter also explores what *Doctor Who* owes to the morality of Tolkien, especially in its *Silmarillion*-like representations of apocalyptic-level warfare throughout the Time War storyline.

Chapters 4 and 5 work together as a unified whole. They include "Noah's Ark Revisited: 2012 and Magic Lifeboats for the Wealthy," and the direct follow-up, "Race and Disaster Capitalism in *Parable of the Sower*, *The Strain*, and *Elysium*." These chapters explore how comics writer and filmmaker Mark Millar crafted two narratives in which the wealthy elite (popularly referred to as the 1 percent) conspire to create a Noah's Ark haven for themselves to survive climate catastrophe. In the process, they sacrifice most of the planet's common people (the 99 percent). These stories, which satirize Ayn Rand's *Atlas Shrugged*, include *Kingsman: The Secret Service* and *The Fantastic Four: The Death of the Invisible Woman*. To demonstrate where Millar's anger with the ruling classes comes from, this chapter will examine both Republican politicians who have refused to confront the climate crisis and the sweeping, well-funded propaganda campaigns funded by members of the fossil fuel industry designed to debunk scientific research that calls for environmental protections. Books, films, and television shows examined in these paired chapters include Michio Kaku's *Physics of the Future*, Octavia Butler's *Parable of the Sower*, Dan Brown's *Inferno*, Michael Crichton's *State of Fear*, and the films and television shows *Elysium*, 2012, *Noah*, *Daybreakers*, and *The Strain*.

The sixth chapter examines environmentalist and feminist theology by Catholic writers, as well as writers from different faith traditions who advocate a similar rapprochement between humanity and nature, including Jewish, Protestant, and Muslim

environmentalists. In total, “Eden Revisited: Ursula K. Le Guin, St. Francis, and the Ecofeminist Storytelling Model” explores the ideological overlap between ecofeminist theorists and science fiction writers who have written political and literary tracts about the moral imperative to reorient the world away from imperial patriarchy, pollution profiteering, colonialism, and institutional racism and sexism. These writers argue that the dominant profit-over-people mindset fostered by global corporate capitalism will soon destroy the planet, and that a new, populist, feminist, environmentalist mindset is needed to save humanity. The argument is gendered and appears to promote a pagan or earth goddess form of religious worship, but the worldview is compatible with the Christianity of female theologian Sallie McFague and male mystic St. Francis of Assisi. Indeed, McFague and Assisi express a view of ecological stewardship compatible with Lewis and Tolkien.

The somewhat self-explanatory title of the seventh chapter is “*MaddAddam* and *The Handmaid’s Tale*: Margaret Atwood and Dystopian Science Fiction as Current Events.” This chapter explores Atwood’s four dystopian novels, placing them in a contemporary sociopolitical context, examining Atwood’s commitment as an author and public scholar to challenging totalitarianism and the systemic persecution of women. The chapter also considers the possibility that Atwood is an agnostic equivalent of a Hebrew prophet—even if she herself rejects the label. This chapter hearkens back to the previous chapter, demonstrating how Atwood’s writing fits the ecofeminist writer’s manifesto of Ursula K. Le Guin and acts as a sequel to the “wolf of Gubbio” story from *The Little Flowers of St. Francis*, also covered in chapter 6.

Chapter 8 is titled “Ur-Fascism and Populist Rebellions in *Snowpiercer* and *Mad Max: Fury Road*.” The works considered in this chapter explore societies that have survived a catastrophic event that ended civilization as we currently understand it, in most cases leaving only a small band of survivors living under an oppressive regime in which power is divided starkly based on class, race, and gender. Eventually, the oppressed masses rebel against their Ur-fascist overlords, and the above narratives depict different potential outcomes for rebellions. Umberto Eco provides the methodological framework for this chapter.

Chapter 9 is “Tolkien’s Kind of Catholic: Suzanne Collins, Empathy, and *The Hunger Games*.” This chapter places Roman Catholic climate fiction author Suzanne Collins squarely in the Catholic social justice tradition occupied by Tolkien, St. Francis of Assisi, Oscar Wilde, Dorothy Day, Pope Francis, and Stephen Colbert. It offers a close reading of the *Hunger Games* series as a subversive text arguing for a bottom-up revolution of empathy within our own reality as well as the world of Panem. This chapter also considers how some conservative Catholic critics have failed to see the book as a liberal Catholic text, or recognized it as such and condemned it for not advocating a right-wing form of Catholicism.

The tenth chapter of this book is called “The Cowboy and Indian Alliance: Collective Action against Climate Change in *A Song of Ice and Fire* and *Star Trek*.” As this chapter demonstrates, *A Song of Ice and Fire* is an incisive commentary on climate

change that resonates with the message of political solidarity found in Naomi Klein's real-world assessment of the political dimension of combatting climate change in *This Changes Everything* (2014) and in the final *Star Trek* story with the original cast, *Star Trek VI: The Undiscovered Country* (1991).

Chapter 11 is "What Next? Robert Crumb's 'A Short History of America' and Ending the Game of Thrones." Right now, readers of Martin's books do not know if his heroes will save Westeros from the coming of the most devastating winter in its history. Similarly, people in the real world do not know if they can halt and/or reverse the already devastating and alarming effects of climate change. Martin offers us suspense. Naomi Klein, in her provocative and controversial book *This Changes Everything*, offers one possible plan for collective action in the real world to confront our own equivalent of ice zombies on the march. Considering both together is an eye-opening process.

Finally, the epilogue asks the question: Who today can legitimately stake a claim to being an inheritor of Tolkien's legacy, as both an author and an environmentalist?

Overall, this book examines the various prophetic scenarios presented by climate fiction and considers the role these works play in offering us all critical food for thought as we face the challenges of the twenty-first century.