

REFLECTING CRISIS, INSTILLING FEAR
THE APOCALYPTIC RHETORIC OF CLIMATE CHANGE LITERATURE

Presented to

The Faculty of the Department of Religion

The Colorado College

In Partial Fulfillment of the Requirements for the Degree

Bachelor of Arts

By

Daniel Lewis

March/2014

Each of the last three decades has been successively warmer at the Earth's surface than any preceding decade since 1850... In the Northern Hemisphere, 1983–2012 was likely the warmest 30-year period of the last 1400 years (medium confidence).¹

It was almost like a nature hike through the book of Revelation.²

We think of our own crisis as pre-eminent, more worrying, more interesting than other crises.³

Within the last decade, the issue of climate change has become portrayed with apocalyptic language in media headlines,⁴ political discourse,⁵ and literature.

Although general connections between religious apocalyptic language and climate change discourse have been identified and evaluated by rhetorical⁶ and social⁷ scholars, few thorough studies have been done to evaluate the degree to which

¹ "IPCC, 2013: Summary for Policymakers," *Climate Change 2013: The Physical Science Basis*. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

² Al Gore, *An Inconvenient Truth: The Planetary Emergency of Global Warming and What We Can Do About It*, (New York: Rodale, 2006).

³ Frank Kermode, *The Sense of an Ending*, (New York: Oxford University Press, 1967), 94.

⁴ Katrina Heuvel, "Avoiding a Climate-Change Apocalypse," *Washington Post*, accessed March 14, 2014, http://www.washingtonpost.com/opinions/katrina-vanden-heuvel-a-climate-change-apocalypse/2013/01/07/f440d704-58e4-11e2-9fa9-5fbdc9530eb9_story.html.

⁵ Pond, Kate. "The Carbon Brief: Accurate Reporting of Climate Science." *Climate Rhetoric*. <http://www.carbonbrief.org/blog/2013/02/climate-rhetoric-from-apocalypse-to-action-in-obamas-state-of-the-union> (accessed March 14, 2014).

⁶ Christina Foust and William O'Shannon Murphy, "Revealing and Reframing Apocalyptic Tragedy in Global Warming Discourse," *Environmental Communication: A Journal of Nature and Culture* 3, no. 2 (2009), 151-167.

⁷ David C. Barker and David H. Bearce, "End-Times Theology, the Shadow of the Future, and Public Resistance to Addressing Global Climate Change" *Political Research Quarterly* 66, no. 2 (2013), 267-279; Bruckner, Pascal, *The Fanaticism of the Apocalypse*, (Malden, MA: Polity Press, 2013).

climate change literature employs apocalyptic rhetorical strategies and narrative structures.

One of these studies is “The Heat Is On: Apocalyptic Rhetoric and Climate Change” by Catherine Keller,⁸ who asserts that although “scientific language does not have the power or the intention to convert,”⁹ “*subliminal*, not quite conscious, collectively carried apocalyptic habits are pervasive [in climate literature].”¹⁰ While Keller “does not assume that because a prediction sounds apocalyptic, it is wrong,” she does argue that an effective response to climate change “needs to make conscious, and therefore theological, the way in which we read data apocalyptically.”¹¹

While this study does not claim to know what is needed for a proper response to environmental degradation, my intentions follow Keller’s in that this study aims to distinguish and illuminate the “subliminal” religious apocalyptic rhetoric that is utilized in the purportedly scientific and secular literature addressing climate change. This study examines the rhetoric of three best-selling books that address climate change: *An Inconvenient Truth: The Planetary Emergency of Global Warming and What We Can Do About It* by Al Gore,¹² *Eaarth: Making a Life on a Tough New Planet* by Bill McKibben,¹³ and the novel *Oryx and Crake* by Margaret Atwood.¹⁴

⁸ *Ecotheology* 7, (1999), 40-58.

⁹ Keller, “Heat Is On,” 46.

¹⁰ *Ibid.*, 43.

¹¹ *Ibid.*, 42.

¹² New York: Rodale, 2006.

¹³ New York: St. Martin’s Press, 2010.

¹⁴ New York: Nan A. Talese, 2003.

Gore's text is a companion book to the 2003 Academy Award-winning documentary of the same name. Both during and after his service as Vice President, Gore has been a leading advocate for the reality, causes, and solutions to what he refers to as the "climate crisis." He has released several best-selling books on this topic, but *Inconvenient Truth* remains the most popular title and gateway reference to readers interested in learning about the dangers of climate change.

Similarly, over the past two decades Bill McKibben has become one of the leading writers and activists about the issue of climate change both domestically and worldwide. The title refers to the idea that our planet has become so fundamentally altered by climate change that it needs a new name: Eearth. Although he has authored several best-selling books on the subject, *Eearth* serves as McKibben's most encompassing recent work on both the issue and its solution.

Atwood's best-selling *Oryx and Crake*, however, makes a notable departure in genre from the two other works by focusing on fictional characters and histories in a work Atwood describes as "speculative fiction."¹⁵ The story is set around Jimmy, who lives in a near-future devastated not only by climate change, but the designs of his best friend, Crake, who has genetically engineered a more eco-friendly version of humans and a disease that has annihilated the remainder of humanity. Jimmy is the one exception, who is left to protect these new humans, or "Crakers," and create a meaning and cosmology for them to understand their devastated world. The book's inclusion in this study is meant to underline the distinction this paper argues – that

¹⁵ Margaret Atwood, "Oryx and Crake by Margaret Atwood," *Oryx and Crake by Margaret Atwood*, accessed March 12, 2014, <http://www.oryxandcrake.co.uk/perfectstorm.asp?p=4>.

although scientific study is informative of climate change and its probable effects, it is only through narrative possibilities that we speculate upon an ultimately unknown future, and that the apocalypse “still lies in the crises of our fictions.”¹⁶

To analyze these three works, I will utilize Steven O’Leary’s rhetorical framework for apocalyptic study developed in his book *Arguing the Apocalypse: A Theory of Millennial Rhetoric*.¹⁷ O’Leary centers his framework on the three “topoi,” or themes, of apocalyptic rhetoric: time, authority, and evil. Together, these apocalyptic topoi address “the nature of time, the destiny of humanity and the cosmos, the sources of spiritual authority, and the meaning and significance of human suffering and evil.”¹⁸ Additionally, I will refer to Adela Yarbo Collins’ *Crisis and Catharsis: The Power of the Apocalypse*,¹⁹ and D.S. Russell’s *Divine Disclosure*,²⁰ which with O’Leary’s text help identify key apocalyptic narrative elements within these topoi. Apocalyptic time is defined by a catastrophic endpoint, imminence, and determinism; claims to authority are defined by visionary experiences, claims to prophetic lineage and scriptural authorities, and the portrayal of authority as judge and savior; apocalyptic evil is portrayed in opposition to righteous authority, in other rigid moral dualisms, and in relation to the biblical portrayals of evil. To show examples of these elements, I will refer to the book of Daniel, Revelation, and other millennial revelations from the Jewish and Christian apocalyptic traditions, which

¹⁶ Kermode, *Sense of an Ending*, 6.

¹⁷ New York: Oxford University Press, 1998.

¹⁸ O’Leary, *Arguing the Apocalypse*, 196.

¹⁹ Philadelphia: Westminster Press, 1984.

²⁰ Minneapolis: Fortress Press, 1992.

will also serve to contrast and reflect examples found in cataclysmic climate change literature.

While the cataclysmic literature addressing climate change does utilize the topoi and rhetorical strategies of apocalyptic discourse, it must be noted that there are some striking differences between climate literature and the religious apocalyptic genre. Put simply, the three topoi of the apocalyptic tradition become secularized and humanized in climate literature: the conclusion of time occurs not as a supernatural but a natural catastrophe, authority becomes framed as the human knowledge of science, and evil becomes portrayed as the human responsibility for environmental degradation.

Although it may suffice simply to establish the rhetorical form of apocalypse within climate literature, it is also apparent that this rhetoric has implications of the conditions in which these texts were written and for their potential effects when read. To evaluate but one of these implications, I refer first to Pascal Bruckner, who writes in his book *The Fanaticism of the Apocalypse* that “the environment is the new secular religion that is rising,” but that “we have to subject it to critical evaluation in turn and unmask the infantile disease that is eroding and discrediting it: catastrophism.”²¹ This critique of the use of apocalyptic rhetoric is based on speculation as to the effects that this rhetoric may have, namely, by intensifying a sense of crisis and alarm. This leads me to Collins, who writes “apocalyptic literature is often defined as literature evoked by a crisis.” This crisis is most often a “*relative*,

²¹ Bruckner, *Fanaticism*, 3.

not absolute or objective, deprivation,"²² forming from both social circumstances and a psychological dissonance, created by an "unbearable tension perceived by the [apocalyptic] author between what was and what ought to have been."²³ However, this nevertheless denotes perceived crisis not simply as an effect of this literature, but as a contributing factor to the conditions under which apocalyptic rhetoric is employed.

Crisis, then, seems to both contribute to and be an effect of the apocalyptic imagination. As O'Leary writes, apocalyptic literature "not only reflects the demands of its historical situation; it also creates its own demands and expectations."²⁴ In this text, I will explore how climate change books employ the apocalyptic genre in ways that reflect and intensify a sense of environmental crisis about climate change. Therefore, I will argue that through the apocalyptic topoi of time, authority, and evil, the writers of *An Inconvenient Truth*, *Eaarth*, and *Oryx and Crake* utilize apocalyptic rhetoric both to reflect and intensify a perceived sense of crisis surrounding the issue of climate change.

Time

The temporal structure of apocalypse foremost reflects and intensifies a sense of crisis by portraying climate change as an imminent and mostly determined catastrophic endpoint. Russell describes that in the catastrophic Jewish apocalypses, "destruction will come upon the world by water and by fire," and the unrighteous

²² Collins, *Crisis and Catharsis*, 84.

²³ *Ibid.*, 141.

²⁴ O'Leary, *Arguing the Apocalypse*, 214-5.

“will be slain in war and by convulsions of nature.”²⁵ Dan. 12:1 also foretells that “there shall be a time of trouble such as never has been since there was a nation till that time,”²⁶ which implies the monumental scale and historical uniqueness of the apocalyptic catastrophe.

This catastrophic rhetoric is utilized throughout *An Inconvenient Truth*, in which Gore continually frames climate change as “the climate crisis,” also describing it as a “true planetary emergency,” and the “worst potential catastrophe in the history of human civilization.”²⁷ McKibben frames climate change as equally monumental, describing it as “the biggest thing that’s ever happened,”²⁸ and historically unique, being “unprecedented in the history of human civilization.”²⁹

However, in discussing the rhetorical framing of climate change as catastrophic, it is worth addressing Keller’s inquiry as to whether “the [climate] apocalypse is in the facts or in the rhetoric.”³⁰ Perceived crisis, as we have seen, is both a factor and an effect of apocalyptic imagination. And so, Keller’s question raises two important points.

The first point is that, as opposed to examples quoted earlier above, Gore and McKibben cite numerous scientific studies and media reports of real events to inform their descriptions of the damage climate change is causing. Without the aid of additional catastrophic rhetoric, these events serve to inform both in frequency and severity a perceived crisis occurring through global warming.

²⁵ Russell, *Divine Disclosure*, 103.

²⁶ Collins, *Crisis and Catharsis*, 105.

²⁷ Gore, *Inconvenient Truth*, 10.

²⁸ McKibben, *Eaarth*, 45.

²⁹ *Ibid.*, 46.

³⁰ Keller, “Heat Is On,” 43.

The second point raised is that many of these events are also aggrandized with additional catastrophic rhetoric that serves to intensify the sense of crisis these events represent. Gore describes the loss of numerous species as a “mass extinction crisis... comparable to the extinction event that wiped out the dinosaurs 65 million years ago,” and describes industrial pollution as the “dumping [of] so much carbon dioxide into the Earth’s environment that we have literally changed the relationship between the Earth and the Sun.”³¹ For McKibben, heat waves will “turn winter into summer,”³² and frequent storms become “thousand year storms across the globe.”³³ Likewise, Atwood’s novel reflects the severity of this rhetoric with her own descriptions of the heat of the sun as too extreme to walk under midday,³⁴ and a reference to autumn as a season of the past.³⁵

Blurring the line between science and rhetoric, McKibben also utilizes scientific statistics to hyperbolize the consequences of the effects of climate change. This is shown in a study by the IPCC that McKibben cites as determining that 40 million people have gone hungry at expense of climate change in 2008. While the number is monumental in itself, McKibben magnifies its severity by writing that this number is “taking the total to 963 million, or one sixth of the world’s population.”³⁶ While this information is true, its use in this case is a narrative decision of McKibben’s, and one that frames climate change as cosmologically monumental.

³¹ Gore, *Inconvenient Truth*, 10.

³² McKibben, *Eaarth*, 73.

³³ *Ibid.*, 215.

³⁴ Atwood, *Oryx and Crake*, 284.

³⁵ *Ibid.*, 71.

³⁶ McKibben, *Eaarth*, 24.

Additionally, the catastrophic significance of these disasters is reflected and intensified through the comparison of these disasters to the prophetic signs of religious apocalyptic texts. As Keller notes, there are multiple similarities between the prophecies of destruction in Revelation and scientifically reported events related to climate change.³⁷ As an example in the material this paper addresses, the description in Rev. 16:20, in which “every island fled away,” mirrors a report McKibben cites on the evacuation plans of island communities due to the rise in sea levels caused by global warming.³⁸

However, while there is no evidence to suggest that any of these three climate authors chose specific data to reflect the prophecies of religious text, all three authors make direct references to religious apocalypses in reference to the events of climate change that are occurring. To describe the flooding of Lucerne, Switzerland, Gore writes, “It was almost like a nature hike through the book of Revelation.”³⁹ When a fatal disease annihilates the human population in *Oryx and Crake*, apocalyptic preachers begin to flail themselves and declare the religious apocalypse has come.⁴⁰

Perhaps most notably, McKibben describes that the decrease of stockpiled grain on the planet to forty days worth of food “sounds almost biblical. So, too, do the food riots in thirty-seven countries, and the rapid rise in malnutrition, which added 75 million people to the rolls of the malnourished in 2007.”⁴¹ By using the

³⁷ Keller, “Heat Is On,” 48.

³⁸ McKibben, *Eaarth*, 37.

³⁹ Gore, *Inconvenient Truth*, 109.

⁴⁰ Atwood, *Oryx and Crake*, 340.

⁴¹ McKibben, *Eaarth*, 153.

term “biblical” as synonymous to “extreme” or “catastrophic,” this section illustrates how relating events to religious scripture functions to aggrandize those events with cosmological significance, and thus intensifies the scale and significance of the crisis of the climate apocalypse.

According to Russell, another technique to frame the apocalypse as pre-determined was to break history up into “pre-determined periods or epochs in such a way that it was possible to recognize much more precisely the course of events and, more importantly, to identify the end of the process and the coming of God’s promised Kingdom.” An example of this is Daniel 11, in which the rise and fall of generational trends is shown to confirm the end is near.⁴² Russell calls this strategy “predicting history,” which is persuasive in establishing an author’s predictive certainty of the future because “if what he said about the passing generations was seen to be accurate, could not the same be said of his predictions concerning the time to come?”⁴³

Gore mirrors this strategy through graphs he creates based on scientific research. According to Gore, one of these graphs describes that “at no point in the last 650,000 years before the preindustrial era did the CO₂ concentration go above 300 parts per million [ppm],” that is, until now. The graph displays a blue line to map CO₂ levels within this period, which ends in 2003 (then present day) at somewhere close to 400 ppm. However, the graph continues into the future with a red line shooting straight up to past 600 ppm. “Within 45 years,” Gore writes, “this is where the CO₂ equivalent levels will be if we do not make dramatic changes

⁴² Ibid., 89-90.

⁴³ Ibid., 88.

quickly.”⁴⁴ While this example is mostly a visual narrative of history, the epochal narrative of preindustrial and industrial eras, as well as the color scheme of the graph exemplify an epochal discourse and function to anticipate a future climax through historical epochal storytelling.

McKibben utilizes epochal discourse by framing the effects of climate change marking a potential end of modernity because of our need to stop using fossil fuels, which he argues have been the primary fuel of modern growth.⁴⁵ Additionally, he writes that the Reagan era was “our last real chance to avert disaster,”⁴⁶ implying the post-Reagan era is the era of disaster and apocalyptic catastrophe.

While Atwood does not employ epochal discourse, the characters of her book make general claims to the predetermined nature of a catastrophic ending for humanity. In *Oryx and Crake*, Crake affirms his predictive certainty that “we’re running out of space-time” by explaining “Demand for resources has exceeded supply for decades in marginal geo-political areas, hence the famines and droughts; but very soon, demand is going to exceed supply *for everyone*.”⁴⁷ Later, Jimmy thinks to himself that it is “too late for humanity,” as Crake attempts to exterminate the human race, save his genetically engineered eco-friendly humans known as the “Crakers.”⁴⁸

Collectively, these books employ epochal narratives of history and rhetoric of predetermined to create a relatively determined future that can only be changed

⁴⁴ Gore, *Inconvenient Truth*, 66-7.

⁴⁵ McKibben, *Eaarth*, 28.

⁴⁶ *Ibid.*, 94.

⁴⁷ Atwood, *Oryx and Crake*, 295.

⁴⁸ *Ibid.*, 9.

through a radical transformation of human behavior. It should be noted that the climate change apocalypse differs from the religious apocalyptic tradition in that its aim is not to welcome the apocalypse, but to motivate behavior to prevent the apocalypse from manifesting. This is largely because these climate books rely primarily on the secular authority of science, the apocalypse that climate change threatens to manifest promises no heavenly salvation or afterlife. Determinism, then, serves to reflect and intensify the perceived crisis of climate change by narrowing the possibility of not encountering an apocalyptic future.

“When the text is read as predictive,” writes O’Leary, the apocalypse often becomes set “in the (immediate) future.”⁴⁹ Thus, determinism is also tied to the key temporal element of imminence in apocalyptic rhetoric. An example of the element is John’s declaration that “the hour of fulfillment is near.”⁵⁰ According to O’Leary, the apocalyptic date is also usually set as a specific date and “fit into the personal interests (lifetime) of [the] audience,” creating an imminence that increases in power as time relentlessly progresses.⁵¹

Though none of the environmental authors set numerically fixed dates for climactic threat of climate change, Gore writes this crisis threatens “liveability for us, our children [and] future generations,”⁵² implying a potential apocalyptic date within the next few generations. McKibben, however, critiques this argument, instead arguing for an urgency does not set the date of climactic threat of climate change beyond our lifetimes, but as already at hand. “Forget grandkids,” McKibben

⁴⁹ O’Leary, *Arguing the Apocalypse*, 72.

⁵⁰ Rev. 1:2 (Harper Collins Study Bible).

⁵¹ O’Leary, *Arguing the Apocalypse*, 204.

⁵² Gore, *Inconvenient Truth*, 71.

decrees, "This was a problem for our parents."⁵³ While Atwood's climate changed world of *Oryx and Crake* is also set in an unspecified future, Atwood herself describes, "It invents nothing we haven't invented already or started to invent,"⁵⁴ indicating that the future she imagines is potentially imminent to our present time.

Together, the collectively described sense of imminence and determinism in these climate books intensify a sense of crisis by assuring a quickly approaching environmental cataclysm, for "when the date is perceived to be imminent, visions of the end can develop fearful potency."⁵⁵ However, these elements also likely reflect a perceived crisis through a determined and imminent narrative of its resolution. As Collins writes, "the purpose of the Apocalypse seems to be the resolution of tension aroused by a perceived social crisis,"⁵⁶ accomplished through a "projection of conflict onto a cosmic screen" that is "cathartic in that it clarifies and objectifies the conflict."⁵⁷ Thus, the employment of apocalyptic rhetoric to frame environmental cataclysm may derive from a desire to emotionally resolve the tension of a perceived crisis.

Therefore, although these authors frame climate change as apocalyptic using these catastrophic rhetorical strategies, they differ from the Jewish and Christian tradition that frame the apocalypse as a spiritual transition to a new age and world

⁵³ McKibben, *Eaarth*, 16.

⁵⁴ Margaret Atwood, "Oryx and Crake by Margaret Atwood," *Oryx and Crake by Margaret Atwood*, accessed March 12, 2014, <http://www.oryxandcrake.co.uk/perfectstorm.asp?p=4>.

⁵⁵ O'Leary, *Arguing the Apocalypse*, 32.

⁵⁶ Collins, *Crisis and Catharsis*, 170.

⁵⁷ *Ibid.*, 153.

in the arrival of the Kingdom of God on earth.⁵⁸ Instead, these environmental authors frame climate change as the potential end-point of humanity if we do not change our behavior. Gore states this simply: “At stake is the survival of our civilization and the habitability of the Earth.”⁵⁹ Similarly, McKibben writes “if we don’t stop pouring more carbon into the atmosphere, the temperature will simply keep rising to a point where *any* kind of adaptation will prove impossible.”⁶⁰

In Atwood’s book, the character Crake states with certainty that “as a species we’re in deep trouble, worse than anyone’s saying. They’re afraid to release the stats because people might just give up, but take it from me, we’re running out of space-time.”⁶¹ Crake, through the release of a catastrophic disease, then manifests this end-point of humanity. Jimmy is the lone survivor, who realizes in this post-apocalyptic world the “absence of official time. Nobody nowhere knows what time it is.”⁶² This imagined end-point echoes the apocalyptic description of II Enoch 65.7, in which “all time will perish, and afterward there will be neither years nor months nor days nor hours.”⁶³

In summary, cataclysmic climate change literature differs from religious apocalyptic scripture in that the coming apocalypse promises no transition to a blissful Golden Age, but only a tragic and final end-point to the human story. Thus, a sense of crisis is reflected and intensified because the apocalypse offers no hope of redemption, only a bleak ending for humanity. The main aim of climate literature,

⁵⁸ Russell, *Divine Disclosure*, 46.

⁵⁹ Gore, *Inconvenient Truth*, 11.

⁶⁰ McKibben, *Eaarth*, xv.

⁶¹ Atwood, *Oryx and Crake*, 295.

⁶² *Ibid.*, 3.

⁶³ Russell, *Divine Disclosure*, 108.

then, is to motivate its audience to change its behavior so as to prevent an environmental apocalypse from occurring. To succeed in this task, however, the authors of this literature must establish the authority to require stark changes in human behavior.

Authority

For the apocalyptic claims about the nature of time and human destiny to be effective, the apocalyptic author must argue for a claim to authority. O’Leary writes: “The promise of the apocalypse to make known the imminent End of history and the justification of evil in the cosmos is no less than the promise of the human apprehension of the divine or universal perspective.”⁶⁴ The authority of Jewish and Christian apocalyptic claims, then, rests in the apocalyptic prophet’s connection to the omniscience of God who “knows all of history, beginning and end.”⁶⁵

While the climate change authors do not make claims of divine knowledge, they do claim to have absolute knowledge by framing the science that informs them as an objective source of knowledge. Gore writes that through scientific study, he has learned that “beyond death and taxes, there is at least one absolutely indisputable fact: Not only does human-caused global warming exist, but it is also growing more and more dangerous, and at a pace that has now made it a planetary emergency.”⁶⁶ Likewise, McKibben cites a climate scientist who states, “It’s pretty outrageous what we’ve done,” which McKibben contends, “Is as objective a scientific

⁶⁴ O’Leary, *Arguing the Apocalypse*, 53.

⁶⁵ Russell, *Divine Disclosure*, 46.

⁶⁶ Gore, *Inconvenient Truth*, 8.

statement as you're likely to hear."⁶⁷ Atwood illustrates this portrayal of scientific knowledge through Crake's certainty that according to statistical calculations, the human race is "running out of space-time."⁶⁸

In affirmation of this absolute knowledge, the authority of science is also portrayed in direct relationship to divine omniscience. Gore writes that he believes evolution was "part of the process God used" to bring humanity to the world,⁶⁹ implying that scientific theory and methodology objectively not only grasp historical knowledge but even the workings of the divine. Conversely, McKibben writes that people's religious cosmological explanations, exemplified in the form of an "angry god," fall away to the scientific knowledge of global warming.⁷⁰ While this passage divides scientific and religious claims to authority, it also argues for scientific knowledge as more objective than religious beliefs. Therefore, somewhat ironically, this argument functions to portray science with the absolute objectivity of the divine authority McKibben denounces.

These juxtapositions of scientific and divine authority also appear in the claims to visions of knowledge that are common to both the environmental writers and religious apocalyptic prophets. O'Leary writes that often, "the authority of the prophet comes from a divine gift, a privileged vision of the realm of the sacred."⁷¹

⁶⁷ McKibben, *Eaarth*, 10.

⁶⁸ Atwood, *Oryx and Crake*, 295.

⁶⁹ Gore, *Inconvenient Truth*, 160.

⁷⁰ McKibben, *Eaarth*, 8.

⁷¹ O'Leary, *Arguing the Apocalypse*, 53.

Russell identifies these vision experiences specifically as “otherworldly journeys” and “dream-visions.”⁷²

The visual maps and diagrams in *An Inconvenient Truth* can be seen to function similarly to the visionary experiences of apocalyptic prophets. According to Russell, apocalyptic visionaries often claim to have been sent up to heaven and given knowledge such as “where rain and wind and lightning stored for winter.”⁷³ In *An Inconvenient Truth*, several pages are devoted to global satellite maps that offer visuals from above of hurricanes, storms, and global weather systems.⁷⁴ Using computer technology, Gore also makes visuals of flooded major coastal cities should global warming continue and sea levels rise. This visual of science’s predictive powers echoes the visual nature of otherworldly journeys, in which prophets “are able to view the whole of history... from its beginning to its end.”⁷⁵

While my aim is not to contend the certainty of scientific study, it is illuminating to note that in all these examples, claims that scientific authority is absolute work also to attribute these authors’ emotive rhetoric with the same objective authority as the science they describe. However, these authors also work to establish the authority of their claims by utilizing other apocalyptic rhetorical techniques not argued on the authority of science.

In his epilogue, McKibben writes that after *Eaarth* was published, humanity “saw some of the most intense environmental trauma the planet has ever witnessed,

⁷² Collins, *Crisis and Catharsis*, 145.

⁷³ Russell, *Divine Disclosure*, 76.

⁷⁴ Gore, *Inconvenient Truth*, 104-5; 114.

⁷⁵ Russell, *Divine Disclosure*, 89.

events that exemplified the forces I have described in the book.”⁷⁶ A list of events are then provided, some of which are well-supported as linked to climate change, but some of which, like the BP oil spill, are not directly related to the threats of climate change or any of McKibben’s specific predictions. This fictive relationship highlights the use of a rhetorical strategy Russell calls “predicting the past,” in which historical events are portrayed as affirmations of a temporal perspective that includes the end of history.⁷⁷ By employing this claim, McKibben reflects the techniques of apocalyptic prophets and justifies his predictive authority.

Oryx and Crake mirrors the dream visions of apocalyptic prophets through the dreams of Crake that manifest in an apocalyptic future. In this post-apocalyptic future, Jimmy recounts visiting Crake at college for a few days and listening to Crake scream in his sleep every night. When inquired upon, Crake denied remembering his dreams, but in a world devastated by Crake’s design, Jimmy concludes that “every moment he’s lived in the past few months was dreamed first by Crake,” adding, “No wonder Crake screamed so much.”⁷⁸

While this apocalyptic scenario is brought about by a human science as opposed to God, Atwood relates these two powers through the deification of Crake. Because the “Crakers” have been raised in a closed environment since birth, Jimmy acts as their only educator, and also develops a cosmology based on deified versions of Oryx and Crake, who both created the world and “cleared away the chaos” of human civilization. When the Crakers ask about the dead humans they encounter in

⁷⁶ McKibben, *Eaarth*, 213.

⁷⁷ Russell, *Divine Disclosure*, 88.

⁷⁸ Atwood, *Oryx and Crake*, 218.

the empty city, Jimmy answers they are “a piece of a bad dream that Crake is dreaming.”⁷⁹ This description echoes the religious authority of apocalyptic dream visions that in this case manifest through the power of human technology.

According to Russell, apocalyptic prophets also claimed authority by framing themselves as part of a lineage, carrying on the message of past prophets of prophets.⁸⁰ A common technique of a prophet to accomplish this goal was the use of pseudonymous authorship, “which allows him to identify himself with seers of old.”⁸¹ The main strategy, however, was to align one’s own visions with the authority of past prophecies, so that “the foretelling of the prophet yesterday is the forthtelling of the apocalypticist today.”⁸²

While Gore does not utilize pseudonymous authorship, he does describe himself as a pupil of Roger Revelle, one of the first scientists to hypothesize global warming, a hypothesis Gore equates to “an almost prophetic insight.”⁸³ Gore affirms this prophetic authority by characterizing Revelle’s science with an “unmistakable ring of truth,”⁸⁴ also describing Revelle as a “charismatic teacher” with an “unusual air of authority.”⁸⁵ These claims to authority do not claim access to an objective source of knowledge (in this case, science) but mirror charismatic appeals to authority that O’Leary identifies as commonly employed by apocalyptic prophets.⁸⁶ Gore then frames himself as carrying on Revelle’s legacy by writing that Revelle’s

⁷⁹ Ibid., 352.

⁸⁰ Russell, *Divine Disclosure*, 82.

⁸¹ Ibid., 81-82.

⁸² Ibid., 81.

⁸³ Gore, *Inconvenient Truth*, 38.

⁸⁴ Ibid., 38.

⁸⁵ Ibid., 40.

⁸⁶ O’Leary, *Arguing the Apocalypse*, 19; 53.

message “would later become, in our time, an inconvenient truth,”⁸⁷ an explicit reference to the title of his book. “I still show Revelle’s chart of rising CO₂ levels many times each week,”⁸⁸ Gore writes, framing himself again as carrying on Revelle’s legacy.

According to Russell, divines secrets were also disclosed through the reading of “secret books” which recorded the knowledge of past prophets “for the encouragement of ‘the wise’ in future years and for the instruction of ‘the many’ that they might also become wise.”⁸⁹ McKibben employs this technique by writing that the text of *Limits to Growth* “glimpsed the likelihood that [humanity] would overwhelm the planet on which we lived, and in so doing make our lives much harder.” He adds that the authors of the book “foresaw this planet Eaarth,”⁹⁰ arguing that his vision is congruent with these past predictions.

McKibben also writes that he has been predicting the effects of climate change for two decades, but states, “I take no satisfaction in saying I told you so,” and, “I’d give a lot to have been wrong instead.”⁹¹ By writing this, McKibben argues for his objective knowledge by removing the authority of the information from his subjective preference – his hope that his predictions would be wrong. The function of this argument is comparable to the effects of pseudonymous authorship that some apocalyptic writers utilize, which according to Russell work to create a sense that the disclosed information is not unique to the subjective perspective of the

⁸⁷ Gore, *Inconvenient Truth*, 40.

⁸⁸ Ibid., 41.

⁸⁹ Russell, *Divine Disclosure*, 82.

⁹⁰ McKibben, *Eaarth*, 91.

⁹¹ Ibid., 216.

apocalyptic prophet, but affirmed by the predictions of other prophets and therefore ultimately connected to the objective knowledge of God.⁹²

In the Jewish and Christian apocalyptic traditions, however, God holds the authority not only of absolute knowledge, but absolute goodness and power as well. Thus, O'Leary posits that apocalyptic schema acts as a "symbolic theodicy" in that it justifies God's omniscience, omnipotence, and omni-benevolence by resolving the issue of evil with a predicted temporal narrative of apocalypse.⁹³ Thus, Russell writes, "There is in this literature a message of hope for the oppressed," for God will resolve the evil of those who perceive themselves victim of crisis. However, "There is also a message of judgment for the oppressor," for evil must also be overcome.⁹⁴

It is through this portrayal of God as judge and savior that science also reflects divine authority. This power of science is manifest in technology, which the three climate authors portray with both destructive and salvific powers.

For Gore, new technology is portrayed as salvific in that it can provide us with alternative sources of energy that can eliminate the production of fossil fuels. "We can build clean engines, we can harness the Sun and the wind; we can stop wasting energy," Gore proclaims, even writing, "We can use our planet's plentiful coal resources without heating the planet."⁹⁵ However, Gore argues that technology can be destructive because "many of our new technologies confer upon us new

⁹² Russell, *Divine Disclosure*, 65-66.

⁹³ O'Leary, *Arguing the Apocalypse*, 20.

⁹⁴ Russell, *Divine Disclosure*, 136.

⁹⁵ Gore, *Inconvenient Truth*, 11.

power without automatically giving us new wisdom,” such as the immense coal-fired power stations which create greenhouse gases.⁹⁶

McKibben also describes the destructive capabilities of technology, writing that “if a nuclear plant has an accident, it’s bad news, but if you operate a coal-fired plant exactly according to the instructions, it melts the ice caps and burns the forests.”⁹⁷ As an antidote, McKibben argues against big scales and many energy technologies like nuclear power, focusing on local energy grids and energy conservation.⁹⁸ He does, however, support “clean-tech” like wind and solar technologies, demonstrating technologies with potential salvific power. “These are the obvious and legitimate responses of serious people to the most dangerous crisis we’ve ever encountered, and to a real degree they’re working.”⁹⁹ Perhaps most strikingly, McKibben also promotes the salvific technology of the Internet, which will help educate us how to live more locally and conservatively, while maintaining social moral progress “so new ideas can blow in and old prejudices blow out.”¹⁰⁰

In *Oryx and Crake*, the destructive capabilities of technology are illustrated not only in the environmental degradation they have caused, but the engineering of catastrophic disease that Crake uses to exterminate the human race. However, peer scientists of Crake also use technology to design green technologies such as Rockulators, technological rocks that absorb water during humidity and release water during droughts. Atwood even names one version of the Rockulator the

⁹⁶ Ibid., 247.

⁹⁷ McKibben, *Eaarth*, 57.

⁹⁸ Ibid., 183-189.

⁹⁹ Ibid., 52.

¹⁰⁰ Ibid., 205.

“Moses Model” (to release water, “Just Hit It With a Rod”),¹⁰¹ invoking a comparison between technological and divine power.

This portrayal of science as parallel to the destructive and salvific power of divine authority in the apocalyptic tradition creates an ambivalence toward technological power and how humanity should address climate change. When combined with the authoritative claims of predictive certainty that these authors make, and with the progressively more imminent catastrophe of apocalyptic climate change, this ambivalence toward technology intensifies a sense of crisis because it is unclear whether technology will help to aid or enhance the effects of climate change.

The sense of ambivalence that these authors portray about the power of technology is illustrated best in *Oryx and Crake* by the power of bioengineering, a technology that inhabits both sides of the line between the salvific and destructive power of science. Next door to where Jimmy learns about the development of Rockulators, he is introduced to the Chickienob, a genetically modified chicken with a “sea-anemone body plan,” designed solely to produce chicken breasts. “The thing was a nightmare,”¹⁰² Jimmy describes, but he also questions this reaction to genetic technology: “Why is it he feels some line has been crossed, some boundary transgressed? How much is too much, and how far is too far?”¹⁰³ Crake, on the other hand, is only concerned with how something functions, and dismisses the concern of

¹⁰¹ Atwood, *Oryx and Crake*, 200.

¹⁰² *Ibid.*, 202-3.

¹⁰³ *Ibid.*, 206.

whether something is natural or fake.¹⁰⁴ However, he illustrates Jimmy's concern in dialogue with Jimmy:

"Nature is to zoos as God is to churches."

"Meaning what?" said Jimmy...

"Those walls and bars are there for a reason," said Crake. "Not to keep us out, but to keep them in. Mankind needs barriers in both cases."

"Them?"

"Nature and God."

What Crake describes in this conversation is not only the fear of destruction at the hands of God or the natural world ("keep them in"), but also the sanctity of God and the natural world ("keep us out"). Although this refers to the salvific and destructive powers of technology, it also highlights a tension that so far has been unaddressed: ambivalence towards the moral nature of human agency. While science mirrors God's omniscience and omnipotence in these climate change books, science does not mirror the moral agency of God's Omni-benevolence. Therefore, the moral agency to employ the authority of scientific knowledge and power is left to humanity. The importance of this is embedded in the requirements of human behavior these authors prescribe to address climate change. For McKibben, it is to live on our planet "lightly, carefully, [and] gracefully."¹⁰⁵ Gore emphasizes, "Those with the most technology have the greatest moral obligation to use it wisely."¹⁰⁶ Atwood imagines a future in which human behavior can be altered through the authoritative power of bioengineering. Each of these requirements reflect and enhance a sense of crisis not only in the firm claims to authority that backs them, or in the ambivalence toward technological power, but also in the negotiation of

¹⁰⁴ Ibid., 200.

¹⁰⁵ McKibben, *Eaarth*, 212.

¹⁰⁶ Gore, *Inconvenient Truth*, 250.

human morality that occurs when human responsibility for climate change is compared to apocalyptic sources of evil.

Evil

According to Russell, evil in the Jewish and Christian apocalyptic tradition is portrayed not only as immoral behavior, but also as the experience of suffering and death.¹⁰⁷ O’Leary writes that in particular, communal death is portrayed as evil since “the negation of communal ideals comes about either through the actions of a demonic Other or through the living community’s own moral failure.”¹⁰⁸ These evils are resolved either through being overcome by the apocalyptic power of divine authority, or through the portrayal of human evil as mistaken and redeemable.

Unlike the religious apocalyptic tradition, the climate change books explored here do not frame evil in supernatural ways, either as mythic “powers of darkness” such as Satan or the beasts of Revelation,¹⁰⁹ or by framing human individuals or communities as manifestations of mythic evil powers, as Robert Fuller describes in *Naming the Antichrist*.¹¹⁰ However, the books do frame government, institutional, corporate and other forms of power as responsible for climate change through rigid moral dualisms and other ways that reflect the portrayal of evil in apocalyptic texts. Ultimately though, these books place responsibility for the cause of climate change on human individuals and their actions. Thus, the framing of human action as the

¹⁰⁷ Russell, *Divine Disclosure*, 112.

¹⁰⁸ O’Leary, *Arguing the Apocalypse*, 32.

¹⁰⁹ Russell, *Divine Disclosure*, 108.

¹¹⁰ Robert Fuller, *Naming the Antichrist: The History of an American Obsession*, (New York: Oxford University Press, 1995).

source of apocalyptic evil reflects and intensifies a sense of crisis by charging humanity with sole responsibility for this evil and either redeeming themselves or bear the consequences of this evil.

Borrowing Bruckner's description of the subjects of evil in ecologism as "system of Russian dolls,"¹¹¹ I argue these climate change books rhetorically frame the source of evil and responsibility for the ills of climate change in the form of government, corporations, economic system, and ultimately human action. To begin with, the climate books portray the American government and its leaders as evil and responsible for the ills of climate change. This corresponds with the Jewish and Christian apocalyptic religious traditions, which depict a dualism between earthly government powers and the sovereignty of God. Collins argues that this is portrayed in Revelation 1:7, because "God's rule must be manifest in concrete political ways and that acknowledgement of God's rule is incompatible with submission to Rome."¹¹²

Similarly, McKibben frames an incompetent and immoral American government as responsible for climate change. "Our leaders have failed to come to terms with the actual size of the problem," writes McKibben, showing examples of how President Obama and Congress have failed to adequately address climate change on numerous occasions.¹¹³ McKibben also argues that centralized governments are systems that must change to address climate change properly. For McKibben, we're "owners of more national government than we can use... and

¹¹¹ Bruckner, *Fanaticism of the Apocalypse*, 13.

¹¹² Russell, *Divine Disclosure*, 104.

¹¹³ McKibben, *Eaarth*, 217.

centralization seems as much about plunder as progress,”¹¹⁴ a description which describes the government as both inefficient and immoral.

Similarly, Gore portrays the government as evil through a depiction of the Bush administration as opposed to the authority of science. He writes that the Bush administration “was determined to block any policies designed to help limit global warming.” They have accomplished this by attempting to silence informed scientists and appointing “skeptics” recommended by oil companies to key positions, from which they can prevent action against global warming.¹¹⁵

It is in this argument that the true culprits of evil are identified, the corporations that have succumbed to greed over the moral imperative of saving the earth. Gore writes that the truth about climate change is “especially inconvenient and unwelcome to some powerful people and companies making enormous sums of money from activities they know full well will have to change dramatically in order to ensure the planet’s livability.”¹¹⁶ Gore writes that the Bush administration has received much support from these companies and “seems to be doing everything it can to satisfy their concerns.”¹¹⁷

McKibben follows suit by portraying agricultural, energy, and fossil fuel multinational corporations as greedy and wealthy. This is shown through the repeated argument that corporate environmental policies won’t change because

¹¹⁴ Ibid., 122.

¹¹⁵ Gore, *Inconvenient Truth*, 8-9.

¹¹⁶ Ibid., 10.

¹¹⁷ Ibid., 285.

they “make a few big corporations rich,”¹¹⁸ and those corporations have a “simple reluctance... to surrender their monopolies.”¹¹⁹

In *Oryx and Crake*, the greed of corporations and the power they have over government policy is taken to an extreme in a scenario where corporations have consolidated power to the point where they have superseded the government, privatizing the army and disintegrating the power of democracy. Cities have been divided between the wealthy corporate compounds and the chaotic “pleeblands” outside their walls, who provide the corporations’ customer base. The division allows the corporate powers to largely ignore the environmental degradation and social strife occurring outside their walls, reflecting a perceived crisis between government powers and marginalized communities that mirrors those of historical apocalyptic religious communities.

Implied in this depiction is the next layer of responsibility for the evil that has caused climate change, the economic system of growth and commerce itself. McKibben explains with a lack of demonizing rhetoric that Goldman Sachs described Exxon Mobil as “the greatest company ever. Period,”¹²⁰ implying that the economic incentives for success are contradictory to environmental degradation. The cause of evil in this case falls upon the economic system.

This argument corresponds to Collins’ observation that ideas, trends, social structures, and institutional processes themselves are sometimes portrayed as a source of evil in apocalyptic literature. “[They] get out of human control and turn

¹¹⁸ McKibben, *Eaarth*, 176.

¹¹⁹ *Ibid.*, 189.

¹²⁰ McKibben, *Eaarth*, 55.

against their creator,” she describes, “like a Frankenstein monster.”¹²¹ An example is found in Revelation 13:17, in which the system of commerce is portrayed as evil, for “no one can buy or sell who does not have the mark, that is, the name of the beast or the number of its name,” referring to the evil figure of Satan.

McKibben writes that the “growth paradigm” of the American economy cannot aid in stopping global warming because “the momentum of the heating, and the momentum of the economy that powers it, can’t be turned off quickly enough to prevent hideous damage.”¹²² McKibben even writes that “the Green Revolution lured us into a kind of ecological debt we’re only starting to comprehend,”¹²³ implying that even a system of commerce with sustainable intentions has only been detrimental to preventing climate change. A large part of McKibben’s solution to this systematic problem is the decentralization of government and the creation of local economies that will focus on durability rather than growth.¹²⁴ He supports this idea as feasible through a narrative of secessionist movements in the history of Vermont (his home state) and the United States, adding, “18.2 percent of people say they would ‘support a secessionist effort in [their] states.’”¹²⁵

This politically subversive rhetoric, as well as the argument against the wealth via a growth economy, both align with similar arguments made in apocalyptic religious texts. According to Collins, the intent of Revelation when it was first written was a call to subvert the Roman government and intensify socially

¹²¹ Collins, *Crisis and Catharsis*, 173.

¹²² McKibben, *Eaarth*, 211.

¹²³ *Ibid.*, 157.

¹²⁴ *Ibid.*, 103.

¹²⁵ *Ibid.*, 130.

radical group norms and boundaries of Christian communal life. This is exemplified in Revelation 3:14-22, where it is portrayed as better to be economically poor, and in Revelation 3:17 and 18:7 where there is an implied idealization of poverty from the linking of wealth with pride.¹²⁶ While Collins writes that the intention of these group norms may have been for the self-preservation of the Christian community, it is possible also that these norms were a response to the perceived moral failings of the community, who perceived and rationalized themselves as victim to the social crisis they created.

Although Gore does not argue for political subversion as answer to climate change, he joins McKibben by arguing for change to a simplified lifestyle that includes consuming less and conserving energy at home. Thus, removing oneself from the system of commerce is portrayed as an ideal and empowering lifestyle choice, mirroring the intensified group norms of religious apocalyptic communities.

Thus, the ultimate responsibility for evil in climate literature is placed upon human individuals and communities, and the actions by which we all cause climate change. According to Russell, in the Jewish apocalyptic tradition human evil is defined by moral choice: the adherence to God's divine moral Law "means life, and rejection of which means death." Russell argues that this demonstrates humans are burdened with the responsibility "not only [of] their own wicked deeds, but also for the wickedness and corruption of the world at large."¹²⁷ The implication, then, is that the moral choices humans make both practically and symbolically are the evil cause of death and destruction in the world.

¹²⁶ Collins, *Crisis and Catharsis*, 158.

¹²⁷ Russell, *Divine Disclosure*, 112.

Because climate literature ultimately portrays humans as the source of evil, and do not consolidate the evil into a demonic other, the responsibility of human action increases drastically, especially since this secular literature provides no hope for divine salvation. Instead, humans, with or without the aid of scientific technology, are portrayed as the sole agents responsible for climate change and for altering its course, or else bearing its consequences of climate change.

However, a tension exists in these books between portraying human action as evil and judging this evil action as an inherent part of human nature. According to O'Leary, evil is sometimes attempted to be resolved in apocalyptic literature by being evaluated on the basis of practical actions and effects. However, O'Leary argues that communities revert to symbolizing evil as more inherent in subjects when "confronted with events of such magnitude as the Holocaust."¹²⁸

Gore's optimism for humanity to correct climate change makes a rhetorical argument for framing evil only in terms of human action. "We have everything we need to begin solving this crisis," Gore writes, "with the possible exception of the will to act. But in America, our will to take action is itself a renewable resource."¹²⁹ His aim is thus to "warn my fellow Americans of the spiraling disaster to which we are all – wittingly or not – contributing," so that they can start making proper lifestyle changes that will reverse global warming.¹³⁰

¹²⁸ O'Leary, *Arguing the Apocalypse*, 33.

¹²⁹ Gore, *Inconvenient Truth*, 1.

¹³⁰ *Ibid.*, 71.

For McKibben, however, humanity is attributed with “willful ignorance of the finite nature of the planet,”¹³¹ and McKibben cites an author of *Limits to Growth* who stated, “The future is no longer what it was thought to be, or what it might have been if humans had known how to use their brains and their opportunities more effectively.”¹³² Human nature is therefore portrayed as more fixed due to missed opportunities for redemption.

The fixed nature of human evil is perhaps best exemplified in the “first unambiguously good news” of McKibben’s book. This news is “that people are rethinking the scale of agriculture “perhaps just in time to help us deal with the strains of our new planet.”¹³³ This quote demonstrates a defining limitation to McKibben’s narrative, which is that the most optimistic future is limited by actions that have already predetermined the relative destruction of the habitability of our planet. “No one is going to refreeze the Arctic for us,” he writes, “Or restore the pH of the oceans, and given the momentum of global warming we’re likely to cross many more thresholds even if we all convert to solar power and bicycles this afternoon.”¹³⁴ The most optimism McKibben can offer is that we are “perhaps just in time” to even attempt survival on Earth, and with that, the promise of redemption for human mistakes decreases, and the definition of evil becomes more of a condition, fixed into us by a crisis we’ve created but cannot wholly reverse.

This tension between evil symbolized as fixed into human nature or dissolved by human action is illustrated dramatically in *Oryx and Crake*. Namely, this

¹³¹ McKibben, *Eaarth*, 128.

¹³² *Ibid.*, 99.

¹³³ *Ibid.*, 166.

¹³⁴ *Ibid.*, 17.

is done through the genetically modified humans that Crake creates in the “Paradise Project” at his post-graduate corporate employer, RejoovenEssence. “Gone were [humanity’s] destructive features,” Atwood describes of these new humans, “the features responsible for the world’s current illnesses.” These re-engineered humans, or “Crakers,” were redesigned to be herbivorous gatherers who lacked the need for territoriality, ownership, and therefore war, and were therefore peaceful race, “perfectly adjusted to their habitat.”¹³⁵ Human evil, understood as a part of human nature, is fixed through the power of genetic technology.

Crake goes on to annihilate the remainder of the human race, leaving only Jimmy to protect and educate this new harmonious race of humans. Humans had become the villain by going against their own ideals, and the authority of science had evaluated and engineered their destruction and transformation. The book, however, ends with a twist: Jimmy spots three other human survivors of the apocalypse on the beach. Unsure of what to do, he runs through his options, from “*I come in peace*,” to considering whether to “kill them in cold blood.” “But they haven’t done anything bad” Jimmy thinks, at least “not to him.” Through this ambivalence of trust in these other humans, Jimmy’s character illustrates the tension that Gore and McKibben negotiate: are humans worth trusting to overcome their evil and destructive potential, or is this evil an inherent part of their nature, so that humanity should be eliminated? The book concludes without resolving the question, with

¹³⁵ Atwood, *Oryx and Crake*, 305.

Jimmy about to confront his new human companions. "Zero hour, Snowman thinks. Time to go."¹³⁶

In conclusion, these climate books utilize apocalyptic temporal frames, parallels to apocalyptic divine authority, and comparisons of human action to apocalyptic evil to reflect and intensify the perceived crisis of climate change. While the employment of this traditionally religious genre to frame climate change may or may not have been conscious on the part of the authors, the employment of the rhetorical strategies of the apocalyptic genre nonetheless has implications for how the audience of this literature understands and relates to the issue of climate change.

As noted in the introduction, other studies have been completed that evaluate the consequences of employing catastrophic rhetoric when engaging climate change. Some of these studies conclude that apocalyptic rhetoric is effective in spreading awareness and motivation to address climate change,¹³⁷ while others argue against the use of apocalyptic rhetoric, showing it can paralyze its audience.¹³⁸ As an alternative method of evaluation, I would like to draw upon the theories of religious apocalyptic scholars whose frameworks were utilized in this paper to speculate on some of the ramifications for the use of apocalyptic narration in addressing climate change.

¹³⁶ Ibid., 373-4.

¹³⁷ Joe Romm, "Exclusive: "Exciting" Public Opinion Study Debunks Claim Al Gore Polarized the Climate Debate and Many Other Myths," *ThinkProgress RSS*, <http://thinkprogress.org/romm/2012/02/06/419371/study-debunks-al-gore-polarized-the-debate-myths-of-public-opinion-climate-change/> (accessed March 11, 2014).

¹³⁸ Foust and Murphy, "Revealing And Reframing Apocalyptic," 151.

As implied in the title of her book, Adela Yarbro Collins argues not only that a perceived social crisis is a key common contributing factor to the expression of apocalyptic imagination, but also that the projection of these crises onto a cosmic apocalyptic narrative can act as a cathartic release in which the tension of crisis is overcome and resolved.¹³⁹ Collins writes that while this catharsis during Revelation's time was successful in releasing aggression so that "pathological behavior was apparently avoided... the process was inadequate in the sense that the cause of aggressive feelings was not dealt with and resolved so that aggression could be eliminated without giving up on the ideal of a sociopolitical transformation."¹⁴⁰ What this suggests is that the intention to motivate individuals through rhetorical portrayals of climate change as the climate crisis may in fact decrease motivation by providing a format for the release of tension that surrounds climate change when portrayed as apocalyptic.

This evaluation presents a larger problem for the use of apocalyptic rhetoric in climate literature. On the one hand, employing an apocalyptic narrative may offer a cathartic resolution to a perceived social crisis, but at the detriment of addressing and changing the social crisis itself. On the other hand, an apocalyptic discourse can alert and motivate its audience with the threat and scale of climate change and the urgent need for response, but it can also propel us into a state of crisis about the environment that is criticized by a number of scholars as ironically unsustainable.¹⁴¹

¹³⁹ Collins, *Crisis and Catharsis*, 166.

¹⁴⁰ *Ibid.*, 161.

¹⁴¹ Keller, "Heat Is On," 42; Eric Zencey, "Apocalypse and Ecology," *The North American Review* 273, no. 2, 1988, 54-57.

As a prescription to this problem, O'Leary posits that the rhetorical framing of apocalyptic narratives as alternately "tragic" and "comic" might help to minimize the paralyzing effects of the discourse, while allowing readers to understand the severity of a crisis. To note, this argument dismisses Jacques Derrida's contention that we must do away with apocalyptic narratives altogether, because O'Leary writes that not only has the apocalyptic tradition survived through "every rational contradiction imaginable," but that "apocalypse is a discourse that is inherently self-refuting, one that bespeaks continuity with every utterance of closure."¹⁴² In O'Leary's definitions, "tragic" apocalyptic narratives "always turn toward an absolute close," while "comic" narratives portray time and human agency as open-ended, which includes the failure of tragic predictions to be fulfilled.¹⁴³ Thus, by creating a sustainable alternation the tragic narratives can allow significance for the ruptures of disaster in history, while the comic turns can mend those ruptures and help one to "continue to live well in the face of horror."¹⁴⁴

While these evaluations offer some ideas of how to effectively read and present climate change rhetorically, it is perhaps most important that the apocalyptic narrative illuminates the narrative and rhetorical structures that are constantly working not only in these climate change books but in how we imagine the future in times of perceived crisis. And as O'Leary notes, the resolution of evil in apocalyptic literature is a rhetorical problem, and thus is resolved only with a

¹⁴² O'Leary, *Arguing the Apocalypse*, 219.

¹⁴³ *Ibid.*, 69.

¹⁴⁴ *Ibid.*, 215-222.

narrative solution that will never appeal to all universally.¹⁴⁵ Rather than adhering to one correct approach in rhetorically framing climate change, it may be better to employ as many rhetorical strategies as possible, appealing to a pluralistic audience of many sensibilities.

¹⁴⁵ O'Leary, *Arguing the Apocalypse*, 36.

Works Cited

- Attridge, Harold W., and Wayne A. Meeks. *The HarperCollins study Bible: New Revised Standard Version, including the Apocryphal/Deuterocanonical Books*. Rev. and updated; 1st ed. San Francisco: Harper Collins Publishers, 2006.
- Barkun, Michael. *A Culture of Conspiracy Apocalyptic Visions in Contemporary America*. Berkeley: University of California Press, 2003.
- Boyer, Paul S. *When Time Shall Be No More: Prophecy Belief in Modern American Culture*. Cambridge: Belknap Press of Harvard University Press, 1992.
- Bruckner, Pascal. *The Fanaticism of the Apocalypse: Save the Earth, Punish Human Beings*. Malden, MA: Polity Press, 2013.
- Collins, Adela Yarbro. *The Apocalypse*. Wilmington: M. Glazier, 1979.
- Collins, Adela Yarbro. *Crisis and Catharsis: the Power of the Apocalypse*. Philadelphia: Westminster Press, 1984.
- Curren, Erik. "Wendell Berry: Forget about big solutions to ecological emergency." Transition Voice. <http://transitionvoice.com/2013/10/wendell-berry-ecological-emergency-patience-and-hope/> (accessed March 14, 2014).
- Ereaut, Gill, and Nat Segnit. "Warm Words: How are we telling the climate story and can we tell it better?" *ippr: Institute for Public Policy Research* (2006).
- Foust, Christina, and William O'Shannon Murphy. "Revealing And Reframing Apocalyptic Tragedy In Global Warming Discourse." *Environmental Communication: A Journal of Nature and Culture* 3, no. 2 (2009): 151-167.
- Fuller, Robert C. *Naming the Antichrist: The History of an American Obsession*. New York: Oxford University Press, 1995.

Gore, Albert. *An Inconvenient Truth: The Planetary Emergency of Global Warming and What We Can Do About It*. New York: Rodale Press, 2006.

Heuvel, Katrina. "Avoiding a climate-change apocalypse." Washington Post.

http://www.washingtonpost.com/opinions/katrina-vanden-heuvel-a-climate-change-apocalypse/2013/01/07/f440d704-58e4-11e2-9fa9-5fbdc9530eb9_story.html (accessed March 14, 2014).

IPCC, 2013: Summary for Policymakers. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Keller, Catherine. "The Heat is On: Apocalyptic Rhetoric and Climate Change."

Ecotheology 7 (1999): 40-58.

Kermode, Frank. *The Sense of an Ending: Studies in the Theory of Fiction with a New Epilogue*. [New ed.] Oxford: Oxford University Press, 2000.

Malina, Bruce J. *On the Genre and Message of Revelation: Star Visions and Sky*

Journeys. Peabody, Mass.: Hendrickson Publishers, 1995.

McKibben, Bill. *Eaarth: Making a Life on a Tough New Planet*. New York: Times Books, 2010.

Nash, David. "The Failed And Postponed Millennium: Secular Millennialism Since The Enlightenment." *Journal of Religious History* 24, no. 1 (2000): 70-86.

O'Leary, Stephen D. *Arguing the Apocalypse: A Theory of Millennial Rhetoric*. New

York: Oxford University Press, 1994.

Pond, Kate. "The Carbon Brief: Accurate Reporting of Climate Science." *Climate Rhetoric*. <http://www.carbonbrief.org/blog/2013/02/climate-rhetoric-from-apocalypse-to-action-in-obamas-state-of-the-union> (accessed March 14, 2014).

Romm, Joe. "Exclusive: "Exciting" Public Opinion Study Debunks Claim Al Gore Polarized the Climate Debate and Many Other Myths." *ThinkProgress* RSS. <http://thinkprogress.org/romm/2012/02/06/419371/study-debunks-al-gore-polarized-the-debate-myths-of-public-opinion-climate-change/> (accessed March 11, 2014).

Russell, D. S. *Divine Disclosure: An Introduction to Jewish Apocalyptic*. Minneapolis: Fortress Press, 1992.

Wallerstein, Immanuel Maurice. *The End of the World As We Know It: Social Science for the Twenty-first Century*. Minneapolis: University of Minnesota Press, 1999.

Weber, Eugen. *Apocalypses: Prophecies, Cults, and Millennial Beliefs Through the Ages*. Cambridge, Mass.: Harvard University Press, 1999.