REMEMBERING WHAT WE LOST: ECOMEMORY, VISUAL ECOMEDIA, AND THE DISCOURSE OF ENVIRONMENTAL CONCERN

By

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Submitted to the graduate degree program in
Film & Media Studies and the Graduate Faculty of the University of Kansas
in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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Date Defended: 11 November 2016

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Date approved: 12 December 2016

Abstract

In this study I examine the evolving discourse of environmental concerns within visual ecological media that utilizes what I define as ecological memory—ecomemory. As part of this examination, I analyze the forms ecological memories take, how those memories are presented, and the role they play.

Employing a combination of ecocriticism and memory and nostalgia studies, I conduct a discourse analysis of a variety of visual ecological media (ecomedia) examples from each of three time periods: 1970-1980, 1980-2004, and 2005-present. Additionally, I contextualize my examples by discussing the concerns of the times in which the media appeared. As an exploratory study, my ecomedia sampling is small: it includes: feature films (*Silent Running*, *The Lord of the Rings*, and *Interstellar*), television programs (*Cosmos: A Personal Journey* and *Cosmos: A Spacetime Odyssey*), a picture book (*The Lorax*, as well as a short form-TV version and the feature film), and both corporate and environmental group advertisements and PSAs.

This study not only examines the evolving discourse of environmental concerns during specific time periods, but also illustrates the connections and changes between differing periods. It illustrates the place of visual ecomedia within the larger environmental discourse over the last forty-plus years. Ultimately, it shows the consistency over time of collectively-held ecomemories and of the nostalgia for and longing to return to the lost edenic utopia of those memories.

Acknowledgments

I would like to start by thanking my committee chair, Dr. Catherine Preston, for her help in crafting and shaping this study. Her support allowed me—and my topic—to wander a bit (metaphorically), before arriving at the current study. My sincere gratitude also goes to Dr. Tamara Falicov, who willingly provided me with a chair and an ear multiple times throughout this process. I also greatly appreciate the support and encouragement of my committee members, Kevin Willmott, Matt Jacobson, and Dr. Kathryn Conrad.

The challenges I faced were not unlike those faced by many doctoral students. During the time it took me to work through both classes and this dissertation, I have worked at several places on-campus where I had very supportive coworkers who recognize the craziness that can be graduate school and doctorate work; specifically, I would like to thank my colleagues at KUs Center for Teaching Excellence—especially Judy Eddy—for understanding that completing a doctorate is more than "just" reading and writing a really long paper. I am very grateful to my friends and colleagues for their support and encouragement and particularly want to show my appreciation to Dr. Ann Martinez, Dr. Sahana Mukherjee, Dr. Bruce Frey, Dr. Bonnie Johnson, Dr. Meagan Patterson, Dr. Dave Hansen, Dr. Laura Kramer, and many others. Similarly, I would like to thank the four-footed beings who helped keep me sane in the ways only companion animals can (Lily, Penny—both Penny v S and Penny M, Jasper, Roo, Thurber, Janie, and Niles).

I am grateful for the support and caring of Dr. Mark von Schelemmer. He has willingly read chapter drafts, allowed me to talk through sticky points, share frustrations and anxieties, and babble about random elements of my research—including those "really neat" facts that are, in reality, only really neat to me.

Finally, I am grateful for the continuous love and encouragement of my family, particularly my parents, Ray and Jerilyn Woodson, who have supported my "tree hugging," nonhuman animal loving, vegan lifestyle choosing choices for many years now.

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Chapter 1: Introduction

While first watching the film *Interstellar* (Christopher Nolan, 2014), I thought it raised interesting questions and ideas about both memory and the environment. Earlier that same year, a revised *Cosmos* television show had raised some of the same ideas. After connecting the points made in the small and big screen productions, I began to think of other visual examples. Always interested in history, I felt it would be intriguing to trace the discourse of environmental concerns and ecological memory in ecological media over time, specifically over the course of the current environmental movement (1970-present).

Humankind has had an ever-changing relationship with the natural environment. During the European Middle Ages, the Church represented untamed lands (wilderness) as evil; centuries later, in America, wilderness often has been represented as an anecdote to modern life. Similarly, while some artists have represented nature as dangerous others have displayed it as magnificent. These ideas and artistic representations have molded general, collectively held memories of nature in the Western world. One such type of image typically presents nature as an ideal realm, drawn from the past and far from the "now" in which we find ourselves, be it the 1860s, the 1960s, or the 2010s. The past environment that such images portray is the ideal of ecological memories. In creating an ideal past environment, ecological memory situates that ideal as something lost and, especially in contrast to the now, as something to which we can/should attempt to return or recreate.

This dissertation addresses the evolving discourse of environmental concerns within visual ecological media (ecomedia) that utilizes what I define as ecological memory (ecomemory).[1] As part of that, I analyze the forms ecological memories take, how those memories are presented, and the role they play.

In order to build my argument, I perform a discourse analysis of visual ecomedia from the period of the contemporary environmental movement (1970-present). Additionally, I contextualize my examples by discussing the concerns of the times in which the media appeared.

While there are many examples of visual media that I could use, my data consists of film, television, advertisements, and public service announcements (PSAs). There are a variety of visual media I do not use (e.g. painting, photography, product labeling, sculpture, mural art, installation art, et cetera).[2] The absence of analysis of such work resulted from two points. First, a comprehensive study of all visual media is impossible within the constraints of completing a dissertation in a timely manner. Secondly, I feel the types of media focused on best fit within the film and media studies field. I also limit my data by focusing on ecomedia that employs ecomemory. I further discuss the factors used to choose my examples in the sample selection section below. In addition to

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[1] Others provide slightly different descriptions of ecomedia, but all have the same core of environmental media. Sean Cubitt defines ecomedia as media with "environmental themes," while Murray & Heumann use the term to describe films with "ecological messages" that may be overt or subtle. Sean Cubitt, *Eco Media* (New York: Rodopi, 2005), 1; Robin L. Murray and Joseph K. Heumann, *Ecology and Popular Film: Cinema on the Edge* (New York: State Univ. of New York, 2009), 1.

[2] While some of my examples include photographs, they do so within the context of advertisements.

the visual, due to the decrease in ecomemory's ecomedia presence during the period of 1980—2004 (and, therefore, a decrease in possible examples for analysis), I also use a limited amount of quantitative data in order to provide a fuller picture and support my argument in chapter 4. Because such exists in higher numbers during the 1970s and the 2005-present period, I do not include similar quantitative data.

A combination of theoretical frameworks structure my analysis, specifically ecocriticism and the two related fields of memory and nostalgia studies. Because my focus has a dual nature (the environment and memory), it only makes sense to apply frameworks that address both issues. I feel that this combination allows for a more rounded examination.

There is a growing body of literature in which the author(s) apply ecological criticism to their subject. While the number of such studies in film and television is growing, the field is still relatively new. The amount of film/TV-related research which applies insights from memory studies is more numerous. However, as yet there are no studies that combine the two areas, ecocriticism and memory studies; therefore, my work provides a preliminary exploration of the discourse surrounding ecomedia, ecomemory, and environmental concerns. For this reason, I look at a limited number of examples, recognizing that they are only a small portion of a larger environmentally-focused discourse. By contextualizing this examination within a larger environmental movement history, my work also aims to add to the cultural history of ecomedia.

In June 2016 scientists confirmed the first climate change-caused mammal extinction, the Bramble Cay melomy; scientists recorded the first such non-mammal

extinction in 1999 (the amphibious Golden Toad).[3] While these creatures might seem too small to make an impact, they are not expected to be the last casualties of a changing planet. With this in mind, and with growing concern about our (human) survival, there is a timeliness to this study. I feel that creating a better understanding of how visual ecomedia uses ecomemory, can only support movements towards change. We may remember a non-existent nature, but the ideal can provide a motivation for environmental action and change.

Theory

The terms "environment" and "nature" often are used interchangeably; however, they are not always equivalent. Environment may indicate the non-manmade world (e.g. forests, plains, etc.), the manmade world (e.g. urban centers, suburban communities), or a combination of the two. In this study I focus mainly on the non-manmade world, with the manmade entering the discussion only as it relates to the non-manmade. For example, the destruction of the natural world in *The Lorax* (book 1971, TV special 1972, and feature film 2012) and *Lord of the Rings: The Two Towers* (Peter Jackson, 2002) intrinsically is related to the creation of the built world.

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[3] For more on these extinctions, see: John R. Platt, "Climate Change Has Claimed Its First Mammal Extinction," *Scientific American*, 15 June 2016, http://blogs.scientificamerican.com/extinction-countdown/climate-change-first-mammal-extinction/; Brian Clark Howard, "First Mammal Species Goes Extinct Due to Climate Change," *National Geographic*, 14 June 2016, http://news.nationalgeographic.com/2016/06/first-mammal-extinct-climate-change-bramble-cay-melomys/; Christine Dell'Amore, "7 Species Hit Hard by Climate Change—Including One That's Already Extinct," *National Geographic*, 2 April 2014, http://news.nationalgeographic.com/news/2014/03/140331-global-warming-climate-change-ipcc-animals-science-environment/.

Nature is a slippery idea that is not so easily defined. As Raymond Williams noted, "nature is perhaps the most complex word in the [English] language." Williams then calls out "three areas of meaning: (i) the essential quality and character *of* something; (ii) the inherent force which directs either the world or human beings or both; (iii) the material world itself, taken as including or not including human beings."[4] It can be, and often is, defined by what it's not. For example, a common dichotomy is human culture versus nature, where "'nature' stands in opposition to modern industrial society and all that it represents."[5] Nature has been described variously as mother, something to fear, something to conquer and use, something "sublime," and something to either conserve or preserve. "The complexity of the word and the concept are hardly surprising," states Williams, "given the fundamental importance of the process to which they refer. But since **nature** is a word which carries, over a very long period, many of the major variations of human thought, often, in any particular use, only implicitly yet with powerful effect on the character of the argument, it is necessary to be especially aware of its difficulty."[6] In this study I use nature as an inherent idea and as the non-manmade elements of the world.

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[4] Raymond Williams, *Keywords: A Vocabulary of Culture and Society* (New York: Oxford Uni. Press, 1976), 184. Italics in original.

[5] Hannes Bergthaller, "'Trees Are What Everyone Needs:'*The Lorax*, Anthropocentrism, and the Problem of Mimesis," in *Nature in Literary and Cultural Studies: Transatlantic Conversations on Ecocriticism*, ed. Catrin Gersdorf and Sylvia Mayer, Nature, Culture and Literature (New York: Rodopi, 2006), 12.

[6] Williams, *Keywords*, 189. Emphasis in original.

The reader might note that Bergthaller's description of nature is not unlike the non-manmade/manmade dichotomy found in the term environment. It is on this common ground that I base how I use the two concepts for the majority of the time; when discussing the non-manmade world, I use both environment and nature largely depending on sentence structure. Such a case occurs in chapter 3. When discussing *Lord of the Rings*, I state that Treebeard the Ent has a "guardian nature." In this instance, I employ "nature" as in Williams' "(i) the essential quality and character *of* something" discussed above. If the sentence had also included a reference to the natural, non-manmade world, I would use environment so as to minimize confusion.

In the introduction to *The Ecocriticism Reader*, Cheryll Glotfelty defines ecocriticism as the "study of the relationship between literature and the physical environment."[7] Going further, Richard Kerridge states that "most of all, ecocriticism seeks to evaluate texts and ideas in terms of their coherence and usefulness as responses to environmental crisis. . . . The starting-point for the ecocritic is that there really is an unprecedented global environmental crisis, and that this crisis poses some of the great political and cultural questions of our time"[8]

Within the present study I combine ecocriticism and memory into ecological memory. Work within the social and biological sciences have used the concept of social-ecological memory to "address [the] memory of groups that engage in ecosystem

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[7] Cheryll Glotfelty, introduction to *The Ecocriticism Reader: Landmarks in Literary Ecology*, ed. Cheryll Glotfelty and Harold Fromm (Athens, GA: Univ. of Georgia Press, 1996), xviii.

[8] Richard Kerridge, introduction to *Writing the Environment: Ecocriticism and Literature*, ed. Richard Kerridge and Neil Sammells (London: Zed Books, 1998), 5.

management."[9] This idea, however, has not yet crossed extensively into humanities/arts-based studies. Ecocritical scholar Lawrence Buell has described ecological memory as "an uncommon term without a set definition . . . the sense, whether conscious, accurate, or shared, of environments as lived experience in the fourth dimension. That is the sense of human life in history as defined by embeddedness in webs of shifting environmental circumstances of some duration, whether this be a finite time span, a lifetime, a generation, a dynasty, or stretching much further back in prehistory."[10] In my own use of the concept, I have adapted Buell's ideas so that I approach ecomemory as a way to investigate an awareness of environment (past, present, and future) embodied in a collective memory.

I also have adopted and adapted some elements of "environmental generational amnesia" into my description of ecomemory. Taken from environmental psychology, Buell defines this phenomenon as "a condition aggravated by the industrial speed up of our times, such that each generation seems to start from a baseline assumption of a more deteriorated environmental status quo as the new normal."[11] Memory is always edited and we tend to see past environments as an ideal.

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[9] Stephan Barthel, Carl Folke, and Johan Colding, "Social-Ecological Memory in Urban Gardens—Retaining the Capacity for Management of Ecosystem Services," *Global Environmental Change* 20, no. 2 (2012), http://www.sciencedirect.com.www2.lib.ku.edu/science/article/pii/S0959378010000026. This study focused on "allotment garden[ers] in the Stockholm urban area, Sweden."

[10] BYU Kennedy Center, "The Uses and Abuses of Environmental Memory," YouTube video, https://www.youtube.com/watch?v=7iKN-TjCSl4.

[11] Ibid.

Based on these various ideas, I define ecomemory as a remembrance of the environment collectively held, shaped, and typically edited or otherwise changed so that the past environment is an ideal for which we are nostalgic or, in other words, for which we long. However, I do recognize that this may still appear a broad definition. Some ecomedia do reference a past nature, but this does not, however, mean the presence of ecomemory. For example, *An Inconvenient Truth* (Davis Guggenheim, 2006) references a past environment but it does not present that past as ideal, as something for which we long, or to which we should attempt to return. Rather the past is referenced in a "then and now" comparison. In fact, when talking about glacial melting, viewers see past and present pictures of the same areas to illustrate the extent of glacial damage. Conversely, the main character in *Silent Running* (Douglas Trumbull, 1972) references a past environment, but does so through nostalgia and his own ecomemory. He talks of a past, lost nature, that was idyllic and is something to which we should (and can) return. I further discuss how analyzing ecomemory narrowed my possible sources in the methods section below.

I also ground this study on two main types of memory: collective memory and postmemory. Collective memory draws on the idea that a group, as a whole, can share common, albeit general, remembrances of the past.[12] While discussing testimony

[12] I use collective here, and throughout, as a mixture of the collective and the masses, as defined by Williams. In *Keywords*, Williams defines a collective as "people acting together." The collective can also be treated as similar to masses, or a "many-headed multitude . . . seen as a positive or potentially positive social force." Therefore, collective in this work refers to a group (many-headed multitude) acting, or in this case remembering, together. Williams, *Keywords*, 60; 161.

narratives, Maurice Halbwachs posited that "Our confidence in the accuracy of our impression increases, of course, if it can be supported by others' remembrances also."[13] Collective memory is not static; as with individual memory, the larger collective can edit, omit, or build up memories. These edits can lead to different versions of the same memory.

While collective memory can be built on first-hand/experienced (direct) or second-hand (indirect) memory, postmemory is built on second-hand experience. Hirsch defines postmemory as "the relationship that the generation after those who witnessed cultural or collective trauma bears to the experiences of those who came before, experiences that they 'remember' only by means of the stories, images, and behaviors among which they grew up. But these experiences were transmitted to them so deeply and affectively as to *seem* to constitute memories in their own right. Postmemory's connection to the past is thus not actually mediated by recall but by imaginative investment, projection, and creation."[14] Kaiser further explains that postmemory "is the process of reconstruction of memories by the descendants of the witness generation. . . . Although more mediated and less connected to the past, postmemory is in itself a powerful and highly significant form of memory."[15]

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[13] Maurice Halbwachs, *The Collective Memory* [La Mémoire collective], trans. Francis J. Ditter, Jr. and Vida Yazdi Ditter (New York: Harper & Row, 1980), 22.

[14] Marianne Hirsch, "The Generation of Postmemory," *Poetics Today* 29, no. 1 (2008), 106-107. Italics in original.

[15] Susana Kaiser, *Postmemories of Terror: A New Generation Copes with the Legacy of the 'Dirty War'*, Palgrave Studies in Oral History (New York: Palgrave Macmillan, 2005), 2-3.

The study of postmemory arose out of traumatic studies, especially those focused on the Holocaust and the former Latin American dictatorships. Researchers found that children and those too young to have direct memory of the trauma still held memories of the event(s). These memories rose out of stories passed on from adults who did have their own direct memories. For example, during the Argentine dictatorship the government disappeared many people, especially those it labeled as dissidents; some of these *desaparecidos* had children who were too young to remember what happened for themselves. However, through stories from family they have their own memories of the past. We find an example of such memories in the Argentine film *Los rubios* (Albertina Carri, 2003).[16] In the film Carri interrogates both her memory of her parents and their disappearance, memory created from stories she has been told, and her generation's memories. As is discussed in the following chapters, I argue that the characters/societies in the films under review have experienced trauma and, therefore, postmemory is applicable to this study.[17]

In addition to memory, I draw on two forms of nostalgia in this study: nostalgia and displaced nostalgia. Nostalgia began as a medical diagnosis that alluded to a

[16] An oft-cited example is Art Spiegelman's two-volume graphic novel *Maus*, which is Spiegelman's own attempt to understand his father, an Eastern European Jewish Holocaust survivor. Hirsch discusses *Maus* at length in her book *Family Frames* included in the memory studies literature review below.

[17] This trauma is especially evident in the feature films discussed in later chapters, as well as the different versions of *The Lorax*.

longing for home.[18] No longer a psychological disorder, nostalgia is "an emotion of longing for a past—admittedly, the longing may be for a past that did not necessarily exist."[19] Wilson points out that nostalgia has altered to indicate "a shift from longing for a particular place to longing for a particular time."[20] The media analyzed in this study typically employ nostalgia as a longing for both place and time. For instance, the main character of *Interstellar* longs for a lost edenic nature, as well as a 1950s or 1960s-type feeling of unending possibility. Like memory, nostalgia is selective; "expressing and expending nostalgia require active reconstruction of the past—active selection of what to remember and how to remember it."[21] Some nostalgia is based on the secondhand; this is "displaced nostalgia." Those experiencing displaced nostalgia have only heard about the item/place/time longed for, but they have no personal experience with it themselves.[22] Due to nostalgia's tendency toward idealization it has been linked to hopes for utopia. Wilson "suggest[s] that nostalgia is a longing for a utopia, projected backwards in time."[23] Fantin argues that "Nostalgia strives for timeless time untied

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[18] Johannes Hofer, a Swiss doctor, first used the "term . . . referring to the extreme homesickness that Swiss mercenaries experienced." Janelle L. Wilson, *Nostalgia: Sanctuary of Meaning* (Lewisburg, NJ: Bucknell Univ. Press, 2005), 21.

[19] Ibid., 36.

[20] Ibid., 22.

[21] Ibid., 25. For further discussion of nostalgia editing, or "retrotyping," see Pickering and Knightly, "Retrotyping and the Marketing of Nostalgia" in *Media and Nostalgia*, 83-94.

[22] Wilson, *Nostalgia*, 32.

[23] Ibid., 37.

from the historical continuum," which is akin to utopia's lack of place, of being no place.[24]

Therefore, in the present study I also employ ideas arising from utopian studies. The environment in our memory often is idealized. We picture this nature to include bright green spaces, lush vegetation, a space where all creatures feel safe. I argue that, by remembering the environment of the past in this way—and longing for a likely non-existent ideal—we are continuing an ages-long tradition of imaging an unknown nature as an eden-like utopia.

Literature Review

To better situate my analysis within larger academic areas important to my study, I will now turn to and examine existing literature relating to: ecocriticism, memory and nostalgia studies, and utopian studies. By presenting existing examples, I can better trace how this study's lineage both derives from and contributes to each of these areas.

Ecocriticism

Literary critics have long analyzed literature about nature and the environment, however they did not always specifically name the work they were doing as anything beyond literary criticism. Ecocritical scholar Lawrence Buell notes that "in one way or

[24] Emmanuelle Fantin, "Anti-Nostalgia in Citroen's Advertising Campaign," in *Media and Nostalgia: Yearning for the Past, Present and Future*, ed. Katharina Niemeyer, Palgrave Macmillan Memory Studies (New York: Palgrave Macmillan, 2014), 101.

another the 'idea of nature' has been a dominant or at least residual concern for literary scholars and intellectual historians ever since these fields came into being."[25] During the 1970s, growing concern about environmental issues led to "literary ecology" or ecological criticism (ecocriticism). Following the 1970s, a realization grew among ecocritics that broad sections of society were not represented in the texts typically studied. This led to feminist ecocritical study (ecofeminism) and minorities and social rights (ecojustice), among other areas that gained a voice. Ecocritical study also expanded to include works beyond the Western cannon, such as texts from the global south.

Buell, an American literature scholar who is considered a leader in modern ecocriticism, covers a range of ecocritical concepts in his work. In his *The Future of Environmental Criticism*, Buell traced the history of ecocriticism and raised questions about the future of the field. Although much of his work focuses on specific authors or literary texts, the broader ideas and discussion influence other ecocritical works, including the present study. During both a 2010 lecture given at the University of Kansas (KU) and another at Brigham Young University (BYU) in 2012, Buell addressed ecomemory to a greater extent than he does in his writings. At KU, he described his definition of ecomemory in broad strokes, while in the BYU lecture he provided more specificity. It is this latter presentation that has most influenced this current study. As

[25] Lawrence Buell, *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination*, Blackwell Manifestos (Malden, MA: Blackwell, 2005), 2.

previously noted, I based my own definition of ecomemory on that which he provided at BYU.

In their introduction to *Beyond Nature Writing: Expanding the Boundaries of Ecocriticism*, Karla Armbruster and Kathleen Wallace state that they wanted "to take on the challenge of applying ecocritical theories and methods that might seem unlikely subjects because they do not foreground the natural world or wilderness."[26] My work reflects the belief Armbruster and Wallace hold that texts open to ecocritical study need not be overtly environmental. I build on their underlying idea by including such examples as *The Lord of the Rings* and *Cosmos*, which do not foreground the environment as directly as other examples (e.g. *Silent Running*, *The Lorax*) but nevertheless are environmentally-relevant.

In moving beyond explicitly environmental texts, ecocriticism has also moved beyond literary studies. Film scholars, such as Robin Murray and Joseph Heumann, Sean Cubitt, and Stephen Rust, have only relatively recently applied the ideas of ecocriticism to visual media. Many of these studies—particularly those of Murray and Heumann[27]—fall within the category of genre studies, such as the Western or disaster films; if not genre-specific these studies often focus on specific film-types, such as

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[26] Kathleen R. Wallace and Karla Armbruster, "Introduction: Why Go Beyond Nature Writing, and Where To?," *Beyond Nature Writing: Expanding the Boundaries of Ecocriticism*, ed. Karla Armbruster and Kathleen R. Wallace (Charlottesville, VA: Univ. Press of Virginia, 2001), 5.

[27] Examples of Murray and Heumann's studies include: *Ecology and Popular Film* (2009); *That's All Folks?: Ecocritical Readings of American Animated Features* (2011); *Gunfight at the Eco-Corral: Western Cinema and the Environment* (2012); and *Film & Everyday Eco-disasters* (2014).

animation or documentary. While these genre- or type-restricted studies provide examples of mixing ecocriticism and film studies, they ultimately are superficial and only truly helpful as examples of doing ecocritical film analysis. Cubitt and Rust are typically more in-depth, however they too are most helpful as examples of analyzing ecomedia through ecocriticism.[28]

Ecocritical studies that mix visual media are rare, as the authors mentioned above focus solely on literature or film. Instead those studies that cross media boundaries are only somewhat tangential to this study. For example, in his *Picturing the Beast: Animals, Identity, and Representation* Steve Baker analyzes posters, advertisements, and television (among other media) to analyze "the place of [nonhuman] animals in popular imagery and popular imagination" and "to assess their [his examples, plus symbolic ideas] operation and influence."[29] In the end, however, while the spheres of ecocriticism and animal studies may overlap at times, Baker's book falls more squarely within the latter.

Memory Studies & Nostalgia Studies

Memory Studies began to take off as a field in the 1980s, however, as Erll states, contemporary memory work "takes its origin from two strands of tradition in particular, both of which have their roots in the 1920s: Maurice Halbwach's sociological

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[28] Rust, Cubitt, and Salma Monani co-edited *Ecocinema Theory and Practice* (2013), which included an article by Rust "Hollywood and Climate Change."

[29] Steve Baker, *Picturing the Beast: Animals, Identify, and Representation* (Urbana: Univ. of Illinois Press, 2001), xv, xxxv.

studies on *mémoire collective* and Aby Warburg's art-historical interest in a European memory of images (*Bildgedächtnis*)." The revived interest of the 1980s also was built on "Pierre Nora's *lieux de mémoire* a notion which revolves around memory, history and nation."[30]

As Erll notes, Maurice Halbwach's *The Collective Memory* laid the groundwork on which most collective memory studies are built. Halbwach discusses individual memory, historical memory, time, and space in relationship with collective memory. While important, the book also is problematic because Halbwach himself never definitively explains his use of "collective." Halbwach had already defined memory in *Les Cadres social de la mémoire* (1925) as "the defining character of memories, as distinct from dreams, is that memories are supported by those of others; they are public and shareable."[31] In her introduction to the 1980 English translation of *The Collective Memory*, Mary Douglas argues that Halbwach's "concept [of collective memory] was of a flexible, articulated set of social segments consisting of live individuals who sustain their common interests by their own selective and highly partial view of history."[32] That said, this study does employ the phrase "collective memory" in a manner akin to that which Douglas defines, to mean the shared remembrances of a group of people.

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[30] Astrid Erll, *Memory in Culture* [Kollectives Gedächtnis und Erinnerungskulturen], trans. Sara B. Young, Palgrave Macmillan Memory Studies (New York: Palgrave Macmillan, 2011), 13; 22.

[31] Halbwachs, *The Collective Memory*. 12.

[32] Ibid., 17.

Marianne Hirsch's *Family Frames: Photography, Narrative, and Postmemory* similarly is a seminal work and touching off point for subsequent studies. Hirsch focuses on postmemory by analyzing family photographs (her own and others') of Holocaust survivors.[33] Through her analysis, Hirsch provided a framework for memory work that moved beyond direct, first-hand experience, opening the area to more nuanced study. However, introducing the idea while focusing on the Holocaust, has arguably led postmemory to be linked automatically to specific forms of trauma.

Susana Kaiser took up Hirsch's idea and applied it to post-junta Argentine young adults who were either very young—or not yet born—during the Dirty War. In her study *Postmemories of Terror: A New Generation Copes with the Legacy of the 'Dirty War'* Kaiser employs oral histories to "explore how the post-dictatorship generation was reconstructing [the] past from three main sources available to it: inter- and intragenerational dialogue . . . education, and the communication media—the media broadly defined to include television, popular music, film, and street demonstrations."[34] Even though Kaiser's work focuses on Argentine experiences and uses a different method, it has proven pivotal to my own research. Unlike Hirsch Kaiser's work includes discussions of both film and television. "It is in [the] discursive construction and reconstruction of what is remembered or forgotten that the media play important roles in incorporating memory issues into the public sphere and shaping the ways that

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[33] Hirsch does not employ Halbwach in *Family Frames*. Instead she draws on Barthes, Benjamin, Lacan, and Freud, among others.

[34] Kaiser, *Postmemories of Terror*, 3.

societies remember."[35] Therefore, focusing on the second-hand, postmemory can be a perfect framework through which to study these two media, which often depict indirect memories. One such example is in the film *Interstellar*; as I discuss in chapter 4, the film's main character does not hold direct memories but definitely holds postmemories of an earlier Earth. Hirsch also frames her study with the history of the period being remembered. As much of my own work, including this study, has an historical element, I have found this aspect of Hirsch's work useful. The way she utilizes history in *Postmemories of Terror,* has helped shape how I include history in this study.

While I employ Hirsch's and Kaiser's definition in my own discussion of postmemory, I have also expanded the types of situations that elicit such memories. Both scholars have focused their work on unquestionably horrific and traumatic moments in time, however in this work I move to topics that are, perhaps, less obvious. For example, the characters in the examples analyzed here have suffered trauma, but their trauma stems from environmental causes, such as loss of habitat (*Silent Running*) and food, peace, and ways of life (*Interstellar*). My non-film examples also involve explicit (*The Lorax*, *Cosmos: A Personal Voyage*) and implicit ("Crying Indian" PSA, the second Greenpeace VW web-film) trauma.

I also expand beyond postmemory, by applying the concept to third-hand rather than second-hand memories. Although this study employs mainly direct memory and postmemory, I include post-postmemory when discussing *Interstellar*. In an

[35] Ibid., 147-148.

unpublished paper on the third generation of survivors of the Holocaust, Uta Larkey calls this further generation's experiences "transmemory."[36] Similarly, Natalia Sanjuán Borney looks at third generation memories of the Spanish Civil War, at "the descendants of the executed, mainly the grandchildren, [who] have assumed the responsibility of confronting the violent past experienced by their relatives."[37] However she calls this memory simply the grandchildren's memory. I have chosen to use post-postmemory, as these memories are postmemories at a remove.

As Wilson's *Nostalgia* illustrates, nostalgia and memory are related as ways to interact with the past.[38] After a section in which she discusses nostalgia's history as an idea and its connection to memory, Wilson applies both concepts (nostalgia and memory) to topics ranging from the Volkswagen Beetle to "interviews with grandmothers." My work both adopts and adapts Wilson's ideas. In the study that follows, I define ecomemory as a remembrance of the environment collectively held, shaped, and typically edited or otherwise changed so that the past environment is an ideal for which we are *nostalgic* or for which we long. Therefore, not only is nostalgia an important part of ecomemory, but it is also collective.

Combining discussion of memory with that of nostalgia within film and media studies is not new. These works include the multi-author book *Media and Nostalgia:*

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[36] Uta Larkey, "Transcending Memory: The Third Generation" (Work in Process, 2010), PDF, http://www.brandeis.edu/hbi/childrenholocaust/docs/larkey.pdf.

[37] Natalia Sanjuán Bornay, "Confronting Silence and Memory in Contemporary Spain: The Grandchildren's Perspective," in *Film, History and Memory*, ed. Jennie M. Carlsten and Fearghal McGarry (New York: Palgrave Macmillan, 2015), 50.

[38] Wilson, *Nostalgia*.

Yearning for the Past, Present, and Future, which provides examples of nostalgia studied across multiple media, and Amy Holdsworth's *Television, Memory and Nostalgia*. As she states in her introduction, Holdsworth used "examples drawn from television and beyond [so] I [could] consider how television's multiple relationships to memory have been and can be thought through."[39] It is this that makes both *Media and Nostalgia* and *Television, Memory, and Nostalgia* useful. There is very little scholarly literature that combines memory and nostalgia within an ecocritical study. Therefore, reading the various authors' studies helped to better shape nostalgia's role in my own work.

Eden & Utopia

For Christians, the term Eden references a very specific place, a garden where all can live in peace; it is a place that, with our fall, we lost.[40] Beginning in (approximately) the thirteenth century, the word came to mean a paradise or ideal. It is this ideal that ecomemory uses to describe a past environment. In her *Reinventing Eden: The Fate of Nature in Western Culture*, Carolyn Merchant traces the history of the concept of eden as the old and new Western world. She undertakes the task of tracing attempts to return to Eden and how the edenic has shaped humankind's relationship and use of nature.

In my work, I follow Merchant, by using eden to reference an ideal rather than the garden from Judeo-Christian religion. That said, there are a handful of times—

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[39] Amy Holdsworth, *Television, Memory and Nostalgia*, Palgrave Macmillan Memory Studies (New York: Palgrave Macmillan, 2011), 3.

[40] Merchant notes that humankind has "tried to reclaim Eden by reinventing the entire earth as a garden." Carolyn Merchant, *Reinventing Eden: The Fate of Nature in Western Culture*, 2nd ed. (New York: Routledge, 2013), 1.

particularly when discussing *Silent Running* in chapter 2—when I purposefully do use the capitalized version (Eden) to refer to that specific place as portrayed in the Bible's Old Testament.

While ideas about eden and those about utopia may seem incompatible, I, however, disagree that they are entirely mutually exclusive. When capitalized, Utopia refers to the "nowhere" land of Thomas More's *Utopia*. In other words, it is an imagined perfect place. However, in the same way that Eden and eden differ, so too do Utopia and utopia. For, like eden, the lower-cased utopia refers to a generality rather than a specific place and it is in this way that I use utopia in the following study. Although unintentional, my use of utopia coincides with one meaning found in the *Oxford English Dictionary*, as a "real place which is perceived or imagined as perfect." It is their similarity that leads me to use eden and utopia interchangeably in the following study.

To German-born philosopher and political and cultural critic Ernst Bloch, all utopias embody hope. As Levitas states, in Bloch's three volume work *The Principle of Hope* he attempted not only to "rehabilitate . . . the concept of utopia" but, instead, to rehabilitate the utopian ideas found within Marxism.[41] Bloch's vision of utopia is that of an "anticipatory consciousness that depends on the Not Yet." The Not Yet consists of the Not-Yet-Conscious (which is ideological and subjective) and the Not-Yet-Become (which, in contrast, is material and objective). Therefore, utopia consists of the Not-Yet-Conscious striving to be the Not-Yet-Become. The idea of one element, the conscious,

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[41] Ruth Levitas, "Educated Hope: Ernst Bloch on Abstract and Concrete Utopia," *Utopian Studies* 1, no. 2 (1990), 14.

shifting into another, the become, when utopia is achieved is echoed in Bloch's ideas about utopia itself.[42] Due to the vast range of ideas in *The Principle of Hope* Bloch, at times, meanders and provides somewhat dense reading. However, his ideas are useful and I apply and expand on his work. More specifically, I use the ideas of imagined versus real utopias and the ability (or impossibility) to attain reality.

It is hard to speak of utopia without, at least briefly, noting its opposite: dystopia. Dystopias generally are imaged as bleak worlds, although Vieira notes that

> although the images of the future put forward in dystopias may lead the reader to despair, the main aim of this sub-genre is didactic and moralistic: images of the future put forward as real possibilities because the utopist wants to frighten the reader and to make him realize that things may go either right or wrong, depending on the moral, social and civic responsibility of the citizens . . . Their true vocation is to make man realize that, since it is impossible for him to build an ideal society, then he must be committed to the construction of a better one."[43]

Although this study uses utopia more than dystopia, discussion of the latter does occur. For example, I consider the world of *Interstellar* as one headed toward dystopia, if not

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[42] Bloch proposed that there were two types of utopia: abstract and concrete. Abstract utopia is based on wishes and desire. However, the wish never becomes reality; the future is not necessarily actually transformed. Abstract utopia may not be connected to the past "in the sense of sustaining its social forms, (although it does draw upon memory rather than imagination in the construction of its images)." Similarly, not all dreams are the same. Day dreams help the dreamer move beyond the present; when these dreams come true, the abstract utopia is replaced by concrete utopia. Concrete utopia is built of possibilities rather than of dreams alone; there is a "possible future within the real." Unlike abstract utopia, where the wish never becomes reality and the future is not necessarily actually transformed, change may actually come in a concrete utopia. Levitas, "Educated Hope," 14; Ruth Levitas, *Utopian Hope: Ernst Bloch and Reclaiming the Future* (Bruxelles: Peter Lang AG, 2010), 104.

[43] Fátima Vieira, "The Concept of Utopia," in *The Cambridge Companion to Utopian Literature*, ed. Gregory Claeys, Cambridge Companions to Literature (Cambridge: Cambridge Univ. Press, 2010), 17.

there already. That said, work on dystopia has provided me with a better idea of utopia; knowing a thing's opposite can be helpful when defining the thing itself.

Method

Scott Slovic writes, "that ecocriticism has no central, dominant doctrine of theoretical apparatus—rather ecocritical theory, such as it is, is being re-defined daily by the actual practice of thousands of literary scholars around the world."[44] With this being the case, as previously mentioned, I structure my analysis by combining several theoretical frameworks (ecocriticism, memory and nostalgia).

I also chose to conduct a discourse analysis because, as Phillips and Hardy note, "Discourse analysis is . . . interested in ascertaining the constructive effects of discourse through the structured and systematic study of texts."[45] These texts can take a variety of forms. In the following chapters, my texts encompass film, television, advertisements, and PSAs. The variety of texts illustrate, as Rose notes, that discourse analysis is inherently intertextual because multiple texts or images influence a discourse; "intertextuality refers to the way that the meanings of any one discursive image or text depend not only on that one text or image, but also on the meanings carried by other

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[44] Scott Slovic, "Ecocriticism: Containing Multitudes, Practicing Doctrine," *ASLE News* 11, 1 (Spring 1999), 6.

[45] Nelson Phillips and Cynthia Hardy, *Discourse Analysis: Investigating Processes of Social Construction* (London: Sage, 2002), 4. Italics in original.

images and texts."[46] In other words, discourse does not rely on only one text or one image.

Rose helpfully divides discourse analysis into two different types, which she labels I (object focused) and II (institutional): I "tends to pay rather more attention to the notion of discourse as articulated through various kinds of visual images and verbal texts than it does to the practices entailed by specific discourses," while II "pay[s] more attention to the practices of institutions . . . it tends to be more explicitly concerned with issues of power, regimes of truth, institutions and technologies."[47] When possible, I do provide production information, but the heart of this study does not delve into institutional practice or questions of power. Instead, I pay more attention to the discourse that my chosen examples influence and/or are influenced by. Rose "summarize[s] the strategies for the interpretation of the rhetorical organization," suggesting a handful of such strategies.

Rose's suggestions include, "looking at your sources with fresh eyes." Many of the examples I analyze in this study have rarely appeared in academic research. Plus, I am the first to apply the concept of ecomemory to each of my examples. Rose also suggests "immersing yourself in your sources" and "identifying key themes in your sources."[48] I believe that, through the multiple screenings and time spent in breaking

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[46] Gillian Rose, *Visual Methodologies: An Introduction to the Interpretation of Visual Materials* (London: Sage, 2001), 136.

[47] Ibid., 140.

[48] Ibid., 158. Quotes from strategy summary all from same citation.

down and analyzing my sources, I have immersed myself in those sources. I also include within that immersion the time spent screening media that, ultimately were ecomedia but did not utilize ecomemory. Each of the ecomedia I used have the common themes of the environment, ecomemory, and nostalgia; some also share dystopian themes.

While some of my source examples are more obviously environmental than others,[49] they all share a similar idea: to get viewers to face truths about our environment and persuade action in order to address environmental concerns today while we still can. This shared idea works within Rose's next proposed strategy: "examining their [the sources] effects on truth." She also describes this as "how a particular discourse works to persuade."[50]

My more overt sources (*Silent Running*, *The Lorax*) maintain a complexity similar to that found in the less obviously environmental examples (*Lord of the Ring*). Memory is a complex thing, shifting and being edited over time, and ecomemory is the same. There are, however, at times contradictions within a single work. For example, we likely would expect *Silent Running*'s Lowell, as a trained botanist, to understand that losing sunlight is killing his plants. However, it takes an external stimulus to cause him to see this connection.[51]

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[49] It is in thinking of both my indirect and direct examples that I think this work satisfies the idea of "looking for the invisible as well as the visible."

[50] Ibid., 158, 154.

[51] This satisfies Rose's "paying attention to their complexity and contradictions."

Discourse analysis is not the method of any one discipline. One such analysis relevant to the current student is Robert Pogue Harrison's *Forests* which provides a history of the discourse surrounding forests, trees, and wild spaces. The current study also discusses humankind's relationship with nature, plus Harrison's specific points are directly relevant to my analysis (e.g. the Ents and forests in *The Lord of the Ring*). Similarly, Simon Schama's *Landscape and Memory*, which focuses on visual artifacts, is a helpful example of applying discourse analysis to visual media. As the title suggests, the book discusses Western (Europe and the United States) landscape and memory or, as Schama notes, "*Landscape and Memory* tries to be: a way of looking; of rediscovering what we already have, but which somehow eludes our recognition and our appreciation. Instead of being yet another explanation of what we have lost, it is an exploration of what we may yet find."[52]

Selecting My Samples

Choosing the visual media texts that I wished to include in this analysis was not easy. My choices had several driving factors:

1. Since I wanted to investigate the discourse of environmental concerns within ecomedia utilizing ecomemory over the time span of the contemporary environmental movement (forty-six years), I knew I needed to use ecomedia from throughout that span.

[52] Simon Schama, *Landscape and Memory* (New York: Alfred A. Knopf, 1995), 14.

2. I also had to keep in mind that I could not include *all* ecomedia. To do so would be a lifetime's work—or at least a work well beyond a single dissertation. Therefore, while I focus on only a handful of examples, I recognize that I am not tackling the whole body of environmental media.
3. Due to my focus on memory, I needed a body of samples that employed ecomemory. Therefore, I chose works of ecomedia that address a past nature, remembered as an ideal, a lost eden, and something to which we should return.

This raises two important points. First, not all ecomedia address a past nature. For example, magazine cover images used to promote environmental stories often do not include any past nature references. The three examples given below (fig. 1) illustrate this point. Each of the issues have a cover that we can classify as ecomedia, but they do not include any reference to a past nature. Further examples of this are located in the history portion of chapter

Figure 1. Magazine covers promoting climate change stories. (left-right: National Geographic, *Sept 2013;* Newsweek, *11 July 2014;* National Geographic, *November 2015)*

4. Secondly, as discussed at the beginning of this chapter, not all ecomedia that addresses a past environment utilizes ecomemory.

4. That said, I wanted to provide examples from a variety of visual ecomedia. I did not feel I would be able to follow an often changing discourse by looking at only one example per medium (e.g. one film or one television series' episode). As previously noted, though, I do recognize the impossibility of including *all* visual ecomedia in a single study. While I do try to present a varied sampling, it would be unrealistic to attempt to cover all genres of all ecomedia; or, even, to cover all genres of only one medium. Therefore, in this exploratory study I largely have used a limited range of ecomedia and genres.

Using a variety of ecomedia also allows me to note how each form deploys ecomemory. For example, the films all employ ecomemory as part of the larger story and they tend to focus more specific ecomemory in one or two characters who try to affect change. Even as we see that any attempt at change ultimately takes more than one person, the films present these characters as lone environmental champions. Television, however, varies. While *The Lorax* deploys ecomemory as do the films, the *Cosmos* series use a single person as environmental spokesperson but emphasize the group effort needed to change the situation. Lastly, the ads and PSAs generally are not individualistic.

5. Particularly when choosing the film samples, there are environmentally-themed films that might appear, at first glance, relevant, they ultimately are not—many for the reasons listed above, specifically those in number three. There have been a number of ecocritical studies focusing on *The Day After Tomorrow* (2004), *Avatar* (2009), and *An Inconvenient Truth* (2006). However, these films do not fit within the ecomemory frame of this study. I also attempted to provide a sample that included pieces that were less discussed and, such as with *Lord of the Rings*, less obvious.
6. Because I wished to focus on popular media, my sample needed to consist of work widely and/or easily available. Since I do not focus on audience numbers or reception studies, I, therefore, cannot state with assurance how broad the viewership was for each example. By keeping access in mind, I feel confident that my samples are more likely to have reached viewers than being seen only by a privileged few.
7. Lastly, I attempted to include contradictory examples or "cases that run counter to the discursive norm . . . in order to affirm the disruption caused by such deviations."[53] Therefore I have included a small number of corporate advertisements that are environmentally themed but do not employ ecomemory. As Rose notes, by providing examples counter to my analysis

[53] Rose, *Visual Methodologies*, 161.

(i.e. ads against environmentalism) we have a fuller understanding of the discourse taking place.

There are two specific examples needing an extra note due to their countries of origin. The majority of the pieces included in this study, to the best of my knowledge, originated in the United States. *The Lord of the Rings* (in chapter 3) and the web film "A Simple Love Poem" by The Climate Coalition (chapter 4) were international creations. The first had screenwriters and a director from New Zealand, which was also the shooting location. The actors were an international mix, as was the funding. Meanwhile, the agency Tribal London was behind "A Simple Love Poem," which the international company RSA Films produced.[54] While this may raise concern, as I note within the specific chapters the intended audience for these works was not limited to one specific country. This is especially true for the web film that, due to its very nature of being available online, anyone, anywhere can find and view the piece. Therefore, in this study, subject matter was of greater interest than in what country the creators worked.

Chapter Breakdown

As far as possible, I have attempted to present my analyses using the same structure in each chapter. First, I open with a short environmental history for the time period in question. This historical discourse typically includes politics/legislation, environmental "events" and concerns, and the environmental movement and pro-

[54] RSA Films has offices in London, New York, Los Angeles, and Hong Kong. While it is likely assumable that the London office worked on "A Simple Love Poem," I do not know that certain.

environmental action. In providing these points, I hope to contextualize for the reader both the environmental discussion and the times within which each example was created. I then move into the heart of each chapter, the analysis of visual media, looking first at a film example, then TV, ads, and PSAs. With each case I provide a brief synopsis, production, and, for the films and TV, critical response. I then move into a close analysis of each, through environmental and ecomemory/nostalgia, lenses.

This chapter, 1, is meant to provide an introduction to the study that follows. The next three chapters consist of my analyses and, thereby, the evidence with which I support my research questions. I have chosen to divide these chapters into three different time spans with one overriding reason driving this choice: an evolving pattern in the discourse. During the 1970s there was a great increase in environmental concern and action and, concurrently, a rise in visual ecomedia; therefore, it made sense to devote a whole chapter to the "environmental decade." The next chapter, however, covers a relatively large chunk of time. During the more than twenty years under consideration, there was a decrease in visual ecomedia generally and in that using ecomemory in particular. Following the turn of the century, there began to be slow growth in ecological concern and ecomedia; this uptick became more noticeable in 2005 and generally has continued since then. This change from the previous decades led to the third time frame beginning with 2005 and continuing to the present.

Chapter 2 focuses on the time frame of 1970-1980, which coincides with the beginning decade of the contemporary environmental movement. Illustrative of this period, the visual ecomedia discussed are more explicitly pro-environmental than are

those in the following periods. Under consideration here are the cult favorite *Silent Running*, *The Lorax* (both the 1971 picture book and the 1972 television special), the television show *Cosmos: A Personal Voyage*, advertisements from the energy, coal, and steel industries and the Monsanto Corporation, PSAs from Keep America Beautiful (the "Crying Indian" campaign, among others), and a poster featuring the cartoon character Pogo.

Chapter 3 covers the broadest time span: a quarter of a century from 1981 to 2004. Here I focus on the feature film trilogy *The Lord of the Ring*, particularly, the second installment, *The Two Towers*. At this point in the chapter I stray from the structure of chapters 2 and 4. Over the decades included, there was a decrease in visual ecomedia and, therefore, a decrease in such media using ecomedia. For this reason, I only briefly address film and television, before drawing on quantitative studies from a variety of fields that illustrate the downturn in ecomedia during this period, covering such media as TV programming, magazine covers and ads, and newspapers. I supplement the use of this research by discussing what visual ecomedia I found in my own searches. My discussion includes corporate advertisements, editorial cartoons, and the photographs used in newspapers across the country. Ultimately the decline in environmental media lasted into the new millennium, a long-lasting reversal only appearing in approximately 2005.

The last of the analysis chapters, chapter 4, brings us from 2005 to the present. While the ecomedia discussed here indicate a change from the previous twenty-five years, in that there is much more ecomedia produced, including that which includes

ecomemory, the treatment and image of nature in these media is still tinged by the conservative 1980s and 1990s. Here I analyze the films *Interstellar* and *Dr. Seuss' The Lorax*, the TV program *Cosmos: A Spacetime Odyssey*, a Dow Chemical Company television ad, and PSA web films for the environmental organizations The Climate Coalition and Greenpeace.

Chapter 2: 1970-1980

During the 1970s, rapid growth of interest in planet-care was accompanied by a similar uptick in media centered on environmentalism. These depictions drew on then-current specific concerns. *Silent Running* builds on the realization of the damage done by chemical use, deforestation, and pollution, while *The Lorax* came from concerns about deforestation and pollution. The central position of the environment in public discussion continued through the decade.

In this chapter, I first analyze the motion picture *Silent Running* from 1972, then the picture book and television special *The Lorax* from 1971 and 1972, the television series *Cosmos: A Personal Voyage* from 1980, and finally a handful of advertisements and PSAs that range in date from 1970 to 1979. These examples allow entry into environmental discourse from the beginning of the current environmental movement and during a period when ecomemories held strong sway.

History: The Contemporary Movement's Early Years, 1970-1980

Sideris and Moore contend that a *Silent Spring* "side effect" was that the book "led to public interest in environmental issues that culminated in the first Earth Day."[55] In

[55] Lisa H. Sideris and Kathleen Dean Moore, introduction to *Rachel Carson: Legacy and Challenge*, ed. Lisa H. Sideris and Kathleen Dean Moore, Environmental Philosophy and Ethics (Albany: State Univ. of New York Press, 2008), 1.

1962, biologist Rachel Carson published *Silent Spring*, a book that specifically discussed the consequences of chemical pesticides.[56]

Silent Spring connected chemical pesticide use with the broader health of all nature, including humankind. Carson writes, "as man proceeds toward his announced goal of the conquest of nature, he has written a depressing record of destruction, directed not only against the earth he inhabits but against the life that shares it with him."[57] Carson tracked chemicals' impacts throughout the chain of life; the Silence of the book's title came from the deaths caused by pesticides. *Silent Spring* begins with "A Fable for Tomorrow" about a peaceful, thriving town over which "a strange blight crept" bringing illness and death. The fable ends with the statement "No witchcraft, no enemy action had silenced the rebirth of new life in this stricken world. The people had done it themselves."[58] The book brought public attention to the topic and we can trace its impact, ultimately, to the EPAs 1972 ban of DDT.[59]

Carson's book was a tipping point, helping give rise to the modern environmental movement. In it we find elements that are echoed by the movement and

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[56] Gottleib points to *Silent Spring* as the start of the "idea of Nature under stress . . . being seen as a question of the quality of life." Robert Gottlieb, *Forcing the Spring: The Transformation of the American Environmental Movement*, rev. ed. (Washington: Island Press, 2005), 121.

[57] Rachel Carson, *Silent Spring*, 40th anniversary ed. (Boston: Houghton Mifflin, 2002), 85.

[58] Ibid., 2-3.

[59] For more on *Silent Spring*'s impact on science and regulation, see Steve Maguire, "Contested Icons: Rachel Carson and DDT," *Rachel Carson: Legacy and Challenge*, ed. Lisa H. Sideris and Kathleen Dean Moore, Environmental Philosophy and Ethics (Albany: State Univ. of New York Press, 2008).

in popular culture in the following years. As Killingsworth and Palmer note, like science fiction, *Silent Spring* "taps into a vein of mythology . . . the story of the end of the world brought about by human hubris, the counter narrative to the master story of human progress and perfectibility."[60] In fact the entire modern-day movement is an attempt to counter a hubris that has led humankind to misuse nature, whether by (over)using it as a resource or not envisioning the impacts of our actions. The fire Rachel Carson fueled pushed activists into the 1970s, which is justifiably called the environmental decade—not only did the decade see the largest mobilization of environmentally-concerned citizens, but also the creation of the Environmental Protection Agency (EPA) and the passage of ecologically-friendly legislation.

The original idea for what became Earth Day came from a somewhat unexpected place. During a speech at the 1969 Washington Environmental Council meeting, Wisconsin Senator Gaylord Nelson announced, "I am convinced that the same concern the youth of this nation took in changing this nation's priorities on the war in Vietnam and on civil rights can be shown for the problems of the environment . . . that is why I plan to see to it that a national teach-in is held."[61] Environmental issues first fully came to Nelson's attention while he served as Wisconsin's governor; owing to growing suburban sprawl, he "became convinced that Wisconsin faced an outdoor recreation

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[60] M. Jimmie Killingsworth and Jacqueline S. Palmer, "*Silent Spring* and Science Fiction: An Essay in the History and Rhetoric of Narrative," in *And No Birds Sing: Rhetorical Analyses of Rachel Carson's Silent Spring*, ed. by Craig Waddell (Carbondale: Southern Illinois Univ. Press, 2000), 176.

[61] Adam Rome, *The Genius of Earth Day: How a 1970 Teach-in Unexpectedly Made the First Green Generation*, (New York: Hill and Wang, 2013), 57.

crisis."[62] Once in Congress, Nelson took up more national environmental issues and fights.

It is rather facile to call the events of April 1970 a single day. Some places saw several days or even a week of Earth Day-related activities, with events ranging from teach-ins to marches and protests, from the educational to activist. While the original idea came from a politician, the organizers, speakers, and participants in Earth Day had a variety of backgrounds. Women were key organizers,[63] while students did much of the event preparation and advertising. Speakers ranged from students to faculty to scientists to celebrities. In its formulation and planning, Earth Day focused on students, particularly those at universities, although in the end participants came from both the gown of universities and the towns.

Earth Day ultimately played a pivotal role in environmentalism. "The lack of antecedents reveals much about the significance of Earth Day."[64] It became a base on which the Environmental Movement grew.[65] It also "convinced many Americans that pollution, sprawl, nuclear fallout, pesticide use, wilderness preservation, waste disposal, and population growth were not separate issues: All were facets of a far-

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[62] Ibid., 61.

[63] Ibid., 34. Women played a key role in the success of Earth Day, although that largely stems from the gender expectations of the time. "Because the suburbs were domestic places—and women traditionally were caretakers of the domestic—threats to the environmental quality in suburbia were threats to 'the woman's sphere.'"

[64] Ibid., 10.

[65] Only in "the run-up to Earth Day" did the phrase "the environmental movement" come into common use. Ibid., 9.

reaching 'environmental crisis'."[66] Additionally, Earth Day-centered mobilization spurred the growth of environmental organizations. A Council on Environmental Quality study found that "the number of local environmental organizations nearly doubled from 1968 to 1973."[67] Organizational growth was in both new membership and new groups.

Earth Day raised enough environmental awareness that the federal government could not return to a position of not acknowledging environmental problems beyond the periodic creation of new national parks. By the end of the year the Nixon administration had created the EPA and the National Environmental Policy Act, which in turn created the Council on Environmental Quality. The President also signed an amendment to strengthen a 1963 Clean Air Act. Over the following years, a variety of similar Acts became law, including the: Clean Water Act (1972, amended 1977), Endangered Species Act (1973), Safe Drinking Water Act (1974), and another amendment to Clean Air (1977).

Widely reported environmentally destructive events also fueled the movement and, sometimes, led to legislation.[68] For example, in spring 1978, following years of complaints by residents about fumes, sludge in the soil, and high numbers of illness, cancer, and birth defects, the government began to investigate Love Canal, New York. Almost two decades earlier Hooker Chemical Company sold its Love Canal property to

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[66] Ibid.

[67] Ibid., 209.

[68] Reported in national news media.

the state. Hooker left behind buried barrels of chemical waste, which over time began leaking into the ground; area residents were exposed both inside and outside their homes and other buildings. Eckardt C. Beck claims that there were at least eighty-two different chemical compounds in the contaminated soil. National news reports on the situation at Love Canal ultimately led to the Comprehensive Environmental Response, Compensation, and Liability Act (aka the Superfund Act).[69] The following year, a partial meltdown at Three Mile Island Nuclear Generating Station in Pennsylvania led to increased fears about nuclear power. Public outcry boosted both stronger governmental regulation of nuclear power and anti-nuclear activism.

Figure 2. This family's house was built over a chemical dumping site in Love Canal. The sign reads, "Wanted: Healthy Home for Toddler, Less than 1 yr. old. Inquire within." 4 Apr. 1978. [AP Images]

In the years following Earth Day activists founded new local, national, and international organizations. Some of these new groups eschewed the more pacifist

[69] Eckardt C. Beck, "The Love Canal Tragedy," *EPA Journal* (1979), https://www.epa.gov/aboutepa/love-canal-tragedy. For further information on Love Canal as a Superfund site, see https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0201290.

Figure 3. Magazine covers following the Three Mile Island disaster. (Newsweek*, 9 Apr 1979;* Life*, May 1979)*

techniques of the older, more established groups such as the Sierra Club, with the late 1970s and 1980s seeing the growth of radical environmentalism. Originally created in Vancouver in 1969 with the goal of halting nuclear weapons testing, in 1971 the Don't Make a Wave Committee leadership renamed the organization Greenpeace and broadened its fight. Greenpeace's approach "was unlike anything the mainstream movement had seen. Greenpeacers were *active* activists."[70] Similarly, Earth First! advocated a "whatever it takes" approach. Founded in 1979, Earth First! was a "response to an increasingly corporate, compromising and ineffective environmental community. It is not an organization, but a movement . . . We believe in using all the tools in the toolbox, from grassroots and legal organizing to civil disobedience and monkeywrenching. When the law won't fix the problem, we put our bodies on the line to stop the destruction. [This] direct-action approach draws attention to the crises facing

[70] Rik Scarce, *Eco-Warriors: Understanding the Radical Environmental Movement*, Updated ed. (Walnut Creek, CA: Left Coast Press, 2006), 49. Italics in the original.

the natural world, and it saves lives."[71] Both Greenpeace and Earth First! have continued to grow, gaining an international presence.

Visualizing Environmental Memory

Growing environmental concern and the accompanying movement were discussed beyond the protests, marches, and legislative chambers. Popular culture took up the topic in a variety of ways; in what follows I analyze a handful of popular visual media, specifically film, television, and advertisements/PSAs.

***Film:* Silent Running**

Douglas Trumbull's 1972 feature film *Silent Running* is a blatantly environmental tale and provides my first example of the connection between ecomedia using ecomemory and the popular environmental discussion. *Silent Running* tells the story of an attempt to save nature and the extent to which one man will go to see that goal to fruition.

Figure 4. Movie poster for Silent Running.

Silent Running depicts a not too distant future in which humankind has

[71] Earth First!, "About Earth First!," http://earthfirstjournal.org/about/.

destroyed the Earth's flora and, in an attempt to salvage it, sends samples from a variety of the planet's biomes into space with the hope of using those samples to replant a future planet. The biomes might not all be ideal for humankind (we get a brief glimpse of a desert-like land, for example), but they do present ideal examples of the chosen habitats. They contain a wide, pristine sample of the Earth's plant life and, at least in the Valley Forge's forest biome pod, smaller nonhuman animals. But when the government decides to end the mission, they order the ships' crews to destroy the pods using nuclear devices and come home. Botanist Freeman Lowell (played by Bruce Dern) decides he cannot let that happen. So, instead, he fights for his "charges," ultimately killing his crewmates (John, Marty, and Andy)[72] and steering the ship further out in space. Left with only three robotic drones (Huey, Dewey, and Louie), Lowell teaches them human activities and how to care for the plants and, in the end, leaves terrestrial nature's care and ultimate fate in Dewey's "hands."

Silent Running was one of a handful of films that Universal Studios wanted to produce over a short period with the idea of capitalizing on the type of young audience drawn by the successful 1969 film *Easy Rider* (Dennis Hopper). These films were to be "inexpensive pictures with absolutely no holds on the director or producer. The studio didn't see the film. We [Trumbull and producer Michael Gruskoff] had final cut. We had total control."[73] By the time it wrapped *Silent Running* cost $1.35 million; it was shot

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[72] Played by Cliff Potts, Ron Rifkin, and Jesse Vint, respectively.

[73] Pamela Duncan, "Silent Running," *Cinefax*, 1 April 1982, 1. Other films made under this scheme included *The Last Movie* (Hopper, 1971), *Taking Off* (Miles Forman, 1971), and *American Graffiti* (George Lucas, 1973). Mark Kermode, *Silent Running*, BFI Film Classics (London: Palgrave Macmillan, 2014), 11.

over thirty-two days, mostly in a decommissioned Navy aircraft carrier, and, to save time and money, it was rare that there were "as [many] as three takes" for any one scene.[74]

The film was Trumbull's directorial debut. At the time he was well known in the film industry for his special effects work on *2001: A Space Odyssey* (Stanley Kubrick, 1968), which won an Oscar for Best Effects, and *The Andromeda Strain* (Robert Wise, 1971).[75] Trumbull drew on this background for *Silent Running,* using a number of techniques he had created for *2001.* While the film largely used pre-made elements to keep down costs, the drones were purpose-built. Trumbull stated that he "went to extreme lengths to deanthropomorphize [the drones], so that there were no eyes, nose, face, head—*anything* that you could recognize—and yet make them evoke a human response," so that "the humanization of the Drones [was the] result of Lowell's desire to create artificial companions."[76] However human actors were inside each drone. Influenced by Johnny Eck's performance in *Freaks* (Tod Browning, 1932), particularly his method of moving using his arms, Trumbull specifically searched for bilateral amputees to portray the drones.

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[74] Cost from Kermode, *Silent Running*, 79. Quote from Chuck Barbee, "The Making of *Silent Running*," (Universal, 1972).

[75] Trumbull went on to do effects work for science fiction films such as *Close Encounter of the Third Kind* (Steven Spielberg, 1977), *Star Trek: The Motion Picture* (Robert Wise, 1979), and *Blade Runner* (Ripley Scott, 1982). Although he currently does little production work now, Trumbull still at times consults; for example, he was an effects consultant for *The Tree of Life* (Terrence Malick, 2011).

[76] Barbee, "The Making of *Silent Running*."; Kermode, *Silent Running*, 52.

Silent Running opened to good reviews, but it ultimately lacked a cohesive promotional campaign by either Universal or, as the film's release spread, the growing multiplexes in which it ran. Both the studio and the theaters relied on word of mouth; this resulted in the film doing poorly at the box office.[77]

In the decades since its first opening at Los Angeles' Cinerama Dome, and despite its poor original earnings, the film has become a cult favorite. As Kermode writes, "the reputation of *Silent Running* has continued to grow; with new generations of fans discovering the movie through revival screenings, TV runs and home-viewing presentations . . .."[78] In 2014 the British Film Institute (BFI) published a short study of the film as part of its "Film Classics" series; that same year BFI screened the film at Britain's Eden Project in Cornwall. Even a cursory Google search finds the film cropping up on many "must see" or best science fiction films lists, ranging from a piece on economia.com (the Institute of Chartered Accountants in England and Wales' website) to a post on the website geekandsundry.com.[79]

Silent Running never explicitly reveals what happened to precipitate the interplanetary "arks." Just over six minutes into the film (00:06:18) we hear via voice over "on this first day of the new century we humbly beg forgiveness and dedicate

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[77] Ibid., 79-80. I have found some evidence that suggests this was the case for each of the films made as part of Universal's low budget project; however, I have not been able to find definitive support for such an argument.

[78] Ibid., 81.

[79] Martin Cloake, "Out of This World: Six of the Best Space Films," 13 Nov 2014, http://economia.icaew.com/life/november-2014/out-of-this-world-six-of-the-best-space-films; Holland Farkas, "Lesser Known Sci-Fi Classics that You Need to See," 29 May 2015, http://geekandsundry.com/lesser-known-sci-fi-classics-that-you-need-to-see/.

these last forests of our once beautiful nation in the hope that they will one day return and grace our foul Earth. Until that day, may God bless these gardens and the brave men who care for them." Due to this wording I believe it likely that Lowell heard these words as the mission began and/or when the ships left Earth, which would set a hopeful tone for the project. Under the voice over the camera pulls away from Lowell cleaning produce, out of a window, to show the ship's exterior and to demonstrate that the Valley Forge is not alone. The voice over also indicates that those in power were aware of Earth's loss—the forests and other natural biomes—when the mission began and that this awareness, possibly, drove their hopes of restoring the old environment.

Although not told what actions fouled the planet, over the course of the film the viewer can piece together a background. One piece is the overt presence of corporations and, by extension, capitalism. Their presence is shown frequently: the crew's jumpsuits have corporate patches attached,[80] onboard supply boxes are clearly labeled with the logos of American Airlines, Dow, and others, and even the ship itself carries the American Airlines logo. Trumbell was well aware of the contrast between Dow's presence in the film and the film's ecological message. Kermode notes that Dow's assistance on the film was wholly a PR campaign for the company. It was an attempt "to adopt a more publicly friendly stance as the war drew to a close."[81] Images from the Vietnam War showing the effects of Dow-produced Agent Orange and Napalm-B,

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[80] Lowell's jumpsuit includes an American Airline patch, but otherwise is covered instead by patches from different US wild spaces (i.e. the Olympic Mountains) and at least one nature conservation group (on his upper left sleeve is a "Smokey the Bear" patch).

[81] Kermode, *Silent Running*, 34.

turned American opinions against both the war and the company. The company, therefore, gave the production "all the plastic [they] needed," which in turn became the supply boxes.[82] Other companies also provided equipment and/or money; according to Trumbull "we tried to give them all credit—both at the end of the picture, and by displaying their logos all over the film. Many of them were pasted on the cargo containers . . . and the Concord Electronics logo showed up constantly in the closeups of the [control room] monitor screens. We put the American Airlines logo on the outside of the ship, and there was a little American Airlines armpatch on the astronauts' outfits."[83]

As previously noted, governmental leaders understood that humankind destroyed nature. Although an extrapolation from the film's narrative and the real-world history of the early 1970s, I would argue that governmental leaders played a role in nature's destruction. It is thereby ironic when, at least for a time, those same leaders hope to reestablish an edenic nature on Earth, a nature based on idyllic ecomemories of a "better" past environment. In *Silent Running*, the Valley Forge and her sister ships (all named after well-known American natural spaces, including the Sequoia and Berkshire) symbolize an attempt—however halfhearted—to realize this dream. Even the language used in the above quote connects the ships' pods with Eden, particularly in the second sentence "until that day, *may God bless these gardens* and the great men who cherish

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[82] Ibid.

[83] Duncan, "Silent Running," last page. The film's "special thanks to" credits list consists of "American Airlines; AMF Incorporated; American Optical Corporation; Concord Communications Systems; Dow Chemical U.S.A.; Duro-Test Corporation; Fairchild Republic Division; Kasper Instruments; Polaroid Corporation; Rapistan; Scientific Products; Spacelabs, Inc.; Tektronix, Inc.; Thetford Corporation; Univac Division, Sperry Rand Corporation; The United States Department of Agriculture Forest Service."

them" (emphasis mine). This language recalls that found in Genesis, particularly Genesis 1-2 which deal with the Earth's creation, humankind's role on Earth, and the Garden of Eden. However, the corporately-sponsored ships are ultimately guided by commercial need. Once the crews destroy the biome pods, the ships are to return to Earth where they will reenter commercial service.

We never see the Earth close up during the course of the film, instead seeing the planet only when Lowell looks through a telescope (at 01:00:17).[84] This shot highlights the distance between Lowell and the nature he wishes to save – between Lowell and the reality of the film's Earth. Not only does Lowell disagree with his crewmates about the current state of life on Earth, he maintains an idyllic image based on ecomemories of a past environment.

John, Marty, and Andy laugh at Lowell's vision of nature; they clearly feel humankind has reached utopia and Lowell's ideas of the future Earth are unrealistic. Early in the film (approx. 00:04:50) we see John, Marty, and Andy enter what appears to be a form of "rec room." As they enter Marty comments, "You know, he [Lowell] told me a whole story this morning, about how they're gonna refoliate the Earth." Later in the same scene, the four men play poker and await a promised radio transmission. In a happy, "I've been waiting for this"-tone Lowell tells Marty "it's my feeling that they're about to reestablish the parks and forest system."

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[84] For an in-depth discussion of the effect of space exploration on environmentalism see: Holly Henry and Amanda Taylor, "Re-thinking Apollo: Envisioning Environmentalism in Space." *Sociological Review*, 2009.

MARTY: [Sarcastically] With you no doubt as director?

LOWELL: Can you think of anybody better? More qualified? Huh?

[. . .]

LOWELL: I've spent my entire last eight years up here dedicated to this project.

Now, can you think of anybody more qualified?

[Cut to MS John and Andy. Seem to ignore Lowell.]

ANDY: Really its more likely they're going to announce cutbacks.

[Cut to CU Lowell, looking down at cards.]

LOWELL: Sorry. There's no way they're gonna announce cutbacks, not after this

amount of time

[Cut to Marty.]

MARTY: [Laughingly.] Hey, Lowell, you're dreaming.

The crew's reception of Lowell's ideas shows that they approve of the Earth's current "perfect" state and wonder why is it either necessary or desirable to reestablish the rescued biomes and return to a past nature that exists only in memory. It also underlines the fact that Lowell stands as a sole voice for the environment. This connects with the filmic tendency to focus on an individual's story/change/struggle.

In a later scene (00:15:09-00:18:55), as Lowell eats a cantaloupe he grew in the pod, he and his crewmates argue over Earth's then current state. The exchange provides a direct description of the ecomemory on which Lowell builds his idyllic Earth.

LOWELL: [Wide eyed. Said forcefully, almost fanatically.] It [a cantaloupe] calls back a time when there were flowers all over the Earth! And there were valleys. And there were plains of tall, green grass that you could lie down in, that you could go to sleep in! And there were blue skies! And there was fresh air! And there were things growing all over the place, not just in some domed enclosures blasted some millions of mils out into space!

[. . .]

On Earth, everywhere you go the temperature is seventy-five degrees. Everything is the same. All the people are exactly the same. [Cut to CU Marty.] What kind of life is that?

[Cut to CU Andy.]

ANDY: Lowell, if it's so rotten, why do you want to go back?

[Cut MS Lowell.]

LOWELL: Because it's not too late to change it.

[Cut MS Andy and John.]

JOHN: [Chuckles.] What do you want, Lowell? I mean, there's hardly any more disease. There's no more poverty. Nobody's out of a job.

[. . .]

LOWELL: But do you know what there's no more of, my friend? There is no more beauty and there is no more imagination. And there are no frontiers left to conquer. And you know why? Only one reason why! One reason why! The same attitude that you three guys are giving me right here in this

room today and that is: nobody cares. [Looking at photographs stuck to the wall behind Andy, John, and Marty.] Look on the wall behind you. Look at that little girl's face. [Cut to CU Lowell. Teary.] I know you've seen it. But do you know what she's never gonna be able to see? She's never going to be able to see the simple wonder of a leaf in her hand because there's not gonna be any trees. Now you think about that.

[Cut to CU John. Cut to CU Marty; sighs. Cut to LS all four men.]

JOHN: The fact is, Lowell, if people were interested something would have been done a long time ago.

The last part of this exchange indicates that all four men have known a planet with trees. However, we do not know if they directly knew the eden-esque nature found in Lowell's description (i.e. existed before he left Earth) or if Lowell has merely heard about it. It is presumably for those lost elements (green grass, fresh air, et cetera) that Lowell is nostalgic. Being nostalgia, however, it is uncertain that the beauty he misses ever actually existed for him. Therefore, while Lowell's nostalgia appears at first glance to be a form of postmemory it is better described as displaced nostalgia.

Displaced nostalgia describes a person's desire/longing for a time they do not themselves know first-hand. Similarly, memory – including ecomemory, as discussed in chapter 1, can be based on either first- or second-hand experience. Researchers typically use postmemory when researching trauma and traumatic events, as it relates to second-hand memory. I contend that in Lowell's case displaced nostalgia mixes with

postmemory's trauma-linked elements. The environment's treatment by humankind, both on the planet and in the space pods, does traumatize Lowell; particularly when the pods are destroyed.

Evidence of this trauma appears throughout the film; we see some in the guise of Lowell's unrealistic images of the present. For example, neither Lowell's belief that he will become the new national parks director once back on Earth nor his continued belief that the planet will revert from its synthetic to its original non-manmade state are realistic. We also see trauma in specific moments. For example, Lowell's action of steering the ship closer to and beyond Saturn causes the pod's plants to start wilting. This at first stumps the botanist, causing him to embody a certain sense of hopelessness. Only after Anderson, one of Lowell's superiors and a would-be rescuer comments "It's awfully dark out here," does Lowell realize the cause (the ship is getting further from the sun). He then erects powerful lamps to mimic the fading sun.

Lowell's description of a past time also illustrates how he remembers a past Earth. In this function, the edenic qualities of Lowell's description grow in significance. It underlines the disconnect between the remembered (and/or imagined) and the real, as well as highlighting the utopian qualities of Lowell's visions of and wishes for a future Earth. It also provides insight into Lowell's relationship with the pods in his care.

We see only one Valley Forge biome pod for more than a second or two; it has lush vegetation, clean water, and small animals. Even Lowell's appearance speaks to his remembered idyll. Periodically we see Lowell wearing a white robe, usually while in the pod but, briefly, also when interacting with his crewmate John. For example, in the

Figure 5. Lowell teaches Dewey (left) and Huey (right) how to plant a tree.

opening sequence Lowell wears the robe while in the pod, sitting on the grass with rabbits (at 00:02:24). He also wears the robe when he teaches the drones how to plant a tree and while working on plants and studying a "Conservation Pledge" in his cabin (at 00:55:40 and 00:58:06, respectively). This robe signifies images of St. Frances of Assisi, which typically depict Frances surrounded by small animals in a pristine nature. Doubtless the film references St. Frances because he is the patron saint of ecology and animals. The connection was an intentional choice made by costume designer Ann Vidor.[85] Although Lowell does wear a flight-suit, the white robe provides a contrast to his crewmates who we only see wearing flight-suits and who do not have Lowell's environmental ideas.

Lowell's nostalgic description also serves as a way to differentiate between the two proposed utopias. While it may appear as if the utopias dreamed of by Lowell and by those in power are polar opposites, in many ways they are not. Both propose a change for what each party considers the better and neither outcome is described as a dystopia, per se. Both visions represent abstract utopias. The ecomemories that drove

[85] Kermode, *Silent Running*, 63; Barbee, "The Making of *Silent Running*."

the pods' creation and those that drive Lowell's actions are inherently the products of wishful thinking, of dreams. As noted in chapter 1, shifting from dream to reality is central to an abstract utopia becoming concrete. These dual visions, however, never make that change; and, because Utopia is a fictional land (and other utopias are unattainable), they never can become concrete.

The authorities' originally based their utopia on the life sustained in the various space pods; however, they ultimately destroy that eden. Life on Earth will continue on without a natural environment, with a solely manmade environment.

Lowell's utopia is the dream of one man; but he does not have the necessary power to effect lasting change by himself. He does continue to live and care for the pod once he has killed his crewmates, but this does not help him achieve his dream. In fact, Lowell's behaviors change once he is isolated from other humans.[86] His actions begin to mirror those of the former crew and it is at this point that he begins to interact with the drones as if they are humans.

Although *Silent Running*'s drones were never human, they do ultimately play the posthuman role of a modified human type. They do not look human, as fictional

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[86] Kathleen Woodward discusses how Lowell's behavior and outlook change once he is alone with the drones. She writes, "We find the botanist displaying a heretofore-unseen conviviality, laughing in delight at the robot's skill in playing [poker]." Kathleen Woodward, "A Feeling for the Cyborg," in *Data Made Flesh: Embodying Information*, ed. Robert Mitchell and Phillip Thurtle (New York: Routledge, 2004), 187.

cyborgs often do,[87] but once Lowell kills his shipmates (to stop them destroying all of the pods) the drones begin to fill the space left by those humans. Lowell reprograms the drones, which were originally meant to help with the ship's maintenance, to help more with the biome. Called Drone 1, Drone 2, and Drone 3 for the first half of the film, Lowell renames the trio Dewey, Huey, and Louie. Their naming, actions, sounds, and increased on-screen presence all help familiarize and "humanize" them. They fill the role of medical team when Lowell gets hurt. He teaches the drones how to help care for the pod and, after Louie is gone, Lowell teaches Huey and Dewey to play poker. During the several minute card-playing scene, we see and hear the drones "talking" to each other through hissing-type noises; Dewey shows Huey his hand while Lowell isn't looking and the scene ends with the drones winning the game. While we do see a very small amount of "personality" earlier in the film, such as foot tapping while waiting, once they are alone with Lowell the drones are more emotive and increasingly easier to anthropomorphize. While this ease is likely partly because we see the drones more, we also see more human-drone interaction. Towards the end of the movie, while being careless in the exact same way his dead crewmates had (with actions he had bemoaned), Lowell accidentally damages Huey. As Lowell works, Dewey moves so he can see Huey the whole time and does not leave Huey's side when Lowell asks him to get a book; Lowell responds, "I understand. I can manage without it." And when it's

[87] A cyborg is a human who has been altered with technology; the word cyborg indicates this by being a shortened version of cybernetic organism. Examples of cyborgs in popular culture include Molly Millions in William Gibson's *Nueromancer* (Ace Science Fiction, pub., 1984), Darth Vader (1977, 1980, 1983, 2005), *The Bionic Woman* (1976-1978), and *Battlestar Galactica*'s human-like cylons (2004-2009).

clear that Lowell cannot fully fix Huey, he apologizes, Huey holds out his claw/hand for Lowell to take, and Dewey tilts his "body" downward, making him seem sad. So while not a “traditional” human-hybrid (in that he does not look at all human), the film ends placing the only hope for a return to utopia in Dewey's mechanical hands.

During the same radio transmission that provides Lowell with the idea of setting up lights to mimic the sun, Anderson also tells Lowell that the Berkshire will “be instrument docking on your port side in six hours.” At which point, Lowell races from the room and we cut to the pod and Lowell putting together and setting up the “sun” lights. At this point, Lowell begins to prepare his own destruction. When he finishes with the lights, Lowell sits down with Dewey and Huey.

Lowell sadly tells Dewey, "I've taught you everything that I know, about taking care of the forest here. And, uh . . . that's all that you have to do now, is just maintain the forest. I, uh . . . I just can't do it anymore. You see, things, uh, things just haven't worked out for me." After this exchange, Lowell and Huey (because he "just isn't working well enough to help") return to the main body of the ship, Lowell prepares the explosives, and disconnects the pod; his last line is delivered as a voice over, "Take good care of the forest, Dewey."

Figure 6. On his own, at the end of the film, Dewey waters the new tree he, Huey, and Lowell planted. The battered watering can depicts children playing outside. The imagery reminds the viewer what has been lost, the fresh grass and clean air of Lowell’s memory.

He then blows up the Valley Forge leaving the pod floating in outer space. In order to keep the last vestige of the old Earth safe, a vestige linked with his ecomemories, Lowell knowingly chooses death. Ultimately his utopia is both posthuman and anithumanist.

Posthuman and anithumanist utopias are, in some ways, similar. Both envision a world in which humankind is no longer in a position of privilege (or dominance) over nature. Their fundamental differences concern humanities' new role. Posthuman utopias posit that humankind must change themselves in order to survive. This "modified survival—as cyborg or through incorporation into some extraterrestrial life form" signifies that only elements of humankind can remain once a utopian world is reached; humankind cannot reach that utopian world in its present form.[88] It also allows "us to put the onus of environmental caretaking where it belongs": on humankind.[89] Anithumanist utopias, on the other hand, ultimately exclude humans. Extinction or the otherwise removal of humankind, through plague, war, et cetera, therefore leaves Earth to itself. At this point "Earth will recover. Long after the traces of human animal have disappeared, many of the species it is bent on destroying will still be around, along with others that have yet to spring up. The Earth will forget mankind. The play of life will go on."[90] The film's remaining pod, then, reverts to a pre-human, edenic state.

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[88] Vincent Geoghegan, "An Anti-Humanist Utopia?" ed. Peter Thompson and Slavoj Zizek, vol. 8, *Privatization of Hope: Ernst Bloch and the Future of Utopia* (Durham, NC: Duke UP, 2013), 48.

[89] Dana Phillips, "Posthumanism, Environmental History, and Narratives of Collapse," *ISLE Interdisciplinary Studies in Literature and Environment* 22, no. 1 (2015), 66.

[90] Geoghegan, "An Anti-Humanist Utopia?", 47.

Lowell's vision of Earth draws on various memories of naturel. The film suggests Lowell was alive before the Earth became un-natural, but we the viewers are left not knowing how much of what he remembers are actually from his direct experience. So, while we seem to have his direct, personal memories, presented in his description of a past Earth discussed, these could actually be second-hand memories. Secondly, his memories of and nostalgia for a pristine nature recall previous visions of nature. The utopia he imagines is like the ideal edenic nature portrayed in Romanticism.[91] If we return to Lowell's description of the earlier, pre-synthetic environment (see p 49) it highlights the beauty and joy of nature, as did the Romantics and Hudson River Valley School.

Lowell is a mix of the past and a harbinger of future elements of the environmental movement. Lowell wishes to protect and conserve nature. At one point we see, hanging on Lowell's cabin wall, a "Conservation Pledge" that states: "I give my pledge as an American to defend from waste the natural resources of my country—its soil and minerals, it's forests, waters, and wildlife." This conservationist attitude draws

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[91] In reaction and opposition to the domination of nature by science and reason and the burgeoning use of nature as resource by industry, Romanticism (late 1700s to the mid-1800s) celebrated nature. "Nature—with its uncontrollable power, unpredictability, and potential for cataclysmic extremes—offered an alternative to the ordered world of Enlightenment thought." Nature was not something to control but something with which humankind should live in harmony. The Romantics called for a return to a pristine, unspoiled nature that was, itself, an ideal. In America, the Hudson River School (ca. 1825-ca. 1880) of painters portrayed the nation's wilderness so as "to convey notions of grandeur and spiritual destiny," as an embodiment of ideal nature. While originating in New York, artists of this school often traveled to and depicted the vast American west. Kathryn Calley Galitz, "Romanticism," (New York: Metropolitan Museum of Art, Oct. 2004), http://www.metmuseum.org/toah/hd/roma/hd_roma.htm; David Melbye, *Landscape Allegory in Cinema: From Wilderness to Wasteland*, (New York: Palgrave Macmillan, 2010), 55.

on ideas from the late 1800s and early-1900s, when those with environmental concerns argued for either conservation (do not stop using nature, but do so wisely) or preservation (stop using nature and preserve that which remains).[92] However, unlike those earlier environmentalists, Lowell shows he is willing to do whatever it takes to save the natural environment. I argue that this makes him a prototype for the radical environmental groups that began to grow in the mid- to late 1970s. At the time of *Silent Running*'s release there had been only very limited radical actions, mainly by Greenpeace; Lowell's actions, however, are similar to those used by members of Earth First! and the later Earth Liberation Front. These groups used direct action techniques and were willing to go to extremes to protect the natural environment; in the years following *Silent Running*'s release, for many members of the public these groups were increasingly the public/known face of environmentalism (see chapter 3).

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[92] Gifford Pinchot, often "considered the founder of modern forestry in the United States," was less interested in preserving nature untouched than standing guard to make sure it was used in the wisest, most efficient way possible." John Muir stood as a leader of the preservation camp. "He proposed . . . that the wilderness areas enriched human life, existing as sacred refuges, antidotes to the stresses of modern society . . . [He] felt government had a moral responsibility to preserve nature, not simply to use it wisely in the name of industry." Muir's desire for a larger national park system came to fruition when, in 1916, Congress passed the National Park Service Act, which "transferred administrative power over the national parks from the United States Calvary to the Department of the Interior." At the time thirteen parks existed; this number grew to 409, covering over 84 million acres by 2015. Carolyn Merchant, *The Columbia Guide to American Environmental History* (New York: Columbia Univ. Press, 2002), 231, 228; Ted Steinberg, *Down to Earth: Nature's Role in American History*, 3rd ed. (Oxford: Oxford Univ. Press, 2013), 137. For more on America's National Parks, see http://www.nps.gov/aboutus/faqs.htm.

Picture Book:* The Lorax *(1971) & Television:* The Lorax *(1972)

While as plainly environmental as *Silent Running*, my next example originally was geared towards a child audience, first as a picture book and then on the small and big screens. Theodor Geisel's cautionary tale *The Lorax* provides another example of how popular culture portrayed ecomemory and the environmentalism of the time.

The Lorax presents a bright, colorful, Edenic world into which the Once-ler enters. When he realizes the financial gains to be made from the native resources (Truffula trees), he proceeds to cut them down and build an ever-expanding, pollution-belching, sneed-producing factory. When the first tree falls the Lorax appears, popping out of the new tree stump, to "speak for the trees, for the trees" and other natural life, and attempts to change the Once-ler's mind and actions. In the end, however, all that remains is a barren, polluted land; all the native animals have left and so, finally, does the Lorax. He leaves behind only the word "UNLESS." The warning is clear "Unless someone like you cares a whole awful lot, nothing is going to get better. It's not." We hear and see the story as the Once-ler tells it to a young boy, who "pays" him "fifteen cents and a nail and the shell of a great-great-great-grandfather snail." The Once-ler also gives the boy the

*Figure 7. The Lorax appears out of the stump of the first Truffula tree the Once-ler cuts down. TV adaptation. [*The Lorax*, 1972]*

last remaining Truffula seed. The ending implies that, if the boy plants and tends the seed, perhaps the Lorax and other fauna and flora will return.

The Once-ler describes the Lorax as: "sort of a man . . . He was shortish. And oldish. And brownish. And mossy. And he spoke with a voice that was sharpish and bossy." In each iteration of the story, the Lorax is covered with orange/brown hair or fur and has a yellow mustache. He is not portrayed as human or even quasi-human but instead is a representative for nature, perhaps even a personification of nature.

Geisel (aka Dr. Seuss) published the picture book in August 1971.[93] Geisel also co-produced a televised animated short film adaptation (for which he wrote the songs and teleplay) that aired in 1972 on CBS stations. This adaptation replicates and enlarges on the book's themes and it also deploys ecomemory in the same way as *Silent Running*. Ecomemory is part of the larger story and specific ecomemory rests in a single individual (the Lorax) speaking for the environment. Unlike *Silent Running*, though, the individual has only a small hope that the idyll will return. Thirty years later Chris Renaud and Kyle Balda retold the tale in a computer animated feature film adaptation (*Dr. Seuss' The Lorax*, 2012), which I will discuss in detail in chapter 4 of this study.

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[93] Geisel "worked almost two years and got nowhere." His wife, Audrey, felt that "something just clicked" on a trip to Africa; "Going over the Serengetti [sic] Plain one afternoon, he looked up and said, 'Look at that tree.' He said, 'They've stolen my trees.'" Geisel then wrote the story in less than an hour. "'Somebody's Got to Win' in Kids' Books: An Interview with Dr. Seuss on His Books for Children, Young and Old," in *Of Sneetches and Whos of the Good Dr. Seuss*, ed. Thomas Fensch (Jefferson, NC: McFarland & Company, 1997), 126; Judith Frutig, "Dr. Seuss's Green-Eggs-and-Ham World," in *Of Sneetches and Whos of the Good Dr. Seuss*, ed. Thomas Fensch (Jefferson, NC: McFarland & Company, 1997), 80-81.

In his more than sixty children's books, Geisel typically steered clear of politics, however a handful did address contentious issues.[94] *The Lorax* is Geisel's "angriest" book, as well as his favorite; "intended to be propaganda," the story came from him being "angry about the ecology problems."[95] Despite this, Geisel did attempt to keep the story from being too pedantic. In turning his story into a television special, Geisel maintained the tale's political message. He even further highlighted then current environmental issues, such as water pollution in the Great Lakes.

> LORAX: [To the Once-ler.] Your machinery chugs on day and night without stop, making gluppity glub and also schlupty schlup. You're glumping the pond where the humming fish hum. No more can they hum for their gills are all gummed. [Cut to show dejected-looking fish walking out of the pond in line.] So I'm sending them off. Oh, their future is dreary.
>
> FISH: [Aside to camera.] I hear things are just as bad up in Lake Erie.

Both the picture book and the short generally garnered favorable responses, but, like Carson's *Silent Spring*, the picture book also received negative responses,

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[94] This sixty plus count consists of books Geisel wrote as both Dr. Seuss and Theo LeSieg (another pseudonym, LeSieg being Geisel spelled backwards). Geisel books with a social message include, *How the Grinch Stole Christmas* (1957), *Yertle the Turtle* (1958), *The Sneetches* (1961), and *The Butter Battle Book* (1984), which take up the commercialization of Christmas, anti-authoritarianism, anti-Semitism, and the arms race/Mutually Assured Destruction, respectively.

[95] Cynthia Gorney, "Dr. Seuss at 75: Grinch, Cat in Hat, Wocket and Generations of Kids in His Pocket," in *Of Sneetches and Whos of the Good Dr. Seuss*, ed. Thomas Fensch (Jefferson, NC: McFarland & Company, 1997), 88; Frutig, "Dr. Seuss's Green-Eggs-and-Ham World," 80.

particularly from those with ties to the logging industry. The controversy continued well past the 1970s; the book even holds a place on the American Library Association's banned book list. In 1989 western loggers attacked the book, linking it to anti-logging actions in the American northwest. Drawing on tactics used by "'denominational and professional groups' . . . parents in Laytonville, California, angered by *The Lorax*'s 'anti-logging' message, protested its inclusion on the second-grade reading list. Although the school board ultimately voted to retain the book."[96] The "loggers saw it as blatant propaganda and agitated to have it banned from the school's required reading list. 'Our kids are being brain washed. We've got to stop this crap right now!' shouted their ad in the local paper, taking much the same belligerent anti-environmentalist tone as the Once-ler himself . . . ."[97]

The logging industry still felt so threatened almost a decade later, that in 1995, the National Wood Flooring Manufacturers Association sponsored a book, *The Truax*, as a rebuttal to *The Lorax*.[98] In this reworking, the Truax is the logger and he's talking to Guardbark, who appears to be magical in a way similar to the Lorax, telling how trees are replanted to balance out those that are cut down and how those new trees

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[96] Lisa Lebduska, "Rethinking Human Need: Seuss's *the Lorax*," *Children's Literature Association Quarterly* 19, no. 4 (1994), 170.

[97] Alison Lurie, "The Cabinet of Dr. Seuss," in *Of Sneetches and Whos of the Good Dr. Seuss: Essays on the Writings and Life of Theodor Geisel*, ed. Thomas Fensch (Jefferson, NC: McFarland & Company, 1997), 158; "Documentary - Nature (Total Grosses)," http://www.boxofficemojo.com/genres/chart/?id=naturedoc.htm.

[98] Anti-logging efforts continued from the late 1980s to the early 1990s. However direct action groups began to violently attack practices such as logging; the Earth Liberation Front came to the United States in 1996, but the group was active in England beginning earlier in the decade. See chapter 3 history section for more information.

encourage greater biodiversity. Birkett ends the book with "he said, 'I am Guardbark, ward of the trees—and I like the way that you're managing these. I'm glad that we chatted, conversed, and confided. I now think our views aren't quite so one-sided. And perhaps best of all,' the Guardbark beamed, 'I think things ARE NOT quite as bad as they seemed!"[99] This attests to a realization of the importance of children, and how they and the books/films they like might impact the adults in their life.

Unlike *Silent Running*, in each iteration of *The Lorax* we see only a single version of the past, presented as a human-free utopia. Here the environment is edenic. *The Lorax*'s pre-Once-ler world appears to have been undiscovered (or, at least, is uninhabited) by humankind, which adds weight to the environmental destruction that follows the Once-ler's arrival.[100]

Figure 8. Boy-listener at Lorax's stone circle, TV adaptation. [The Lorax, *1972]*

In both 1970s versions (picture book and TV special) the boy-listener is almost like an explorer. The Once-ler seems to be the only

[99] Terri Birkett, *Truax*. National Wood Flooring Manufacturers' Association Environmental Committee, 1995. http://woodfloors.org/truax.pdf. See chapter 3 for a discussion of the period in which Truax appeared.

[100] In both the picture book and TV version, it is never made clear that the Once-ler is or is not human. We see only his hands/arm; while these are shown to be green, we are told he is wearing "gruvvulous glove[s]." However, in the 2012 movie, while we first see just the Once-ler's eyes and green gloved hands, as the movie proceeds we see that the Once-ler is unquestionably human.

being who remembers nature's original state. This makes the consequences direr than those in *Silent Running;* the choice of whether or not to act is left entirely to the boy (or, to extend the story, to the real world's next generation). The Once-ler underlines this choice as he nears the end of his tale.

ONCE-LER: [Voice over, as narrator.] Now all that was left, 'neath the bad smelling sky, my big empty factory, the Lorax, and I. The Lorax said nothing, just gave me a glance. Gave me a glance, a sad, sad backward glance, as he lifted himself by the seat of his pants. And I'll never forget the look on his face as he hoisted himself and took leave of this place through a hole in the smog without leaving a trace. And all that the Lorax left here in this mess was a small pile of rocks with one word –

BOY: [Looking up at the Once-ler in the top window of his house.] Unless?

ONCE-LER: Yes, unless. [Cut to boy looking at the rock circle.]

BOY: What's an "unless"?

ONCE-LER: Just a faraway word, just a faraway thought.

BOY: A thought? About what? About something I ought?

ONCE-LER: Ah. A thought about some thing's that somebody ought. A thought about something that somebody ought. Unless someone like you cares a whole awful lot, nothing's going to get better. It's not. [Boy turns to walk away.] Hold on a minute. Where is it? Don't go. I've got something here for you. Ah, here it is. [Holds up a brown almond-shaped seed.] A

> Truffula seed. The last one of all. Catch! [Tosses seed down to the boy.] You're in charge of the last of the Truffula seeds. And Truffula trees are what everyone needs. Plant a new seed. Treat it with care. Give it clean water, feed it fresh air. Grow a forest. Protect it from axes that hack. And the Lorax and all of his friends may come back.
>
> [Once-ler closes window. Boy walks away over a rise, looking down at the seed cupped in his hands.]

According to Lebduska, "The book [and TV special] concludes tentatively . . . *The Lorax* involves all of its readers in environmentalism's complexities . . . ."[101] If the boy does not act, not only will nature not return, but the utopian ecological memory will be lost. Other than the single Truffula seed there is no remaining nature; once the Once-ler dies, the Lorax's world will wholly be a world without human and nonhuman animals. Conversely, it is assumed that if the child acts, nature will return to the original eden, albeit one that includes humankind. For this reason, Geisel felt that the possibility for hope balanced out the tale's pedantic qualities.[102] However, in both the book and television special the story ends without sharing what the boy decides.

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[101] Lisa Lebduska, "Rethinking Human Need," 175.

[102] Gorney, "Dr. Seuss at 75," 88.

Television:* Cosmos: A Personal Voyage *(1980)

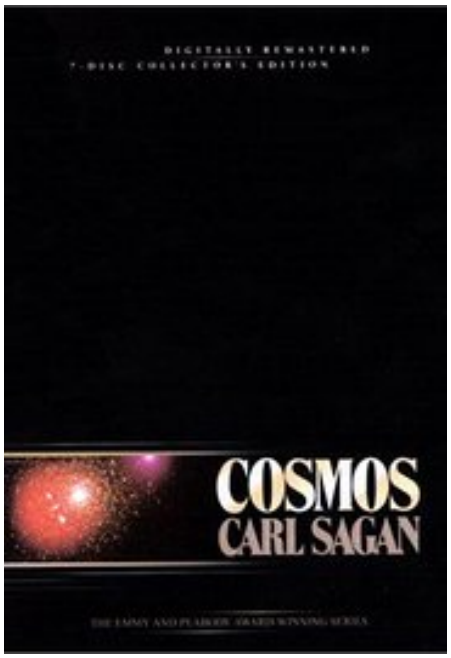

Figure 9. Home-release packing cover for the original series, Cosmos: A Personal Journey.

Such overt concern for the environment and use of ecomemory were not solely restricted to works of fiction. For thirteen evenings in 1980 scores of viewers tuned in to have Carl Sagan take them on a journey from the evolution of life on Earth to the evolution of stars to ancient Alexandria and NASAs (then recent) Voyager project. *Cosmos: A Personal Voyage* (*C:APV*) "was a watershed moment for science-themed television programming . . . [it] was eventually watched by 400 million people in 60 countries, making it public television's most-watched short-form series until the Ken Burns documentary 'The Civil War'" in 1990.[103] Its popularity led to a companion book *Cosmos*, also by Sagan.

At the time Sagan's show aired, he was known to the public as an astrophysicist and science educator. He also had already appeared several times on *The Tonight Show with Johnny Carson* as well as hosting a televised series of science education programs for *The Royal Institution Christmas Lectures*. Beyond viewer ratings, *C:APV* earned a Peabody Award, three Emmys, two further Emmy nominations, and a Hugo Award nomination.

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[103] Dave Itzkoff, "'Family Guy' Creator Part of 'Cosmos' Update," *New York Times*, 2011, Published electronically 2 March 2012, http://www.nytimes.com/2011/08/05/arts/television/fox-plans-new-cosmos-with-seth-macfarlane-as-a-producer.html

Throughout the series, Sagan did not shy away from directly addressing the Earth's current environmental situation. As a vocal supporter of protecting the environment, as well as nuclear disarmament, Sagan consistently points to how humans are changing the planet and how close we are—how easy it would be—to destroy both our home and ourselves through both environmental damage and nuclear war. Decades later, in an updated *Cosmos* series, we would again learn about humankinds' impact on the planet. I discuss the new series in greater detail in chapter 4.

Figure 10. Sagan in episode 4 "Heaven and Hell."

While environmental concerns weave throughout the series, *C:APV*s fourth episode, "Heaven and Hell," most directly combines ecological issues and ecomemory. Here Sagan addresses the greenhouse effect by discussing Venus and then proceeds to the many ways humans are destroying the Earth's environment. At the episode's end, Sagan notes that "it may not take much to destabilize the climate, to convert this heaven, our own cosmos, into a kind of hell." human activities, such as "the indiscriminate destruction of vegetation," are slowly creating a Venus-like planet Earth.

Sagan relies almost entirely on direct language to address these subjects, leaving little to inference. The episode's structure begins with Venus, moves to greenhouse gases, and how humankind has and is affecting their planet. This marks a departure

from the "lone hero" found in *Silent Running* and *The Lorax*. While Sagan stands as a sole spokesperson for nature, he repeatedly states that the destruction has been a group effort – and so, too, must be the work to restore nature.

There are two points of interest here. First, the heaven/hell dichotomy automatically signifies specific images. Sagan tells us that, of our solar system's planets "Venus is the most like hell" while "Earth is a comparative heaven." Throughout the episode this and other language directly indicates that, over time, Venus's environment shifted to its present, hellish state; it now is a cautionary tale for humankind. Earth and nature itself, meanwhile, is paradisiacal. If we, the viewers continue the heaven-hell dichotomy, Earth is, in fact, the ultimate eden. Humankind, though, must heed the Venusian warning. Sagan tells the viewer in voice over that "our generation must choose which we value more: short-term profits or the long-term habitability of our planetary home?" This follows multiple examples, told both through visuals and narration, of how we are not taking care of our planet.

Secondly, Sagan's heaven/hell discourse does not entirely follow the lost utopia narrative-aspect of ecomemory. While a past nature may have been even more heaven-like (particularly before the Industrial Revolution), the then current (1980) version of nature *is* a utopia of sorts. However, we are losing that utopia. Sagan lays much of the blame for this on man's misuse of nature. "Today forests and grasslands are being destroyed frivolously, carelessly by humans who are heedless to the beauty of our cousins the trees and ignorant of the possible climatic catastrophes. . . . " Throughout this monologue, the viewer sees slow pans of burnt and smoking tree stumps and clear

cutting (and the air pollution created in the process), all of which illustrate a commodified and misused nature. Thus, in Sagan's presentation we once again find the argument that utopia cannot exist as long as we use nature as a commodity.

Of the examples discussed in this chapter, *C:APV* lies closest to the end of the period under review, airing as it did in 1980. As is discussed further in the following chapter, the environment's place in media began to alter in 1981 with the start of the first Reagan presidency. Sagan's words, therefore, acquire a greater sense of warning as they are the last for some time to directly address environmental concerns while when addressing ecomemory.

Advertisements & PSAs

With the coming of Earth Day and the rise in environmental concerns, advertisements from the 1970s show companies and industrial interests putting a green veneer over their business. Some touted green changes they had made to their products or companies. For example, in 1970 Coca Cola introduced a campaign touting the drink—or more specifically the bottle—as environmentally friendly. The text above a bottle of Coke reads, "This is the bottle for the Age of Ecology. What the world needs today are containers that recycle." While recyclable there is no indication that the company made any further environmental changes.

In the mid-1970s the American Electric Power System created a campaign in response to the 1973-1974 oil embargo, often using the tagline illustrated in figure 11: "America has more coal than the Middle East has oil. Let's dig it!" They touted coal as a

"clean" alternative to (OPEC-produced) oil and as a way to fight "galloping unemployment." Another example, from late 1974, includes a drawing that depicts two sheiks reading newspapers with headlines that read "USA Has Half of All the World's Coal" and "USA Coal Will Last 500 years." The banner text underneath the image reads "Maybe we should buy American coal fields." The smaller accompanying text questions why the US is not using its coal supply and provides two reasons: "The Environmental Protection Agency won't let us burn much of the Eastern coal we can mine. And the US Interior Department won't let us mine the vast amounts of Western coal we could burn."

Figure 11. Tagline and image that appeared on the AEPS oil embargo campaign pieces.

Similarly, Bethlehem Steel Corporation attempted to highlight its green actions while at the same time placing some blame for financial issues on the government. In the 1976 newspaper ad shown in figure 12, Bethlehem discusses why they had to lay off some workers "We had to 'stretch out' the completion of a number of expansion projects we had under way. That cost people jobs. **One program we had to continue: pollution control**."[104] While sounding as if they are supportive of the fight against

[104] Bethlehem rests much of its presentation on the idea that the steel market will grow exponentially between 1976 and 1983. This appears to have been a common industry expectation, based on "outside studies backing [industry leaders] estimate that the United States will require an additional 30 million tons of raw steel productive capacity by 1983 to meet, the needs of an expanding American economy. They are worried about the huge costs of such an expansion and how they will raise the funds for it." For more information, see Thomas E. Mullaney, "Economics of the Times," Article, *New York Times* (1976), http://www.nytimes.com/1976/09/12/archives/economics-of-the-times-confidence-at-steel-mills.html?_r=0.

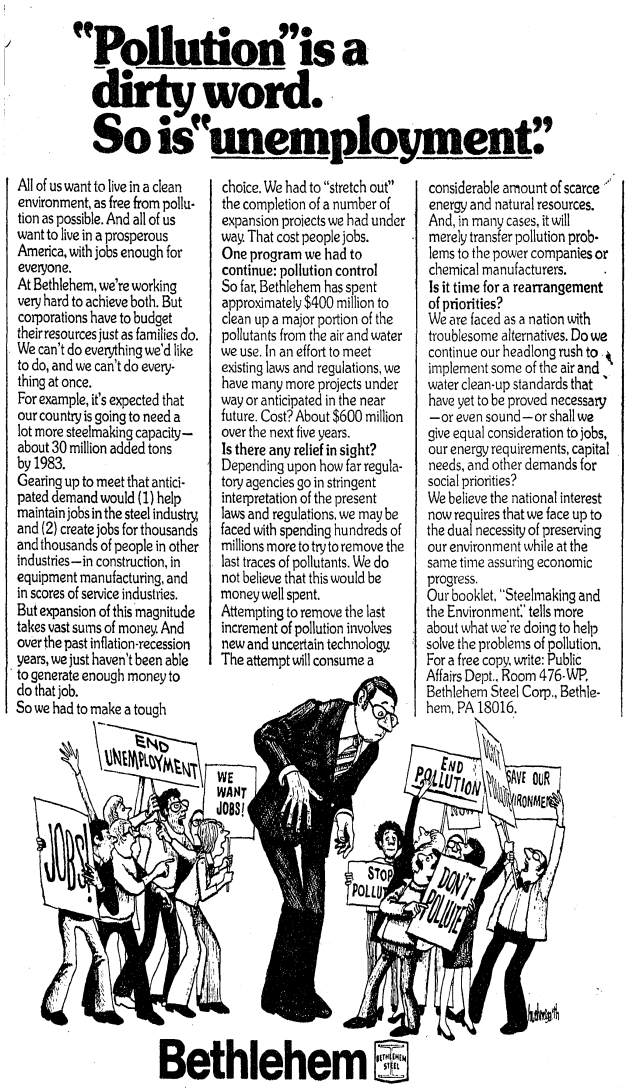

Figure 12. Bethlehem Steel Corporation newspaper advertisement. 11 Aug. 1976. [Wall Street Journal]

pollution, text in the third column places blame for the environment/jobs inequality at the government's feet. "**Is it time for a rearrangement of priorities?** We are faced as a nation with troublesome alternatives. Do we continue our headlong rush to implement some of the air and water clean-up standards that have yet to be proved necessary—or even sound—or shall we give equal consideration to jobs, our energy requirements, capital needs, and other demands for social priorities?" The ad ends offering the public a "Steelmaking and the Environment" booklet. Overall, the ad is a double-edged sword for environmental concerns; Bethlehem supports a clean environment, acknowledging as they do public desire "to live in a clean environment, as free of pollution as possible," but presents the case that they are in an either/or position—they can either maintain pro-environmental actions or create jobs. By 1979 some industries were no longer providing even an uneven environment-industry image. That year

Monsanto ran a campaign that attempted to counter environmentalist claims as frivolous and their own work as wholly positive.

As seen in figure 13, the top half of the Monsanto ad consists of a child on all fours looking at a dog; the pair are in lush, bright green grass. Above this picture is the text: "Without chemicals, life itself would be impossible." The below-picture text begins with "some people think anything 'chemical' is bad and anything 'natural' is good. Yet nature is chemical." It proceeds to tell how, "chemicals help you live longer . . . Chemicals help you eat better. . . . " In this way, Monsanto is directly addressing environmentalists who spent the years since *Silent Spring* vocally fighting the ills caused by chemicals, such as possible harm to children and the questionable use of chemical pesticides on yards and foods. However, they are also – possibly unwittingly – drawing on elements of ecomemory. The colors and positioning of the subjects in the ad's photograph create an image of nature as bright, colorful, even beautiful; meanwhile the language seemingly argues that such a nature is not simply the present, but also a continuation of the past. For this reason, I argue that the ad uses ecomemory in an attempt to subvert environmentalist claims that the planet is no longer and eden. Unlike the image of a past nature created in either

Figure 13. Monsanto print advertisement.

Silent Running, *The Lorax*, or *Cosmos: A Personal Voyage*, though, Monsanto attempts to show that chemicals are needed and so, by extension, are the chemical companies.

At first glance these ads may appear to draw on ecomemories of a clean environment, but, on closer inspection, they indicate a disconnect between the idyll and the "real" world. The first is just that, an ideal, while the latter exists and faces economic difficulties. The companies, therefore, do not harbor a desire to return to a past nature. In fact, their ideal is not entirely ideal; Bethlehem's ad describes "a clean environment, as free from pollution as possible" rather than a wholly pristine environment.[105] The companies instead look to a future where "wise use" prevails and there is nothing wrong with humankind using nature's resources.

Unlike the other examples in this chapter, these corporate ads generally do not deploy ecomemory. In the rare case when it faintly appears, the ad deploys a coopted ecomemory that attempts to shift the narrative from a lost past to a very alive present. Similarly, environmental PSAs of the period also unevenly use ecomemory. While some do not directly deploy ecomemory, others do but with an individual/group blend.

Countering business-based advertisements addressing the environment, there were a growing number of print pro-environmental images. As early as 1956 the national non-profit group Keep America Beautiful (KAB) launched its first anti-litter PSA campaign.[106] A large number of the environmentally friendly images of the early

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[105] Bethlehem's language mirrors that of Lowell's crewmates in *Silent Running*, focusing, as it does, on jobs.

[106] KAB historical information from: Keep America Beautiful, "Mission & History," https://www.kab.org/about-us/mission-history.

Figure 14. Woodsy the Owl. [KAB]

1970s focus on the issue of litter and pollution, as a form of littering. Examples include a series of "Every Litter Bit Hurts" PSAs, always featuring a child typically admonishing adults (generally or their parents in particular) and the US Forest Service's "Woodsy the Owl," who beseeched "Give a hoot! Don't pollute."[107] KAB produced a series of anti-littering campaign ads as part of the "People start pollution. People can stop it." campaign that included print ads on buses and billboards.

KAB also was behind one of the most iconic images of the decade. Colloquially known as the "Crying Indian" PSA, KAB produced print and television versions depicting a Native American man, Iron Eyes Cody,[108] with a single tear rolling down his cheek. KAB introduced the campaign in 1971 and revisited it in 1975. The print PSAs consist of a close-up of Cody's face accompanied by text; the text of one version is illustrated in figure 15 while another version simply states "Pollution: it's s crying shame." The sixty-second television spot provided a larger scope for the same message.

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[107] The USFS introduced Woodsy on 15 September 1971. USFS still uses Woodsy, sometimes in conjunction with Smokey the Bear. Woodsy has also appeared in other, non-USFS contexts; in 2010 he appeared in the "Insheeption" episode of *South Park* (season 14, episode 10).

[108] Cody was an actor known for playing Native American roles. He claimed to be a mix of Cherokee and Cree and from Oklahoma. Legal documents, however, show that he was an Italian-American from Louisiana named Espera DeCorti. Amy Waldman, "Iron Eyes Cody, 94, an Actor and Tearful Anti-Littering Icon," Obituary, *New York Times* (1999), http://www.nytimes.com/1999/01/05/arts/iron-eyes-cody-94-an-actor-and-tearful-anti-littering-icon.html.

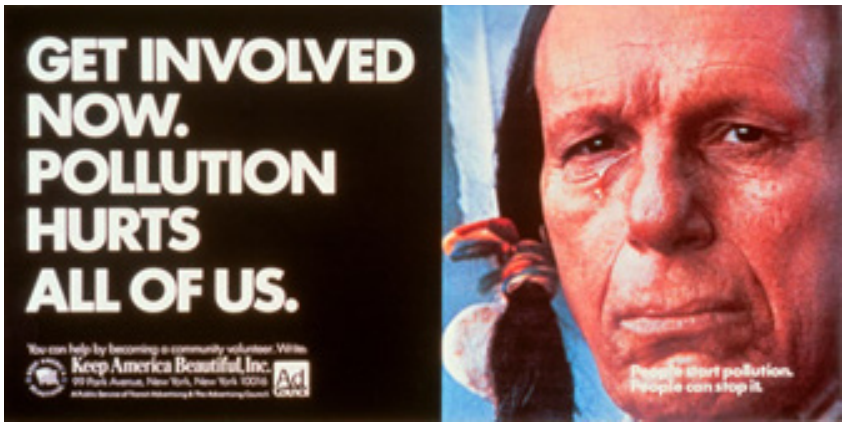

Figure 15. Keep America Beautiful "Crying Indian" campaign billboard. [KAB]

Music plays over long shots of Cody paddling a canoe from a clean natural (wooded) world, then past factories and smokestacks, before finally beaching the canoe. Put another way, he moves through and from an ecomemory idyll to an illustration of what happens when we forget that memory. In this forgetting we see increasing evidence of human-created pollution, trash in the water and on the beach, and air pollution belching from factory smoke stacks. Once on shore, voice over narration begins. As Cody walks to the side of a freeway we hear that "Some people have a deep abiding respect for the beauty that was once this country." As Cody observes a passenger throwing litter from a car, we hear via voiceover "and some don't." He looks at the trash then up directly into the camera, which does a slow zoom up to his eye and the tear. Over this final shot and zoom the narrator says, "People start pollution, people can stop it."

Although the text and narration locate the “Crying Indian” in the anti-littering "family" of PSAs, I would argue that it is also in the same category as *Silent Running* and *The Lorax*. The "Every litter bit hurts!" campaign focused solely on keeping nature clean for outdoor enthusiasts. However, by juxtaposing Cody’s clean nature with the polluted modern world the "Crying Indian" campaign uses a nostalgia for wilderness and a

Romanticist, celebratory idealistic connection of humankind to nature. The campaign also employed the concept of the "noble savage" who is connected to, and has an understanding of, the natural world; thereby we should pay heed to Cody's message because he has this connection with and understanding of the environment.

Similarly, an anti-litter poster featuring the cartoon character Pogo also calls on an idealized past nature (fig. 16). In 1970 Walt Kelly created a drawing showing Pogo the opossum facing a partially treed space. The ground is liberally covered with litter and Pogo, holding a bag and stick for picking up litter, looks over his shoulder directly at the viewer. The accompanying text proclaims, "We have met the enemy and he is us." Although the viewer does not literally see the former ideal, the imagery and language evokes the collective ecomemory. The "enemy" of Pogo's world has forgotten it's ecological idyll and, therefore, feels no qualms about littering. Kelly created an updated version in 1971, which used imagery and text similar to that in the 1970 version. The two panels show Pogo with his friend Porkypine walking through the swamp—or attempting to. In the second panel, while

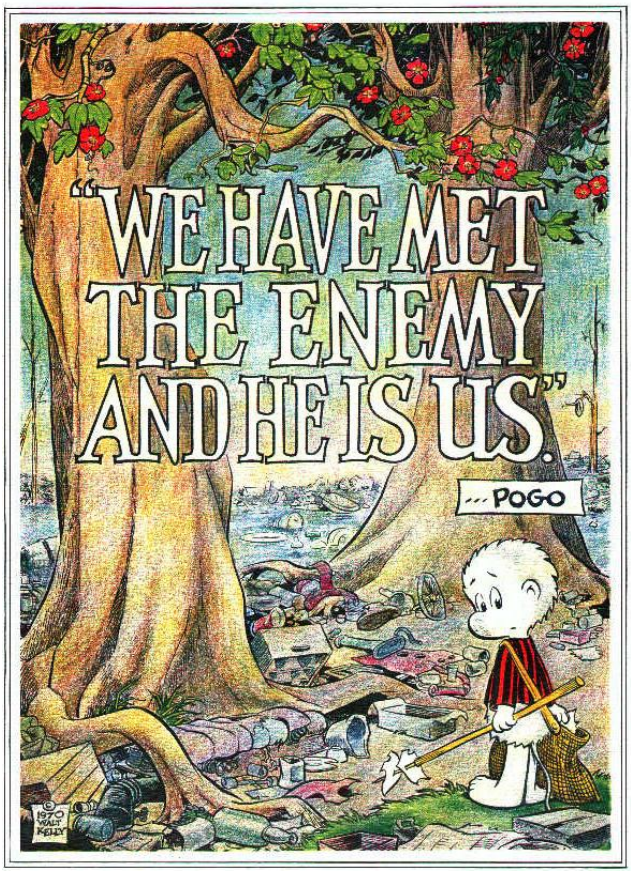

Figure 16. Walt Kelly, 1970.

the pair sits on a log overlooking a landscape of litter, Porkypine says, "It ***is*** hard walkin' on this stuff," to which Pogo answers, "Yep son. We have met the enemy and he is us." Pogo already was well-known from newspaper funny pages. I would argue that, by drawing on a previously known character, Kelly created a sympathetic character with whom the viewer can empathize. Unlike the "Crying Indian" the audience was more likely to have previous knowledge about the character, his world, and the changes to that world being depicted in the different posters.

Conclusion

During the 1970s, concern for the environment grew, was nationwide, and led to both popular and governmental action. Humankind caused environmental degradation, therefore it should work to "fix" nature. There gradually was optimism that we could turn back the clock, whether it be through education, government regulation, or direct action (as seen in the film and television analyzed in this chapter). However, there was pushback and some degree of cooption of environmental concerns—and ecomemory—by large corporations whose ads characterize environmentalists as "Chicken Little," causing needless fear and concern.

Beyond the themes of ecomemory and utopia, the better conditions presented in the media analyzed here are often similar. Although we do not see Lowell's eden in *Silent Running* his descriptions "call to mind" a bright, sunny sky over open green lands and just as easily can largely apply to the Lorax's version: bright, sunny, and colorful. Similarly, the pristine land Iron Eyes Cody leaves, is sunny and vibrant. In all three

cases the idealized environment appears "untouched." Even while Cody obviously is a human presence in the ideal of his PSA, KABs presentation of his character draws on older, white Euro-American stereotypes of the connectedness of nature and Native Americans.

These utopias are all threatened by pollution and littering. As with the KAB PSAs pollution is portrayed as another form of littering. This is not surprising since many of the crises that came to light during the period involved pollution, from the Cuyahoga River repeatedly catching fire to oil spills to Love Canal.

The concern for the environment that led both to Earth Day and the growth of the present movement is evident in the visual media of the time. The momentum heading into April 1970 continued throughout the decade. New and increasing knowledge about the planet's plight led both to imagined bleak and/or unnatural futures and to "remembered" environmental ideals. Just as the earlier Romantics presented nature as eden-esque, recognizing what we might lose led filmmakers, writers, television producers, advertisers, and PSAs to portray the environment being lost as an eden.

By decade's end America had elected a new Republican presidential administration and as the 1970s turned to the 1980s, pro-environmental popular visual culture went into decline. Over the next two decades the environmental movement remained, although it's form and actions shifted, but environmental issues faded from the general visual media. While the 1970s provide an example of environmental

momentum carried through the decade, the 1980s ultimately provide one of business and corporate interests undermining environmental concerns.

Chapter 3: 1981-2004

As the "environmental decade" of the 1970s came to a close, a more conservative era began. The 1980 election of Ronald Reagan as president heralded this new era in the US.[109] The period also heralded changes in environmental action. While in the 1970s the growth of environmental organizations and environmental legislation were fairly even, this trend did not persist in the two decades that followed. While on the one hand the discourse surrounding environmental concern in visual ecomedia shrank and domestic government actions weakened environmental legislation, on the other hand environmental groups grew continued to grow.

Similar contradictions found their way into the visual media of the time. The amount of green newspaper reporting and advertising decreased, as did the number of non-family films with environmental themes. Producers did continue to create films and TV shows with these themes for children, but the subject matter differed significantly from that seen in the 1970s. The environment was often less apparent and was secondary to other, unrelated storylines (e.g. world peace). For this reason, rather than using specific TV shows, ads, or PSAs, in the discussion that follows I draw on quantitative studies from a variety of fields that cover media such as TV programming, magazine covers, and advertising.

[109] The previous year a similar shift began in the United Kingdom with conservative Margaret Thatcher becoming Prime Minister

The films discussed in this chapter lie on the edge of the 1980s-90s time frame, as they were written in the mid-1990s, made in the late 1990s, and screened in the opening years of the twenty-first century. The 2001-2003 trilogy *Lord of the Rings* embodies some of the same environmental uncertainty as did other media of the time. Most of the more obvious environmental story points did not survive the adaptation from books to the screen, but unlike some media of the 1980s and 1990s environmental memory is present to a small extent. I argue that the films are something of a bridge between the early movement of the 1970s and the increased awareness that became more visible starting in 2005.

History: The Contemporary Movement, 1981-2004

While environmental organizations continued to grow, the structure of some of the largest and most established became more corporate. As political concern within Washington, DC shifted (see below), the CEOs of the nine largest environmental organizations and a small number of invited funding group heads met in early 1981 to prepare for the changes expected under the Reagan administration. These changes "warranted improvement in the performance of the environmental movement through better coordination among the groups," and, by extension, the defense of environmental legislation that passed in the 1970s. Those involved called this group the Group of

Ten.[110] As Gottlieb points out "the very existence of a mainstream environmental CEO gathering would signify an institutionalization process deemed necessary for environmentalism in the Reagan era." The Group of Ten symbolized a desire to present a strong front and, even though the meetings ended in the late 1980s "critics [continued to use it] as *the* symbol of mainstream environmentalism."[111] But they symbolized only a more mainstream portion of the movement.

Increasingly direct action and grassroots organizations began to populate the movement beyond the mainstream. As mentioned in the previous chapter there was an increase in the former type of group. Some direct action groups adopted more "mainstream" tactics. For example, in the late 1980s Greenpeace created a subgroup tasked with lobbying government on environmental issues. Not all members of these groups, however, appreciated what they saw as activist groups becoming too Group of Ten-like. Such a split within the Greenpeace leadership led Paul Watson to found Sea Shepherd Conservation Group whose work focuses on sea-related issues, such as whaling and overfishing.

Although members of the former Group of Ten continued their legislation-based actions, due to specific well-reported events, direct action groups arguably became the face of the environmental movement. For example, during the late 1980s and early

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[110] Gottlieb, *Forcing the Spring*, 172 (chap. 2, n. 56). Shortly after the first meeting in 1981 a tenth organization joined future meetings. The Group included the National Wildlife Federation, National Audubon Society, Sierra Club, Natural Resources Defense Council, Environmental Defense Fund, Wilderness Society, Council for Environmental Quality, Izaak Walton League, National Parks and Conservation Association, and Friends of the Earth.

[111] Ibid., 171; 175.

1990s, activists in the Pacific Northwest used tree sitting and tree spiking as part of the fight against logging in order to save the spotted owl. The national news media helped portray the activists as extremists, more concerned with (nonhuman) animals than human welfare. For example, a November 1989 editorial argued that environmentalist actions harmed Oregonian families, while another piece from April 1990 underlined the idea that environmentalists will choose the life of "animals" over people.[112] Only a few years later, the Earth Liberation Front (ELF), which began in England in 1992, established itself in the US (1996).[113] ELF quickly established that they were not content with such traditional methods as protests and marches. In fact, due to their actions, by February 2001 the US federal government classified both ELF and its sister organization the Animal Liberation Front (ALF) as ecoterrorist organizations.[114] By classifying direct action groups in this way, not only does the government shape the discourse away from the movement-preferred eco-sabotage, but it also allows for extended surveillance and anti-terror actions, particularly in a post-September 11 world. As of the time of this

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[112] Karen-Alicia Robertson, "Oregon: Put Through the Mill," *New York Times*, 27 Nov 1989, A19.; "Owls Are People, Too," *Wall Street Journal*, 9 Apr 90, A12.

[113] Due to the group's amorphous nature it is incorrect to provide a "founded" date.

[114] Libertarian and Executive VP of the Center for the Defense of Free Enterprise Ron Arnold coined the term ecoterrorism in 1983. The term first appears in a statute in 1988 and in a House hearing in 1998. "If a Tree Falls: A Story of the Earth Liberation Front—In Context" (pbs.org: POV, 2011), http://www.pbs.org/pov/ifatreefalls/photo-gallery-in-context/2/.

The FBI defines ecoterrorism as the "use or threatened use of violence of a criminal nature against innocent victims or property by an environmentally-oriented subnational group for environmental-political reasons, or aimed at an audience beyond the target, often of a symbolic nature." *Testimony Before the House Resources Committee, Subcommittee on Forests and Forest Health*, (2002) (James F. Jarboe, Domestic Terrorism Section Chief, Counterterrorism Division, Federal Bureau of Investigation). https://www.fbi.gov/news/testimony/the-threat-of-eco-terrorism.

*Figure 17. Mark Mobley, Arson at Vail Resorts claimed by ELF, 24 Oct. 1998, Photograph. [*New York Times*]*

writing, an ELF member occupies a place on the FBIs Most Wanted Terrorist list and two members are on the Most Wanted Domestic Terrorism list.[115]

At the same time as the growth in direct action, smaller, grassroots organizations formed. Some groups focused on issues of inequality and environmentalism, such as in the populations most affected by environmental problems/disasters. These populations were more likely to be low income and/or communities of color. For example, during the mid- to late 1980s industrial plant workers named a stretch of land between New Orleans and Baton Rouge, Louisiana Cancer Alley and "Bhopal on the Bayou."[116] The EPAs Toxic Release Inventory "effectively, 'branded Louisiana as the most polluted state in the U.S.—because of its chemical plants.'"[117] In multiple instances the level of

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[115] Daniel Andreas San Diego is on the general terrorist list and Josephine Sunshine Overaker and Joseph Mahmoud Dibee are on the domestic terrorist list. At https://www.fbi.gov/wanted/wanted_terrorists and https://www.fbi.gov/wanted/dt.

[116] Gerald Markowitz and David Rosner, *Deceit and Denial: The Deadly Politics of Industrial Pollution*, (Berkeley: Univ. of California Press, 2002), 247.

[117] Ibid., 249.

pollution put area residents at risk; these residents were often lower income families, plant workers, and those of African American and/or Cajun heritage. As Markowitz and Rosner note, "as often [as not], the industry chose not to clean up its pollution but simply to buy out and remove an entire community." A resident of one of these communities "summarized his experience: 'Dow didn't exactly ask for our input. They just came in and told us what they were going to do. I guess Dow is the plantation now.'"[118] Close ties between industry and state government meant there was little help from the state. Across the country grassroots groups formed to fight these inequalities.

Although elements of the movement saw growth during this time, the environmental presence in politics and visual media decreased drastically during the 1980s. In America, Ronald Reagan's election as president signaled a reversal of the environment-politics relationship. "Anti-environmentalist rhetoric developed by the Republicans and the party's Christian Right wing pervaded the administration."[119] Reagan named pro-business, anti-environmental individuals to the EPA (Anne Gorsuch) and Department of the Interior (James Watt). Thus "anti-environmental forces . . . had far greater influence on environmental policy under the Republican administrations of the 1980s and early 1990s than in the 1970s."[120] Environmental legislation and court rulings tended to favor the forces of free market trade.

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[118] Ibid., 253; 242.

[119] Carolyn Merchant, *American Environmental History: An Introduction*, (New York: Columbia Univ. Press, 2007), 199.

[120] Ibid., 200.

Unlike the previous decade, there was little new environmental legislation passed in the US. What was passed, such as the Nuclear Waste Policy Act (1982) and EPCRA (1986),[121] typically followed on the heels of disaster (Three Mile Island and the release of toxic gasses in Bhopal, India affecting over 100,000 people in 1984). However other significant environmental occurrences did not spur the same level of action in the US as they may have just years earlier; no major new policies were enacted or existing policies amended following such events as the 1986 reactor explosion and fire at the nuclear power plant at Chernobyl or the 1989 Exxon Valdez oil spill.

While mainstream American politicians typically did not act for the environment by working for new laws and acts, as they had in the 1970s, the 1980s did witness the formation of the United States Green Party. However, unlike Green Parties elsewhere US Greens have not gained traction in the mainstream.[122]

While the 1970s are the Environmental Decade, the late 1980s could be considered the "Ozone Years." In 1985 British scientists discovered a hole in the Earth's ozone layer situated over Antarctica. Science linked the hole, at least in part, with humankind's use of Chlorofluorocarbons (CFCs). When the world's nations came together in Montreal, Canada in 1987 the meeting's main focus was ending global CFC

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[121] EPCRA stands for Emergency Planning & Community Right-to-know Act.

[122] Such as Tasmania (in 1972 some local elections included a Green candidate), New Zealand (party formed in 1972, ran first national elections in 1990, and elected first Green MPs in 1996), and Australia (first national election presence 1992). American Greens ran their first local election candidates in 1990.

Figure 18. Ozone hole-focused cover, Time*, 19 Oct 1987.*

use.[123] The Reagan Administration signed on to the subsequent Montreal Protocol. I would argue that this was solely because in 1978 the US had already begun a program to phase out the use of CFCs, and as Dryzek points out, during the era of Reagan and Bush, "the only real exception to US foot-dragging on international environmental affairs came with the issue of ozone layer depletion."[124] Unfortunately the US has not consistently maintained such a participatory stance on later international environmental issues.

In the decades since Montreal, America has participated in various international environmentally-centered meetings. For example, the UN Framework Convention on Climate Change (UNFCCC) was an outcome of the 1992 Rio Earth Summit; along with

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[123] The Protocol covered "man-made ozone-depleting substances," but largely focused on CFCs.

[124] John S. Dryzek, *The Politics of the Earth: Environmental Discourses*, 3rd ed. (Oxford: Oxford Univ. Press, 2013), 65. Following studies by the National Academy of Sciences and others, the EPA, FDA, and Consumer Product Safety Commission "ordered the phaseout" of fluorocarbons in March 1978. Beginning in October the "manufacture of bulk fluorocarbons" was ended; the ban on "interstate shipment of existing stocks of these products" began 15 April 1979 and products already on the shelf or in commercial distribution after April 15, 1979 may continue to be sold until depleted." "Government Ban on Fluorocarbon Gases in Aerosol Products Begins October 15 [1978]" EPA press release, https://archive.epa.gov/epa/aboutepa/government-ban-fluorocarbon-gases-aerosol-products-begins-october-15-1978.html.

many other developed nations, the United States signed on to the UNFCCC in 1992 and enforcement began in 1994. The Convention called on the world's nations to "stabiliz[e] greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."[125] Unfortunately, the Convention only urged the signees to make changes, it did not outline specific steps or deadlines. This is the main difference between the Convention and the Kyoto Protocol, which emerged from the UNFCCC 1997 Conference of the Parties (COP) in Kyoto, Japan. The Kyoto Protocol committed the signees to make changes by setting both deadlines and emission rates.[126] As with the Convention, Kyoto started with industrialized countries, while countries with emerging economies had a slightly different timeline and were urged to focus on clean technologies rather than follow the developed world's dependence on fossil fuels.

While the United States originally signed on to Kyoto in 1998, in March 2001 President George W. Bush withdrew the country before any changes were to have occurred. The Bush Administration felt Kyoto was "unfair"[127] to the United States, since it did not include developing nations in the first round, and that it was dangerous to the nation's economy and energy supply. In a letter to the US Senate, Bush announced his

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[125] UNFCCC Conference of the Parties, "United Nations Framework Convention on Climate Change," (Geneva: United Nations, 1992), 3.

[126] UNFCC Conference of the Parties, "Fact Sheet: The Kyoto Protocol," (Geneva: United Nations, 2011).

[127] In his letter to the Senate, Bush stated that, "The Senate's vote, 95-0, shows that there is a clear consensus that the Kyoto Protocol is an unfair and ineffective means of addressing global climate change concerns."

administration's plan to come up with an alternative strategy that would cover America and the global community.[128] Australia was the only other original COP member to not institute the Kyoto changes. These actions have led Kyoto to be less successful than it otherwise might have been. As Penna notes, "the United States and Australia's refusal to join the Protocol has resulted in the failure of others, developing countries with huge reserves in coal . . . have refused to make additional commitments to reduce emissions without contributions from the United States."[129] In the years that followed, there were additional meetings that worked to support the changes implemented under Kyoto and keep the international community on track to change; these included meetings in Cancun, Durban, and Warsaw. These meetings all led up to the 2015 Paris meeting, which is discussed in greater detail in the following chapter.

The United States signed on to Kyoto in 1998, during President Bill Clinton's second term. The presence of Al Gore, with his vocal concern for the environment, helped strengthen the Clinton presidency's environmental stature. During the eight years Clinton was in office there was a very slight uptick in environmental regulation, such as new standards for chemical plant emissions (1994) and automobile emissions (1999). However, some environmentalists felt that the Clinton-Gore tenure was not as pro-environment as it was made out to be. In a 1996 *Los Angeles Times* article, Alexander

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[128] For the letter's text, see http://www.presidency.ucsb.edu/ws/?pid=45811. For more on the G. W. Bush Administration's stance on climate change, the President outlines plans in a June 2001 press conference that can be found at: http://georgewbush-whitehouse.archives.gov/news/releases/2001/06/20010611-2.html.

[129] Anthony N. Penna, *The Human Footprint: A Global Environmental History*, 2nd ed. (Malden, MA: John Wiley & Sons, 2015), 331.

Cockburn noted long-time activist David Brower[130] had declared "that the Clinton-Gore record on the environment 'is worse than the Reagan-Bush record.'" Cockburn went on to point out how the White House's record on environmental legislation "back[ing] off campaign promises" and actions such as approving renewed "logging in ancient forests" supported Brower's point of view.[131] So although it might be assumed that 1992-2000 would have seen the environment more regularly addressed in the United States, the period was not overly different from the previous decade. With the George W. Bush presidency coming into office, the nation did not see any major reversals in the federal government's environmental actions.

Visualizing Environmental Memory

Environmental issues receded from the visual media of the time (1980s-2004), but ecomedia did not disappear completely. As I show in the following discussion, production of environmentally-focused visual media was uneven and, when it did occur, typically did not employ ecomemory. In this ecomedia, environmental issues were often secondary to others (e.g. business interests) and did not draw on memories of an eden as was done during the 19790s.

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[130] Brower had been part of the Sierra Club leadership; afterwards he was a founder of the group League of Conservation Voters.

[131] Alexander Cockburn, "Tainting of the Green Movement; National Environental Groups Have Become Hucksters for the Democratic National Committee," *Los Angeles Times*, 12 Sept. 1996.

***Films:* The Lord of the Rings**

Based on a trilogy of books written over the course of approximately a decade and originally published in the mid-1950s, Peter Jackson's *The Lord of the Rings* (*LOTR*) film trilogy provides an interesting image of human- and nonhumankind's relationship with, and memory of, nature.[132] In both the books and films, the trilogy follows the rise of threats to and fights for the survival of the fictional land Middle-earth.[133]

In a very un-Hobbit-like way,[134] Bilbo Baggins went on an adventure, where he found and brought home to the Shire[135] the One Ring created by the dark lord Sauron. If in his possession, the Ring would give Sauron control over the whole of Middle-earth. This story and its events form the central story of *The Hobbit*. I include *The Hobbit* in this synopsis and, fleetingly, in the following production information, solely because of its relation to the creation and production of *LOTR*; this chapter focuses on the *LOTR*. The *LOTR* film trilogy picks up sixty years after the events of *The Hobbit*. Gandalf the Gray, a

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[132] Due to the text to screen transition, *LOTR* is a slightly different type of film, which ultimately deploys ecomemory in somewhat different ways than do other films in this study.

[133] The trilogy's three parts are: *The Fellowship of the Ring*, *The Two Towers*, and *The Return of the King*. For ease of reading, for the remainder of this discussion *LOTR* titles are shortened to *Fellowship*, *Towers*, and *Return*.

[134] Un-Hobbit-like in that Hobbits tend to stay near home and going on adventures was considered, as Tolkien says, "not as respectable." In *The Hobbit* Tolkien says Hobbits "have become rare and shy of the Big People, as they call us." They are a small people who tend towards fatness (as they never pass up a meal), have slightly larger, hairy feet (and, thus, go without shoes), can be very quiet, and typically are good natured. For further description see pp. 3-5 of *The Hobbit*.

[135] The Shire is in the north of Middle-earth, in an area named Eriador. It consists largely of fields, rolling hills, rivers, and small copses of trees. Tolkien describes how the Shire became the Hobbits' home in the "Prologue: Concerning Hobbits" (pp. 4-5) of *The Fellowship of the Ring*.

wizard, learns the truth about Bilbo's ring, which sets Bilbo's nephew Frodo Baggins on a quest to destroy the Ring.

Figure 19. Movie posters for The Lord of the Rings trilogy. (left-right: Fellowship of the Ring, The Two Towers, *and* Return of the King*)*

In *The Fellowship of the Ring* Frodo, along with a company of eight others, sets out on this quest. By the installment's end, the group has lost two members to death, Frodo and his fellow Hobbit Samwise Gamgee leave the group to make their own way to Mt. Doom, the two other Hobbits (Merry and Pippin) are kidnapped, and the fellowship's three remaining members have to choose between following Frodo and rescuing Merry and Pippin. Where *Fellowship* portrays a mostly linear storyline, *The Two Towers* consists of two parallel storylines that are intercut over the film's 130 minutes. One thread follows the remnants of the fellowship as they track Merry and Pippin, encounter the horse-loving Rohirrim, tree-herding creatures called Ents, and fight the forces of the evil wizard Saruman. The second thread follows Frodo, Sam, and their guide Gollum to Moria wherein lies the one place the Ring can be destroyed: Mt. Doom. *The Return of the*

King continues to follow these two storylines, coming together into a single narrative again by the story's end. At the tale's climax, a force consisting of Men, Hobbits, Elves, and a Dwarf must battle Sauron's army of Men and manmade creatures; meanwhile, the questers meet their own foes (e.g. the giant spider Shelob and the Ringwraithes) and Frodo manages to destroy the Ring. Ultimately Middle-earth again has a king in Gondor, is free of the evil Sauron, and the Hobbits return to the Shire.

The first filmic adaptations of Tolkien's books were animated. In 1977 Jules Bass and Arthur Rankin, Jr. produced *The Hobbit* as a television movie; later, in 1980, they produced *The Return of the King*, also as a TV movie. Between these small screen productions, Ralph Bakshi directed an animated, full-length feature film, *The Lord of the Rings*; despite its name, the film consists of only the *Fellowship* and *Towers* portions of the trilogy. These productions received middling reviews. *Variety*'s staff felt Bakshi's film was boring and only for those with pre-knowledge of the story; Roger Ebert gave the film 2.5 out of 5 stars.[136]

Just over a decade later, New Zealand-based writer-director Peter Jackson[137] and collaborator Fran Walsh began the process of adapting all three books into a feature film. In 1996 Miramax bought the trilogy's rights from producer Saul Zaentz.[138] Jackson,

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[136] "Review: 'The Lord of the Rings'," Unsigned review of *The Lord of the Rings*, *Variety* (1977), http://variety.com/1977/film/reviews/the-lord-of-the-rings-1200424126/.; Roger Ebert, "The Lord of the Rings," www.rogerebert.com/reviews/the-lord-of-the-rings-1978.

[137] At the time Jackson was known primarily as a horror director and for his handling of the tragic real story behind his film *Heavenly Creatures*.

[138] Zaentz acted as producer for Bakshi's 1978 animated *Lord of the Rings*.

Walsh, and Philippa Boyens wrote a script for two films, but in 1997 Miramax backed out due to the films' proposed length and costs. The studio gave Jackson a month to pitch the idea to other studios; only New Line showed interest. Under New Line the two films became three and, in 1999, production began. Jackson shot all three films simultaneously in multiple New Zealand locations, with multiple crews. The shoot lasted approximately fifteen months. Although Jackson is a New Zealander and production occurred in that country, the funding, the cast and crew, and intended audience were all international. For this reason, while production location may differ from other media discussed in this study, the time period is more significant than the specific country of production.[139]

The films opened worldwide over three years, with one opening each December in 2001, 2002, and 2003. While the films had a total production budget of $281million, over the course of their "lifetime" in theaters they grossed a total of $2.9 billion worldwide (excluding DVD and merchandizing sales).[140] According to boxofficemojo.com all three rank within the top fifty for "All Time Domestic Box Office" and were ranked either first or second in gross the years they opened.

Critically, Jackson's version of the trilogy met with somewhat mixed reviews. *Rolling Stone* film reviewer Peter Travers noted of the trilogy, "many reviewers who

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[139] "The global appeal of Rings made it an easy sell internationally. New Line estimates that 65% of the production costs were covered by international distributors--meaning that for the $350 million project, New Line was responsible for only $123 million. (New Zealand, where the movies were filmed, even offered to cover 10% of the production costs.)" Grainger David, "The Ring Masters," *Fortune* (2005).

[140] Individually the film's grossed $871.5 million (*Fellowship*), $926 million (*Towers*), and $1.1 billion (*Return*). All financial information from boxofficemojo.com.

resisted the two previous films . . . have come aboard to hail *King*, as if the series has only now kicked in. Bull. All three films are equal and indispensable to the tale being told."[141] Conversely *The New York Times*' Elvis Mitchell consistently gave the films mixed reviews, with only *Return* receiving a slightly more positive (yet still mixed) review.[142] The three films each garnered awards from both the industry and from fans. Each film won at least a handful of Oscars, plus other nominations: *Fellowship* won four Oscars, *Towers* won two, and *Return* won eleven.[143]

Unlike in *Silent Running* we the viewers are not left in the dark as to why Middle-earth's nature is in danger. Over the ages Men have become disconnected from nature and other beings with strong environmental ties (e.g. Elves and Hobbits) have retreated from the wider world. Most visibly the rising power of Sauron, and to a lesser extent Saruman, drives intentional physical destruction.

Over the course of *Fellowship,* we learn that the wizard Saruman the White has been tempted by the possibility of both power and knowledge and has been paying allegiance to Sauron. As we see in the film, Isengard, Saruman's stronghold, is a mixture of natural and built environment. Walled off, Isengard is built as a circle, with a

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[141] Peter Travers, "The Lord of the Rings: The Return of the King," Rolling Stone, http://www.rollingstone.com/movies/reviews/the-lord-of-the-rings-the-return-of-the-king-20031217.

[142] Elvis Mitchell, "Soldiering on in Epic Pursuit of Purity," Review, *New York Times* (2002), www.nytimes.com/2002/12/18/movies/18LORD.html.

[143] *Fellowship* won for: Cinematography, Makeup, Original Score, and Visual Effects. *Towers* received Oscars for Sound Editing and Visual Effects. *Return* won Oscars for: Best Picture*, Director*, Adapted Screenplay, Film Editing, Art/Set Direction, Costume Design, Makeup, Original Score*, Original Song*, Sound Mixing, and Visual Effects, with "*" indicating in which categories the film also earned Golden Globes.

*Figure 20. The wizards Gandalf and Saruman walk among the edenic green space that surrounds Orthanc. [*LOTR: Fellowship of the Ring*, 2001]*

path along the outer edge and spoke-like paths at regular intervals that lead to the central tower of Orthanc, which is built of black stone. Green grass, dotted with trees and other greenery, fills the spaces between paths; Isengard, therefore, appears to be a self-contained eden-like space. As Dickerson and Evans note, Saruman (along with Sauron, Orcs, et cetera) desires power *over* their surroundings.[144] This type of power easily lends itself to destruction. However, we do not fully see the effects of this destruction, or "fall" until *Two Towers*.

Saruman has caused drastic, and environmentally disastrous, changes to Isengard. What was once neat, orderly, and, above all, green, is now a landscape of grays and blacks. Orcs have ripped all the trees from the soil, dug vast pits, from which rise factory-like black smoke clouds that pollute the air. The destruction spreads beyond Isengard's walls; we see the outcome of clear cutting at the edge of neighboring Fangorn Forest and the damming and fouling of the River Isen. As with the Earth of *Silent Running*, nature has become a commodity; Saruman orders nature's destruction to

[144] Matthew Dickerson and Jonathan Evans, *Ents, Elves, and Eriador: The Environmental Vision of J.R.R. Tolkien*, Culture of the Land: A Series in New Agrarianism (Lexington: Univ. Press of Kentucky, 2006). Chapter 3.

*Figure 21. The environmental destruction of Isengard; due to Saruman's desire for power, he exchanges an edenic home for a dystopic one. [*LOTR: The Two Towers*, 2002]*

further his own ambitions. While walking among the pits to check on progress, an Orc tells Saruman, "the trees are strong, my lord. Their roots run deep." In response, Saruman orders, "rip them all down." The majority of the felled trees buttress the pits and power the forges used to create both weapons and the genetically manipulated Orcs, the Urukhai; the remaining trees are cut for no reason other than destruction. Through his actions Saruman has deliberately forgotten, or ignored, any ecomemory he may have had as a wizard. He abandons his own eden. His actions not only support Sauron's dystopian goal of world domination, but also create his own tangibly dystopic environment.

This dystopian vision mixes some elements of the posthuman and antihuman.[145] Urukhai are arguably modified human-like creatures. We see them being created in *Fellowship*. Jackson depicts the Urukhai as being "born," or pried, full grown from the muddy earth. As they sit up, we see that the creatures have been encased in a placenta-

[145] For consistency, I will continue to use the term "antihuman"; in discussing *LOTR*, I expand the term's scope from referencing only humans to include the various beings of Middle-earth (e.g. dwarves, Elves, Hobbits, etc.).

like covering; they are portrayed as man-sized with Orc-like qualities.[146] The Urukhai would likely survive (and thrive) in a dystopic Middle-earth. There is also the possibility of an antihuman world. Both Saruman and Sauron are content with killing anyone or anything who gets in their way; in my opinion, read as a contemporary allegory, they stand as almost an antithetical version of direct action environmentalists.

Although Saruman falls, he ultimately is not attempting to return to a utopic, eden-ish vision of Middle-earth. In this way, like *The Lorax*'s Once-ler, once Saruman literally falls from power, the wizard serves almost as a cautionary tale of what can happen when one tries too hard to dominate and use nature for their own individual purposes. His desire for power that leads him to use and destroy nature ultimately leads to his fate. In the films we do not see the wizard again once he has lost power.

In opposition to Saruman are creatures who, like the Lorax, speak for the trees.[147] The tree-like Ents are tree-herds and speak for the trees and, more broadly, for the forests/wilderness as a whole. We meet and follow the Ents' actions in *Towers*. The first

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[146] While talking to the head Urukhai in *Fellowship*, Saruman tells him that, "Orcs were Elves taken by the dark forces, twisted, tortured into horrible beings, perfected in my fighting Urukhai." Davis provides further discussion regarding the Urukhai and genetic manipulation. See James G. Davis, "Showing Saruman as Faber: Tolkien and Peter Jackson," *Tolkien Studies* 5 (2008).

[147] There are only two characters who are not affected by the Ring: Treebeard and Tom Bombadil (discussed later in the main body of the text). Although Treebeard is never brought near the Ring, he treats it as inconsequential and part of the larger destruction. Neither Ent nor man desire the Ring, even when Tom could easily take it from Frodo. This provides another example of the split between the environment and Sauron's desires. For more on Tom Bombadil and the Ring see Campbell. Light posits that these characters represent a different time scale than the other characters, one slower, more attuned to nature. Andrew Light, "Tolkien's Green Time: Environmental Themes In *The Lord of the Rings*," in *The Lord of the Ringsand Philosophy: One Book to Rule Them All*, ed. Gregory Bassham and Eric Bronson, Popular Culture and Philosophy (Chicago: Open Court, 2003).

*Figure 22. Treebeard the Ent. [*LOTR: The Two Towers*, 2002]*

Ent we see is named Treebeard and is possibly the oldest creature in Middle-earth. Treebeard is a being who looks like a tree but moves on trunk legs and has arms made of long branches. He has a sonorous voice and, like other Ents, does nothing "hastily," which arguably mirrors nature's own slow process of growth and evolution.

In addition to his guardian nature, Treebeard appears to be the Ent leader. He summons together and takes charge of an Entmoot, or gathering of Ents. As the scene unfolds, we see a variety of tree species represented among the Ents.

To Merry and Pippin's dismay, the Ents do not immediately agree to join the larger fight. Treebeard already has said that he is "on no one's side because no one is on [his] side" and, following the Entmoot, he indicates that the larger fight is beyond the Ents' environmental world.

TREEBEARD: The Ents cannot hold back this storm. We must weather such things as we have always done.

MERRY: [angrily] How can that be your decision?

TREEBEARD: This is not our war.

MERRY: But you're part of this world. Aren't you? You must help. Please! You must do something.

TREEBEARD: You are young, brave Master Merry. But your part in this tale is over. Go back to your home.

He plans to take the Hobbits west toward the Shire, but Pippin instead convinces him to take a southern route, leading past Isengard.

When the trio arrive at the edge of Fangorn closest to Isengard, nature's destruction awes the Ent.

TREEBEARD: Oh . . . [Zoom to CU Treebeard's face]

[Pan right to left showing cleared area, end back at the trio.]

TREEBEARD: Many of these trees were my friends. Creatures I knew from nut and acorn. [. . .] They had voices of their own.

[Cut to LS over, toward Isengard. Sounds as if creaking trees begin.]

TREEBEARD: Saruman. A wizard should know better.

[Cut to LS of trio from front. Treebeard balls his "hands" and bellows. Cut to an aerial shot of Forest tree tops, slowly zoom out; bellow continues over shot.]

TREEBEARD: There is no curse in Elvish, Entish, or the tongues of Men for this treachery. My business is with Isengard tonight with rock and stone.

[Muted creaking begins, grows, Ents begin to appear out of tree line.]

TREEBEARD: Yes. Come my friends, The Ents are going to war. It is likely we go to our doom. Last march of the Ents.

While Treebeard's sadness during this scene speaks to his own connection with nature, his anger speaks to a past in which wizards as a whole were also connected to nature and would never have destroyed any part of the part of the forest. It also speaks to an ecomemory of how Fangorn Forest used to be.

The forest's destruction mirrors similar deforestation actions in the real world. Due to news media coverage, we are increasingly able to understand the impact of this destruction. Therefore, it is not unlikely that the viewer's mind is then primed to connect the plight of Fangorn with that of the real Earth and to see the loss of Middle-Earth's past idyllic state as the loss of our own edenic past environment. Seen in this light, Treebeard's anger and the Ents' actions then stand as a (real world) call to action.

Through Treebeard we the viewers get a glimpse at what the forests and, by extension, what Middle-earth was like in an earlier time.[148] Unlike the Lorax, whose actions for the trees are mainly attempts at verbal persuasion, the Ents are quite ready to do whatever it takes both to protect the remaining trees and revenge the fallen. They recognize that it might mean their own destruction. In fact, Treebeard explicitly

[148] Merkelbach points out that in the books the main forests and woods "are old and they remember things that have been lost." I believe that this was carried into the films' forests. Rebecca Merkelbach, "Deeper and Deeper into the Woods: Forests as Places of Transformation In*the Lord of the Rings*," in *Tolkien: The Forest and the City*, ed. Helen Conrad-O'Briain and Gerard Hynes (Dublin: Four Courts, 2013), 60.

acknowledges this likelihood in the scene's last line, telling the Hobbits that they are to witness the "last march of the Ents."

The film cuts to other members of the original fellowship and when we return to the Ents they have left the gray "forest" of tree stumps and are at Isengard. There they kill Orcs, undam the river in order to "clear away" the filth of Saruman's actions, and take the wizard captive in his own tower. In this sequence, the Ents' very tree-ness is both a help and a hindrance. As tree roots can break apart stone foundations, the Ents use their strength to break apart the Isen's dam. And their tree-like height helps them cover more ground with each stride, as well as step on the much smaller Orcs. But they are vulnerable in some of the same ways as trees; we see one set on fire, while axe-wielding Orcs attack another.

*Figure 23. The Ents attacking Isengard; this Ent is tearing about a stone wall. [*LOTR: The Two Towers*, 2002]*

Pippin and Merry initially are afraid of Treebeard. The realization that Treebeard is no tree, but a walking, talking being is understandably startling. However, their fear draws on centuries-old real world ecomemory of the forest. As Schama writes, "the forest [has] been represented in the popular imagination as the enemy."[149] During the

[149] Schama, *Landscape and Memory*, 193 (see chap. 1, n. 52).

Middle Ages wild spaces, specifically forests, were perceived as separate from society; "the forests were *foris*, 'outside.' In them lived the outcasts, the mad, the lovers, brigands, hermits, saints . . . the wild men." Harrison continues, noting that "outside of the law and human society one was in the forest. But the forest's asylum was unspeakable. One could not remain human in the forest; one could only rise above or sink below the human level."[150] Throughout the films when humankind enter a forest it is for only a short period. For example, the human Boromir represses a Ring-induced madness until the fellowship reach the river Amun Weir's wooded shore. Boromir attempts to forcibly take the Ring from Frodo; shortly thereafter he is killed in a Urukhai attack. Excluding nonhumanoid animals, the only sylvan dwellers—and the only characters with overt ecomemory—are either Elves or Ents.

Throughout their history, the Elves have had a connection with the natural world around them. The Elves of Lothlórien even live within the tree tops. In several scenes Legolas, the elven representative in the traveling fellowship, senses the feelings and moods of the forest. When he, Gimli the Dwarf, and Aragorn (a human) arrive at the edge of Fangorn, Gimli states that "the air is so close in here." Legolas replies, "This forest is old. Very old. Full of memory. And anger." This exchange not only illustrates Legolas' connection with nature, but also his ecomemory-based longing for a past, edenic nature. We also see that those without that nostalgia (Gimli) draw on an attitude

[150] Robert Pogue Harrison, *Forest: The Shadow of Civilization* (Chicago: Univ. of Chicago Press, 1992), 61.

similar to that expressed by Merry and Pippin, one based on a real world negative cultural memory of forests as dark and dangerous places.

Interestingly, the above exchange indicates that nature itself maintains a form of ecomemory. While the forest remembers the past, its present misuse (or even abuse) by ambulatory beings has led Fangorn to anger. Unlike the Ents, however, the forest itself has no recourse. It cannot act either against the perpetrators or towards a reconstruction of, and thereby return to, the remembered ideal. In this way it, like the real world environment, must rely on others for its care.

Legolas and Gimli's exchange continues a motif running through several of the examples in this study, that of forest as a part (if not all) of ecomemory utopia. For example, the Lorax's ecomemories consist of forest-like stands of Truffula trees; the same is true for Treebeard, Legolas, and the other Ents and Elves. In part this draws on "*forests* [as] *an indispensable resource of symbolization in the cultural evolution of humankind*."[151] Forest as part of ecomemory also relies on the long history of, as Gifford notes, equating of wilderness as edenic.[152] The edenic ecomemories used in corporate ads, however, tends toward an orderly, tamed, unforested. For example, we see this in the Monsanto print advertisement analyzed in the previous chapter and the Dow Industries ad discussed in the following chapter.

Both Ents and Elves are long-lived, and therefore can recall an earlier time; both are attempting to return Middle-earth to versions of a more utopian state. Treebeard

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[151] Ibid., 8. Italics in original.

[152] Terry Gifford, *Pastoral*, The New Critical Idiom, ed. by John Drakakis (London: Routledge, 1999), 33.

indicates that the Ents will do what they can to make the forest as it was before. Treebeard displays a nostalgia for that previous world, however his longing is overrun, at least for a time, by his anger and the knowledge of what may lie ahead. While dreaming of an Edenic world, Treebeard is also pessimistic (or possibly simply realistic) that he and his fellow Ents will survive to be a part of that world. As noted above, the Ents' direct action techniques, which in the real world would likely be judged eco-terrorism, may well lead to death; it is also possible that, as the remaining Ents die or "become tree-ish" the utopia they desire simply will become anti-Entish.

In their own way, the Elves also remember and are nostalgic for an earlier, better version of the world. However, while the Ents will do whatever it takes to protect nature as nature, the Elves wish to protect nature as a symbiotic element of Middle-earth, as part of the fight against Sauron and dystopia, but only to a point. While they will help in the fight, most will depart Middle-earth rather than die there. Before coming to Middle-earth the Elves had already experienced an edenic land in their homeland Aman and particularly in Valinor.[153] We the viewers never see this land. In order to return to this eden the Elves must leave Middle-earth. While in *Fellowship* we see groups of Elves heading to the sea in order to leave, it is not until the end of *Return* that we actually see the sea.

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[153] Although not the utopian ideal they had known, Lothlórien represents an attempt by the Elves to recreate Valinor in Middle-earth. Alison Milbank, "Tolkien and Dante's Earthly Paradise: Enculturing Nature," in *Tolkien: The Forest and the City*, ed. Helen Conrad-O'Briain and Gerard Hynes (Dublin: Four Courts Press, 2013), 156; 158.

Ultimately three non-Elves also leave Middle-earth. In *Return*, as well as *Two Towers*, we learn that Bilbo and Frodo are never fully free of the Ring. Bilbo's desire for it changes him to a grasping, mean-faced version of himself, while Frodo never fully heals from the injuries he sustained on the quest. Near *Return*'s end the five Hobbits travel to the Harbor with Gandalf and a host of Elves. When Bilbo asks where their wagon is headed, Frodo responds, "To the Harbor, Bilbo. The Elves have accorded you a special honor: a place on the last ship to leave Middle-earth." With the ship's departure, the living characters with the closest experience of the Ring – and the destruction Sauron symbolizes – must leave in order both to reach utopia and fully free themselves of the Ring's shadow.[154]

While Saruman and Sauron envision a dystopic and subservient Middle-earth, the world's other inhabitants dream of a edenic Middle-earth. Each group envisions this utopia somewhat differently. Unlike Ents and Elves, a Hobbitish eden is more pastoral than sylvan.

*Figure 24. Gandalf approaches Bag End (the round green door jut right of center) amid the pastoral serenity of the Shire. [*LOTR: The Fellowship of the Ring*, 2001]*

[154] This also applies to Gandalf, as the one character who died and returned. Arguably this makes his journey to the Havens appear as a reversal of the fall instigated by both Saruman and Sauron.

Indeed, as previously mentioned, Hobbits are not overly fond of forests or bodies of water. The films' only illustration of the Shire depicts a verdant land of gently rolling hills where (pre-industrial) agriculture is the main work done and the inhabitants have a symbiotic relation with nature. For example, Hobbits typically live in warren-like houses built into hillsides. In figure 24 we see the front of Bilbo's home under the hill, Bag End. The ideal Hobbit life consists of eating, parties and visits, eating, pipe smoking, eating, and other comfortable activities. The Shire's bucolic nature recalls ecomemories of a romanticized pre-industrial age, but also of the "tidiness" of planned, enclosed gardens.

During our time in the Shire in *Fellowship*, we see a great spreading oak known as "the party tree." Later in the same film the Elf Galadriel shows Frodo a brief glimpse of "what will come if you fail," or, in other words, how a Sauron-dominated world would affect the Shire. In this vision Orcs extend their needless destruction by felling the party tree, burning down Bagend and Hobbiton, and enslaving Hobbits. Because Jackson has shifted this incident into the first movie the viewer easily can connect the Shire's possible destruction with the very real destruction already occurring at Isengard. In both cases edenic nature falls victim to the desire for power and exponentially fast-growing industry; in both cases it is ultimately up to the native/local peoples to both end and counter the destruction in order to re-establish a utopian version of their lands. Frodo's vision is the only glimpse we see of the Shire's destruction, which is a much lengthier element in the *Return* novel and directly contrasts pastoral utopia with Saruman's industrialism.

Cutting the "Scouring of the Shire" chapter from the film is symptomatic of what Jackson cut and what he kept. With the exception of the Ents, the most blatantly environmental characters did not make the book to big screen transition. These characters include the Ent-like Hurons, a personification of nature (Tom Bombadil), and the St. Francis-like wizard Radagast the Brown.[155] While it may be argued that time constraints limited what Jackson could include, I argue these cuts reflect the larger decline of environmental discourse in visual mass media of 1980 to 2004 period.

The cuts also help underline how the film deploys ecomemory. While ecomemory continues to be part of the larger story, it is also more diffuse than in the other sample films. It waxes and wanes and it mixes with other (non-environmental) memory. Unlike the films of the 1970s, multiple characters hold ecomemory (both the Ents and the Elves). These characters, however, are similar to Lowell and the Lorax in their hope for change.

As previously noted, Jackson, Walsh, and Boyens worked on the *LOTR* script during the late 1990s, a time when many countries had already recognized a need for action in order to counter climate change. Such is the case in the scriptwriters'

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[155] Huron's "look essentially like trees, except when they are in motion," but unlike Ents they take root when not actually ambulating. These beings are more generally malevolent than are the Ents. Their desire for revenge leads the Huron's to take part in the battle for Helm's Deep but, unlike the Ents, they do not focus on directly helping/altering nature; instead they take root and any Orcs or Urukhai that enter the "forest" do not return. Tolkien was purposefully ambiguous about Hurons, which may or may not, "be trees, Ents, or something else." Cohen, "Unique Representation of Trees," 117.

Radagast travels with animals and blends into the natural world. Bradley Brazer argues that Radagast "embodies elements of St. Francis of Assisi . . . Like St. Francis, Radagast is described in *The Silmarillion* as 'the friend of all beasts and birds' and in *Unfinished Tales* as dressed in 'earth brown' like a Franciscan.'" Quoted in Dickerson and Evans, *Ents, Elves, and Eriador*, 122.

homeland of New Zealand, which has one of the oldest, nationally active Green Parties.[156] However the United States lagged behind these other countries. Although it is possible that New Zealand's increased environmental awareness might have influenced the screenwriters, I argue that the film ultimately reflects the disconnect between the US and the rest of the world over the attention to and handling of environmental issues and change.

Fading from View

From 1980 to 2004 the number of environmentally-themed films and TV shows generally declined, particularly in the 1980s. Production was uneven during the 1990s, with a slight increase in 1990 (when Earth Day 20th anniversary events took place) and at the end of the decade. Those works that did address the environment did not utilize ecomemory.

Film & Television

During the 1980s and 1990s many environmentally-conscious American productions were aimed at children and preteens. *Ferngully: The Last Rainforest* (Bill Kroyer, 1992) envisioned an edenic Amazonian rainforest home to fairies and untouched by humankind. But then loggers appear causing destruction, but the only way to effect change is for an outsider (one of the loggers) to come in to lead efforts.

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[156] Wolfgang Rüdig, "Between Ecotopia and Disillusionment: Green Parties in European Government," *Environment* 44, no. 3 (2002), 22.

Others, such as the TV show *Captain Planet and the Planeteers* (1990-1996) did not attempt to reverse environmental change or degradation but to stop it; while this may sound promising, other messages often dwarfed the eco-theme and both were overly simplified.[157] For example in a 1992 episode (season 3, episode 12) entitled "If It's Doomsday, This Must Be Belfast," the Planeteers are trying to stop nuclear bombs from being detonated, with one group ending up in Belfast. There they "solve" the Troubles, which is depicted as a gang dispute; they also solve the Israeli-Palestinian conflict and South African apartheid. Ultimately the episode's message is getting along and forgiveness rather than something environmental. Similarly, the *Mighty Morphin Power Rangers* (1993-1999) children's TV show dedicated an episode to the environment. In "Clean-up Club" (season 1, episode 37) the Rangers tackle litter in their town and an evil creature, Polluticon. Unlike *Captain Planet*, the eco-theme is the only storyline. However, ecomemory ultimately is not present, as the episode focuses on how littering will hurt humankind.[158]

Beyond youth-oriented productions, those that were environmentally-themed do not fall within the parameters of this study. While eco-concerns (species extinction—humpback whales) drive the narrative in *Star Trek IV: The Voyage Home* (Leonard Nimoy, 1986), the film's ultimate theme is that present humankind needs to change its behaviors to save other (nonhuman) animals. There is no application of ecomemory. This is also true of the 1991 comedy *The Naked Gun 2 ½: The Smell of Fear* (David Zucker).

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[157] *Ferngully* opened to mixed reviews.

[158] *Captain Planet and the Planeteers* had 112 episodes, while *Mighty Morphin Power Rangers* had 156.

The film provides a pointed commentary on the environmental policies of George H. W. Bush's presidency and the role of fossil fuel corporations in those policies. With a similar focus, *The Pelican Brief* (Alan J. Pakula, 1993) is environmentally-themed, as it depicts the lengths to which a large oil company will go in hiding its use of money in politics to gain permission to drill in a protected stretch of the Louisiana coast. Although Pakula provides some historical background, the film does not employ ecomemory. There is no discussion of a lost utopia, nor any desire to return to a previous nature. *A Civil Action* (Steven Zaillian, 1998) and *Erin Brockovich* (Steven Soderbergh, 2000) both portrayed the results of water pollution and the court battles against the perpetrators. While these do reflect the rise of grassroots efforts and the ecojustice movement, as discussed earlier in this chapter, neither film addresses ecomemory nor a lost utopia to which we might return.

Waterworld (Kevin Reynolds, 1995) finds it's premise in climate change. At some long ago time, the Earth's ice caps melted and "the ancients" were forced onto the seas. Seemingly centuries have passed and although humankind hopes to seek dry land, those hopes appear driven largely by a desire for change.[159] None of the adult main characters have any form of memory (first-, second-, third-hand, etc.) about what an earlier, pre-melt planet was like. The child Enola has some form of subconscious memory that there were horses and grass, but no larger ecomemory. So while on first viewing *Waterworld* might appear to employ ecomemory it does not.

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[159] The filmmakers provide no timeframe, but dialogue within the film leads to this supposition. Plus, some humans have evolved to match their conditions. The Mariner (Kevin Costner) is such a person; he appears human but has neck gills and webbed toes.

Documentaries (e.g. *Koyaanisqatsi* [Godfrey Reggio, 1982]) were somewhat more likely to address nature than were fiction features, but they also did not utilize ecomemory. Openly environmental documentary films did not begin to appear with greater frequency until 2004/05, with eco-topics growing drastically beginning in 2006. This is illustrated in "top" lists. According to boxofficemojo.com's "Top 30 Grossing Nature Documentaries" list, only one was made before 2005 and twenty of the thirty appeared after 2010.[160] Similarly, only one pre-2005 nature film appears on rottentomatoes.com's "Top 100 Documentaries" list.[161]

These themes—eco-narratives not utilizing ecomemory—continue to the small screen. An episode of the television show *Dinosaurs* (1991-1994) may seem promising.[162] In "Changing Nature" (season 4, episode 7) a chain of dinosaur-created events (habitat destruction, loss of all plant life, and the creation of volcanic clouds) causes climate change, and, ultimately, dinosaur extinction. Once again the episode does not apply ecomemory to the situation.

Other Visual Media

Other visual media of the time followed these trends. Scholars in areas such as communication studies, business, and environmental studies have conducted studies investigating how different media approached the environment during this time period.

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[160] Based on the films' lifetime box office earnings.

[161] The list is based on critical review scores.

[162] *Dinosaurs* had 65 episodes.

The findings of these studies generally reflect a decrease similar to that in film. For example, Meisner and Takahashi found that, from 1923 to 2011, *Time* magazine covers addressed nature and the environment most often in the 2000s, with pollution and climate and weather issues being most prevalent.[163] The environment that is portrayed on the covers "in some cases . . . evoke[s] concern and care toward other nature, but more often they echo the dominant anthropocentric-resourcist ideology."[164] Therefore the magazine covers perpetuated the idea that the environment is meant for human use as a quantitative resource.

Figure 25. Covers used in Meisner & Takahashi study. (left-right: 9 Apr 1979, Three Mile Island; 1 Aug 1988, Ocean Pollution; 1 June 1992, Rio Earth Summit; 17 May 2010, Gulf of Mexico BP Oil Spill)

McComas, et al., found that from 1991 to 1997 the total amount of prime time television, non-news programming given over to environmental issues was "approximately 2 hours and 22 minutes—about 0.5% the total hours watched." There

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[163] Weather is the day to day observation; a single day's temperature, precipitation, et cetera. Climate, however, is long term; climatic conditions arise from years of data.

[164] Mark S. Meisner and Bruno Takahashi, "The Nature of Time: How the Covers of the World's Most Widely Read Weekly News Magazine Visualize Environmental Affairs," *Environmental Communication* 7, no. 2 (2013), 272. N = 128 covers.

was a "downward trend" during the study's time frame.[165] Although Lester and Cottle found that 2004 daily and high-rating news programs did show nature as threatened, problematically the programs used the spectacular to provide this image. They note that "we need to be wary of placing too much emphasis on the power of spectacular visualization alone to galvanize sentiments . . . spectacle may prove essential for processes of mobilization and solidarity, but it cannot entirely substitute for the processes of political debate and deliberation which must also inform the politics of climate change."[166] Although the spectacular has its place, it should not trump substance in order to effect change.

Specific studies of environmental advertising have spanned media.[167] Robin T. Peterson studied environmentally-themed advertising in children's magazines, sampling in 1987, 1997, and 2002. Her results showed that such ads decreased between 1987 and 1997, with numbers beginning to grow by 2002. Not all themes represented

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[165] K. A. McComas, J. Shanahan, and J. S. Butler, "Environmental Content in Prime-Time Network TV's Non-News Entertainment and Fictional Programs," *Society & Natural Resources* 14, no. 6 (2001). N=510 shows (410 total hours).

[166] Libby Lester and Simon Cottle, "Visualizing Climate Change: Television News and Ecological Citizenship," *International Journal of Communication* 3 (2009). The researchers included six countries in their study, including the US; they took their sample from the two-week period of 13 to 26 Sept. 2004. N=27.

[167] The original definition of environmental advertising came out of an American Marketing Association meeting in 1976; the group defined such marketing as "the study of the positive and negative aspects of marketing activities on pollution, energy depletion and nonenergy resource depletion." For more on the basics of green marketing, see http://escholarship.org/uc/item/49n325b7#page-1. Beginning in 1996 the FTC has published guidelines for green marketing; these are periodically updated with the latest version appearing in 2012. For more information on the guides, see https://www.ftc.gov/enforcement/rules/rulemaking-regulatory-reform-proceedings/guides-use-environmental-marketing-claims.

grew evenly. For example, pollution issues generally declined across sample years while resource depletion concerns grew slightly between 1987 and 1997, but rose drastically (by 48.8%) between 1997 and 2002.[168] Similarly, Ahern, et al., found that although the issues represented shifted, corporations were the dominant voice in thirty years of environmental ads in *National Geographic* magazine.[169] Although these ads have green messages, they are a form of greenwashing. It is unclear in both Peterson and Ahern's studies what products are being sold, but much green advertising ultimately carries the message that humankind can buy its way out of environmental problems. This is illustrative of the problem Lebduska calls "checkbook activism." Discussing the use of *The Lorax* to counter consumerism, Lebduska considers how children's literature often supports the idea that "environmentalism consists of choosing the right brand or finding sufficient pocket change, while buying itself remains unscrutinized."[170] Such increasing consumption can be counterproductive, giving a false idea that there are unending material resources.

My own survey of print visual media from this time period echoes the findings of these quantitative studies. Searching newspapers from across the country, I found

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[168] Robin T. Peterson, "Employment of Ecology Themes in Magazine Advertisements Directed to Children: A Longitudinal Analysis," *Journal of Promotion Management* 11, no. 2/3 (2005). (22 total magazines)

[169] Lee Ahern, Denise Sevick Bortree, and Alexandra Nutter Smith, "Key Trends in Environmental Advertising Across 30 Years In *National Geographic* Magazine," *Public Understanding of Science* 22, no. 4 (2012). N = 577.

[170] Lebduska, "Rethinking Human Need," 172 (see chap. 2, n. 96).

that when journalists, photographers, advertisers, and editorialists addressed the environment, they did not also address environmental memory.[171]

There were a number of industry-sponsored items during the 1980s that highlighted possible problems imposed by environmental regulation and supported the decade's overall anti-environmentalism.[172] A 1981 two-page spread in *The Wall Street Journal* addresses the idea that the US was running out of oil and gas. Most of the spread consists of an interview with Michel Halbouty (chair of the Reagan Energy Policy Advisory Task Force), but the top center consists of an illustration (fig. 26) of a "US Wildcatter" who is tied down by such elements as, "Environmentalism," "Over-Regulation," and "Short-Sightedness." Due to the illustration, a reader would not have

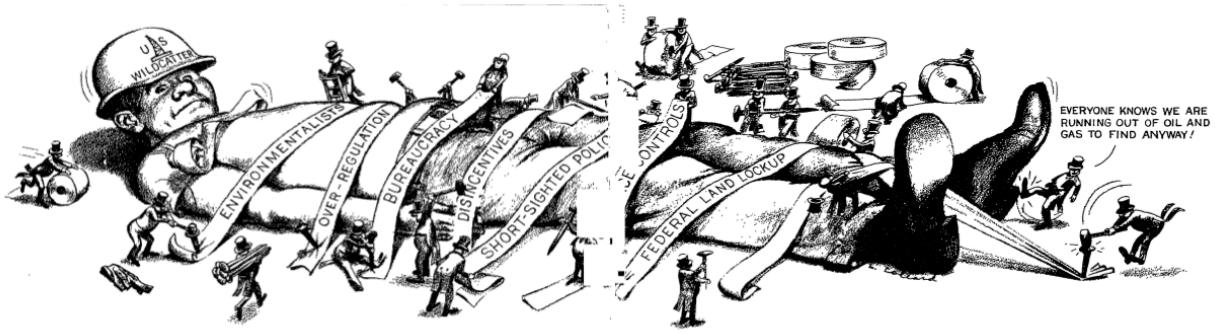


*Figure 26. Dresser Industries advertisement, 9 June 1981. [*Wall Street Journal*]*

[171] Focusing on The *New York Times*, *Wall Street Journal*, *Washington Post*, *Chicago Tribune*, and *Los Angeles Times*, I searched by ten year blocks, 1980-1989 and 1990-1999. This choice of publications allowed my searches to span the country and included both left- and right-leaning papers.

[172] A number of the industry sponsored items consisted wholly of text, with no visual illustration. For example, Mobil Corporation ran a series of advertisements that discussed the domestic energy crisis. See "Who's the public in 'public interest' politics?," *Washington Post* 13 April 1980, F-2. Or "A post audit," *Chicago Tribune* 16 March 1982, Sec. 1:2.

to read all of the interview to understand that such elements are harming domestic energy production and, thus, the economy.

Similarly, an editorial cartoon from the 17 March 1983 *Los Angeles Times*, directly addresses the tension between the Reagan White House and environmentalists. Note that in figure 27 the artist labeled the skull closest to the image's left edge as "EPA." The unease towards environmental topics continued in a cartoon from the 29 Oct 1996 *Wall Street Journal* depicting a child telling their parent (or an adult) about school over dinner. The child states, "We didn't do anything to save mankind or the environment. We wasted the whole day on reading and math."

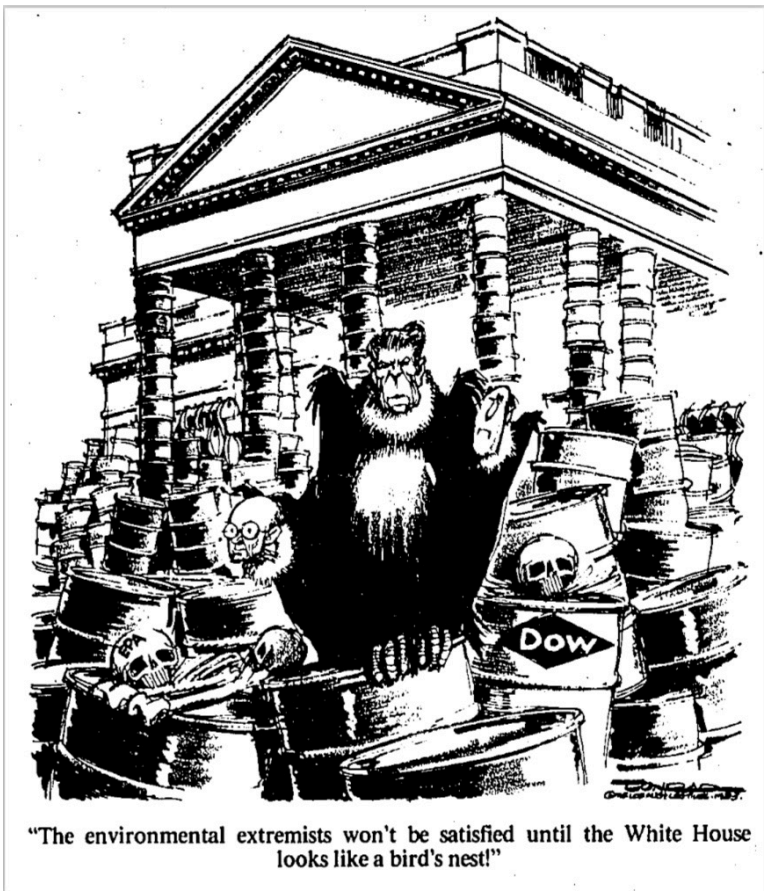
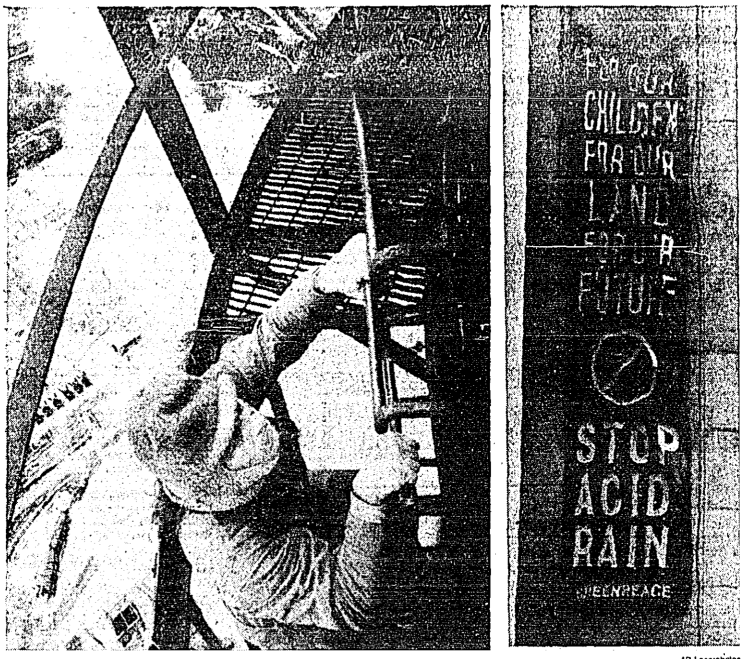


*Figure 27. Editorial cartoon, 3 Mar 1983. [*Los Angeles Times*]*

Not all environmental imagery from the period was negative, with the newspapers printing environmental photographs. These images, however, did not utilize ecomemory; they also generally were accompanied only by caption, rather than a story. Many of those that I found were either depicting direct action efforts, such as that



Climbing against pollution

Jeff Petersen [left], a member of the environmental group Greenpeace from Wilmette, stands atop a 650-foot smokestack in Madison, Ind., to protest industrial emissions, which the a advocacy group says contribute to acid rain. Meanwhile, two members of the organization hang a banner from another smokestack in Tucson [right] as part of a national demonstration against the discharges at power and manufacturing plants.

Figure 28. "Stop Acid Rain" Greenpeace action against industrial pollution in Indiana, 11 Feb 1982. [Chicago Tribune]

seen in figure 28 (mostly by Greenpeace and, often, not within the United States) or local activities held as part of Earth Day 20th anniversary celebrations.

No matter the media or visual format (e.g. editorial cartoon v. photograph), there are similar trends throughout the twenty-year period. The environment does not play a large role in the national discourse of the period and, when it does, ecomemory is not present as it was during the Environmental Decade.

Conclusion

Unlike the 1970s, from 1981-2004 environmental concern on a national, political level dropped. Politicians reversed what 1970s-era environmental legislation they could. This atmosphere led to an increased view of nature as resource. Any ecological problems were isolated affairs and, if possible, were blamed on very specific culprits. While there were still smaller actions on the local level, the momentum for change seen in the 1970s did not continue on a national-scale. When people did take visible direct

action, they were vilified; over time this characterization spread, in a lesser degree, to all who were pro-environment.

Not only did ecomedia's presence decrease in the 1980s, but the ecomedia created during the period did not use ecomemory in the same way as had ecomedia from the 1970s. And while the environment occupied slightly more space in national discourse in the 1990s, that ecomedia did not drastically alter the tone set in the previous decade nor did it utilize ecomemory. During these years, several trends emerge in those instances that visual media did address the environment: simplification of the issues/an increased tendency toward a black and white narrative lacking shades of gray (i.e. *Ferngully*, *Captain Planet*); and presentation of environmentalists and the environmental movement as economy-strangling extremists (i.e. the Halbouty interview, editorial cartoons). When the idea of working towards another time arose, the presentation framed the piece as looking to a future based on a (then) present environment rather than on an edenic past nature (i.e. Greenpeace emissions-based action).

Only toward the end of the 1980-2004 period did ecomemory in ecomedia begin again to grow. However, the discourse had evolved and ecomedia addressed concerns more implicitly than had been done in the 1970s. In the 2001-2003 *LOTR* films most of the overtly environmental elements did not make the page-to-screen jump, although as we have seen the environment did maintain a subtler presence in the films. Therefore, the films presented an environmental discussion much muted from what Tolkien presented in the original novels. However, an environmental element that Jackson kept,

the Ents, are akin to the direct action groups that experienced strong growth in the late 1980s and 1990s. The Ents are like the environmental movement at the time: less overt than in the past but in need of only a nudge to act.

Chapter 4: 2005-Present

During the first decades of the new millennium environmental issues gained ground in visual media; however, the environmentalism of the early twenty-first century has differed from that of the 1970s. As discussed in chapter 2, the "environmental decade" grew from the bottom up; following Carson's *Silent Spring* (1962) and Earth Day (1970) popular concern for the environment grew while legislative actions generally followed. However, it is arguable that the concern of the 2000s has grown in spurts, with the general and governmental discourses increasing and, at times, converging, while at other times they diverge.

The conservative 1980s and slow gains of the 1990s and early 2000s have cast a shadow over the mid- to late 2000s and early 2010s. There have been unorganized individuals, group, and organization actions, but attempts to bring awareness to an unaware populace have not gained the following or the persistence of the Earth Day movement. Congressional actions have been uneven and often weakly enforced.

As in the previous chapter, popular visual media of the time have reflected this broader unevenness. Since 2005 the number of environmental films and TV specials has grown. Many of these productions fit within a handful of broad topics, such as climate change movies (e.g. *When the Levees Broke: A Requiem in Four Acts* [Spike Lee, 2006], *Kingsmen: The Secret Service* [Matthew Vaughn, 2014]) and fuel/energy films (e.g. *Moon* [Duncan Jones, 2009], *Avatar* [James Cameron, 2009]). However, as discussed in chapter 1, not all ecomedia addresses ecomemory.

In this chapter, I analyze the motion pictures *Interstellar* (2014) and *Dr. Seuss' The Lorax* (2012) before turning to the 2014 television series *Cosmos: A SpaceTime Odyssey*. Lastly I look at advertisements and PSAs. I argue that the media investigated in this chapter attest to the continued, albeit altered (e.g. more covertly environmental), presence of ecomemory within ecomedia.

History: The Contemporary Movement, Updated, 2005-2016

The 2015 Paris Climate Change Convention, in some ways, was a culmination of the earlier meetings discussed in the previous chapter and an attempt to redress the failed 2009 Copenhagen Climate Change Summit. In the Paris Agreement, the participating nations agreed to hold "the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the impacts of climate change."[173] It also includes ways to adapt to the effects of climate change and to financially support climate-friendly development. Participating nations have to ratify the Agreement before it goes into effect. It is open for ratifying signatures from April 2016 to April 2017.

Although the United States was one of the Convention participants, at the time of this writing the Agreement's US implementation is unsure. In August, 2015 the Obama administration and the EPA announced a Clean Power Plan (CPP), which would

[173] UNFCCC Conference of the Parties, "Adoption of the Paris Agreement. Proposal by the President.," (Geneva: United Nations, 2015).

"reduce carbon pollution from power plants . . . while maintaining energy reliability and affordability. Also on August 3, EPA issued final Carbon Pollution Standards for new, modified, and reconstructed power plants, and proposed a Federal Plan and model rule to assist states in implementing" the Plan's changes. Ultimately CPP would help cut "power sector" carbon emissions to "35 percent below 2005 levels" and sulfur dioxide and nitrogen oxides by 90 and 72 percent, respectively.[174] A seemingly positive step to curb carbon-based climate change, the response was intensely partisan. Republican politicians did not support the Plan. Twenty-nine states "led mostly by Republicans and many with economies that rely on coal mining or coal-fired power, sued to stop what they called 'the most far-reaching and burdensome rule the E.P.A. has ever forced onto the states.'"[175] Irregularly, before a lower court had ruled, on 5 February 2016 the US Supreme Court ruled against a portion of the CPP. This ruling temporarily stopped CPP from moving forward.

As discussed in the previous chapter, when the United States pulled out of the Kyoto Protocol, the action ultimately weakened the Protocol. It was harder to enforce compliance when one of the largest contributors to climate change was not participating. The CPP was the first step in the United States' fight against climate change on which a larger, more international action could rest. Without that base, it is

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[174] Environmental Protection Agency, "Factsheet: Overview of the Clean Power Plan: Cutting Carbon Pollution from Power Plants," (Washington, DC: Environmental Protection Agency, 2015).

[175] Adam Liptak and Coral Davenport, "Supreme Court Deals Blow to Obama Efforts to Regulate Coal Emissions," *New York Times* (2016), http://www.nytimes.com/2016/02/10/us/politics/supreme-court-blocks-obama-epa-coal-emissions-regulations.html.

unclear whether the Paris Agreement has failed in the United States before the international community has even ratified it.

During George W. Bush's tenure as president, America's legislative environmental stance was uneven. As noted, Bush withdrew the United States from the Kyoto Protocol in 2001. At the same time, he felt the United States could create its own plan to battle climate change, but ultimately little changed in environmental protection legislation between 2001-2008. Osofsky and Peel point to political partisanship as a force behind this lack of change. They note that "President Bush, unlike some of the outspoken Republicans during President Obama's administration and the 2016 election, acknowledged human-caused climate change as a serious problem . . . However, despite these commitments, the Bush administration repeatedly refused to regulate domestic greenhouse gas emissions . . . and prevented leader states [e.g. European Union nations, etcetera] from moving ahead with their own regulations."[176] In fact, despite the possibility that Bush accepted anthropogenic causes for climate change, his administration's stance on several environmental issues did nothing to combat human-made climate change and, in fact, could exponentially increase that change.

It was during the Bush Administration that debates on whether or not to open the Arctic National Wildlife Refuge (ANWR) to oil production became more heated and

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[176] Hari M. Osofsky and Peel Jacqueline, "The Grass Is Not Always Greener: Congressional Dysfunction, Executive Action, and Climate Change in Comparative Perspective," *Chicago-Kent Law Review* 91, no. 1 (2016), http://www.heinonline.org.www2.lib.ku.edu/HOL/Page?handle=hein.journals/chknt91&start_page=139&id=153. 150. The authors compare the situation in the US to that in Australia, which similarly is divided along party lines. They note that, "rather than legislative gridlock, the result has been dramatic flip-flops on climate policy under different administrations." This lack of constancy is behind Australia's changing participation in the Kyoto Protocol. 155.

hydraulic fracturing (fracking) also gained ground, with newer techniques helping the practice grow quickly in the mid-2000s. Towards the end of Bush's time in office (September 2008), Trans-Canada applied to the US State Department for approval of the Keystone (or XL) Pipeline; however it was almost three years before the Department produced its report, the first step needed for the project to move forward. President Barack Obama vetoed authorization of the Pipeline in February 2015.

All three issues—ANWR, fracking, and Keystone—have provided focus points for environmentalists. These fights brought together a wide range of individuals similar to the variety found in the original Earth Day. Native populations, local residents, and national organizations have joined with scientists and some politicians to stand against each of the three issues. President Barack Obama's Administration has been relatively more successful in addressing the environment. Congress, however, has not been supportive,[177] which has led Obama to turn to and rely more heavily on federal agencies such as the EPA and executive actions. The CPP is one such agency-based attempt at change.

The environmental movement has maintained the mainstream, popular, and direct action techniques that it used during the 1980s and 1990s. There continued to be action by mainstream environmental organizations, such as lobbying for changes in pro-environmental legislature. Protests such as those against the Keystone XL Pipeline

[177] As Osofsky and Peel point out that "even early in President Obama's first term, when his party held both houses of Congress, comprehensive climate change legislation failed to pass." Ibid., 146.

have often formed at the popular and local level.[178] Other actions have brought together the mainstream groups and more general populace. On 21 September 2014 400,000 people marched in New York City as part of the People's Climate March, which included many environmental groups. The New York march was one of 2,646 events in 162 countries. The following year many of the same people and organizations came together in over 200 actions across the US for the People's Climate Movement.[179]

*Figure 29. Damon Winter, People's Climate March - New York City, 2014, Photograph. [*New York Times*]*

Similarly, the direct action that grew in the 1990s maintained its visual presence. For example, the Sea Shepherd Conservation Society began in 1977 with a mission "to

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[178] Beyond the United States, enacting even small peaceful protests is a much more defiant act. A 2014 report brought to light just how dangerous acting for the environment can be around the world; in fact, "on average two people are killed every week defending their land, forests and waterways against the expansion of large-scale agriculture, dams, mining, logging and other threats . . . Some victims were environmental protestors killed in crackdowns, others murdered by hired assassins because they live on a desirable plot of land. Global Witness, *Deadly Environment: The Dramatic Rise in Killings of Environmental and Land Defenders: 1.1.2002-31.12.2013* (Global Witness, 2014). https://www.globalwitness.org/en/campaigns/environmental-activists/deadly-environment/.

[179] "People's Climate March," http://2014.peoplesclimate.org; "2015 Day of Action," http://2014.peoplesclimate.org/day-of-action-2015/.

end the destruction of habitat and slaughter of wildlife in the world's oceans in order to conserve and protect ecosystems and species."[180] Using many of the same tactics as Greenpeace, Sea Shepherd has boats around the world that will blockade areas, chase illegal whalers, and fight misuse of both the oceans and the coasts. Members have been arrested during a variety of actions. Many of Sea Shepherd's activities have focused on whaling, particularly Japanese operations. Unlike other direct action groups that maintain a large amount of secrecy regarding participants, activities, et cetera, Sea Shepherd has been the subject of the TV show *Whale Wars* (2008-) and the feature documentary *The Cove* (Louie Psihoyos, 2009) depicted some Sea Shepherd actions.[181] This marks a decided change from the 1990s visual media coverage that typically "vilified" direct actioners. I argue that this may be due to the placement of direct action within the larger environmental discussion.

Many of the negative environmental events that led to change in the 1970s represented a culmination of decades-long human inaction, including the Cuyahoga River pollution problem and Love Canal. Similarly, in the early twenty-first century almost all such events have been caused by human (in)action. The 2010 BP Gulf of Mexico oil spill is an obvious example of human-caused environmental problems.

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[180] "Who we Are," Sea Shepherd Conservation Society, http://www.seashepherd.org/who-we-are/.

[181] *Whale Wars* airs on Animal Planet. *The Cove* focused on former dolphin trainer Rick O'Barry and his fight—using direct action—against the annual Taijii, Japan dolphin slaughter. The film won the Best Documentary Oscar.

Meanwhile storms like Hurricane Sandy in 2012,[182] increased numbers of "off- season" tropical cyclones,[183] and record-setting summer and winter weather[184] are less obviously related to human actions but are direct consequences of those actions and their worsening of global climate change. In the US, mainly it has been domestic environmental events that have raised concern with continued foot dragging on the need for national and international changes.

Figure 30. Visual coverage of twenty-first century environmental concerns in popular magazines. (Clockwise from top left: Hurricane Katrina, Mad, *Jan 2006; Hurricane Sandy,* Time, *12 Nov 2012; BP Gulf of Mexico oil spill,* National Geographic, *Oct 2010; LA Cancer Alley,* Newsweek, *20 Dec 2013 and; Extreme weather & climate change,* National Geographic, *Nov 2015.)*

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[182] The first storm to make landfall on the US Northeast since the 1980s, the National Oceanic & Atmospheric Administration (NOAA) has listed Sandy as the second costliest hurricane after only 2005s Hurricane Katrina. For more NOAA information on Hurricanes, see http://www.aoml.noaa.gov/hrd/ or the National Hurricane Center at http://www.nhc.noaa.gov.

[183] The Atlantic hurricane season is 1 June-1 Nov, with a small number forming outside this time frame. January 2016 saw the earliest named hurricane since the 1930s, in addition to smaller tropical events. See https://www.climate.gov/news-features/event-tracker/case-you-missed-it-there-was-atlantic-hurricane-january for more on Hurricane Alex.

[184] According to NOAAs data analysis both the 2015/2016 winter (Dec-Feb) and 2015 as a whole were the warmest on record. More information, including wider time frames, is available at http://www.ncdc.noaa.gov/sotc/.

Throughout the last two decades, climate change skepticism (and outright denial) have hindered attempts to address environmental issues. Scholars have studied whether or not such skepticism has grown and/or become more vocal. In 2015, Andreas Ziegler surveyed adults (18 and over) in the US, Germany, and China about general "global warming beliefs" and the causes of climate change. He found that "not only the frequencies of climate change skeptics and participants who refused to answer [about global warming beliefs] are highest in the USA, but also the frequency of climate change believers who think that this global warming is not anthropogenic."[185] Meanwhile, by studying newspaper stories for 2000-2010, Grundmann and Scott found that although more stories across four countries (including the United States) support advocacy over skepticism "sceptics [sic] are much more visible in the USA."[186] But has skepticism spread? Through their study of American print media (from 1 June 2012 to 31 May 2013), Schmid-Petri, et. al, found little change in the number "of articles containing skeptical voices"; in fact, these articles constituted 31 percent of the sample, while a similar study of the 2009-2010 period found the number to be 34 percent.[187]

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[185] Andreas Ziegler, "On the Relevance of Ideological Identification and Environmental Values for Beliefs and Attitudes toward Climate Change: An Empirical Cross Country Analysis," *Joint Discussion Paper Series in Economics* (2015), http://hdl.handle.net/10419/119451.10.

[186] Reiner Grundmann and Mike Scott, "Disputed Climate Science in the Media: Do Countries Matter?," *Public Understanding of Science* 23, no. 2 (2014). 232. The study considered media from France, Germany, the United Kingdom, and the US.

[187] Hannah Schmid-Petri et al., "A Changing Climate of Skepticism: The Factors Shaping Climate Change Coverage in the Us Press," *Public Understanding of Science* (2015), http://pus.sagepub.com.www2.lib.ku.edu/content/early/2015/11/06/0963662515612276.full.pdf+html. 9 .

Why, then, might it feel that the numbers of skeptics have grown? According to a 2014 Pew Research Center poll, the answer lies in partisanship rather than an increase of individual skeptics. For example, when asked what causes global warming (e.g. anthropogenic, et cetera), 27 percent of Republicans and those who lean Republican answered that it is human-caused, 30 percent felt it is due to "natural patterns," and 41 percent said that there is no solid evidence that the Earth is warming. Comparatively Democrats and those who lean Democratic answered 71 percent, 17 percent, and 11 percent, respectively.[188] Osofsky and Peel agree; they note that "the past two decades have seen a worsening of partisanship across the board in the United States."[189] Therefore, while skepticism and disbelief may have gained some followers, the illusion of growth is due instead to greater visibility of an increasing political divide. This divide has led to recent US inaction and mixed action regarding the environment.

Visualizing Environmental Memory

An increase in the evolving environmental discourse was visible outside capitol buildings and beyond marches and direct actions. Due to many factors, such as growing environmental knowledge, less opposition, and the legacy of the 1980s and 1990s, mainstream visual ecomedia of the 2005-2016 period provide an altered discourse than did those media in the 1970s. In what follows, I analyze a sampling of visual media: film, television, and advertisements/PSAs.

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[188] Pew Research Center, "Americans, Politics and Science Issues," in *Science and Society* (pewresearch.org: Pew Research Center, 2015), 38.

[189] Osofsky and Peel, "Grass is Not Always Greener," 143.

***Film:* Interstellar**

Figure 31. Movie poster for Interstellar.

As noted earlier in this chapter, beginning in 2005 the instances of ecomedia, specifically films, increased but not all of these films employed ecomemory. A selection of examples of this growth include: *Who Killed the Electric Car?* (Chris Paine, 2006), *Children of Men* (Alfonso Cuarón, 2006), *Earth* (Alastair Fothergill & Mark Linfield, 2007), *If a Tree Falls: A Story of the Earth Liberation Front* (Marshall Curry, 2011), *The Human Experiment* (Sean Penn, 2013), and *The East* (Zal Batmangli, 2013). However, focus and handling of environmental issues had shifted since the early 1970s. The science fiction feature *Interstellar* (Christopher Nolan, 2014) illustrates this shift. It provides a somewhat more implicit view of man's connection with and vision of nature than did the science fiction feature *Silent Running* while also addressing ecomemory.

The shift causes this film to deploy ecomemory differently than did the films of the 1970s. As *Silent Running*, ecomemory is a part of the whole story; but as in *LOTR* there is an alteration to the lone hero of the 1970s: while one storyline focuses on a single person, the other has a different focus that implies the presence of a group. Due

to this difference, it becomes clear that the collective ecomemory does not reside in simply one person. There is also the possibility that the recreated idyll will carry on. Conversely, the film raises questions about whether we should attempt to recreate a lost environmental paradise.

In an unspecified future[190] a combination of population surpassing sustainability and crop disease (named only "blight") has decimated humankind's food sources and transformed the planet into a choking dust bowl. A group of scientists and, presumably, politicians are working secretly on a plan to move humankind to another planet. Five years before the film's time, the Lazarus mission's first stage left Earth, passed through a wormhole, and scattered to study multiple possible planets.[191] The film follows the mission's second stage, which sends a ship through the wormhole to follow data from the first stage indicating positive possibilities. The scientists on Earth have come up with two plans: Plan A returns the second crew to Earth once a new home is found, at which time humankind will move to their new home; Plan B supposes the crew cannot return home and will use harvested embryos to colonize a new home plant and the Earth (and all her human inhabitants) will be left to die.

False data from both the earthbound scientists and the earlier pioneers means there is no hope to return to Earth. In a last ditch attempt to save those on Earth, the

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[190] Feeney notes that the time frame is a mere forty years in our future. Elements such as cars and technology are like ours because, as the "ecosystem[s] collapsed" we as a species began to decline. F. X. Feeney, "Their Stellar Odyssey: Christopher Nolan & Jonathan Nolan Prove the Infinite Power of Brotherhood," *Written By*, November/December 2014, 31.

[191] Interestingly the wormhole appears near Saturn, the plant towards which *Silent Running*'s interplanetary "arks" are heading.

mission's captain, Cooper (Matthew McConaughey) enters a black hole. Bending the laws of relativity, he is able to send signals back in time to his daughter Murphy, before he himself left. As an adult she is able to crack the science and lead humankind to a new home near Saturn. This home consists of Earth-like space stations.

Interstellar began as a 2006 project in development under Steven Spielberg, Linda Obst, and theoretical physicist Kip Thorne, as "a film about an expedition into the recesses of deep space but grounded in good science." Jonathan Nolan pitched Spielberg and Obst a script for "a film set in a world where we as a species have peaked."[192] The film Christopher Nolan (the writer's brother) directed ultimately was a combination of the two, plus he continued to receive technical advice from Thorne and retained Obst as one of seven producers.[193] Shot over four months, the film was a coproduction between Warner Brothers, Paramount, and Google, with an estimated production budget of $165 million.[194]

The film opened to mixed reviews. *Rolling Stone*'s Peter Travers felt *Interstellar* was "enthralling" and "gracefully . . . blend[ed] the cosmic and the intimate."[195]

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[192] Feeney, "Their Stellar Odyssey," 31.

[193] The film's story was partially based on Thorne's own research and publications. Thorne received an executive producer credit for his work on the film.

[194] Jeff Jensen, "Fall Movie Preview: Interstellar," *Entertainment Weekly*, no. 1325 (2014), http://web.a.ebscohost.com.www2.lib.ku.edu/ehost/detail/detail?vid=10&sid=4dc3b992-b851-40a6-a022-6ea2c95beb50%40sessionmgr4001&hid=4201&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#AN=97481033&db=a9h., 62; Feeney, "Their Stellar Odyssey," 30.

[195] Peter Travers, "Interstellar," *Rolling Stone*, http://www.rollingstone.com/movies/reviews/interstellar-20141105.

Similarly, A. O. Scott commented that it is "ultimately about the [ecomemory-like] longing for home, about voyages into the unknown that become odysseys of return. And 'Interstellar' may take its place in the pantheon of space movies because it answers an acute earthly need, a desire not only for adventure and novelty but also, in the end, comfort."[196] Joe McGovern, however, gave the film a B-, noting that "the comic-book dialogue is preoccupied with exclamation points" and that "for a brief moment in galactic time, our most brilliantly cold and clinical filmmaker forgets how to go gently into that good night."[197] Based on gross totals, it appears the public generally liked the film, flocking to both regular and IMAX theaters.[198]

Unlike the earlier film *Silent Running* the audience sees the planet's plight from *Interstellar*'s beginning. We learn that humankind has directly caused Earth's slow death. The world hit its population tilting point; and it is clear that drought conditions have led to a new Dust Bowl. About twenty minutes into the film we see a baseball game halted because of an advancing sandstorm, as shown in figure 32, and, further

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[196] A. O. Scott, "Off to the Stars, with Grief, Dread, and Regret: 'Interstellar' Review, *New York Times*, 2014, published electronically 4 Nov. http://www.nytimes.com/2014/11/05/movies/interstellar-christopher-nolans-search-for-a-new-planet.html?_r=0.

[197] Joe McGovern, "Interstellar," *Entertainment Weekly*, no. 1337/1338, http://web.b.ebscohost.com.www2.lib.ku.edu/ehost/pdfviewer/pdfviewer?sid=43207186-f149-49c0-b909-bcd7b7ed07c4%40sessionmgr110&vid=8&hid=105.

[198] *Interstellar*'s had a $165 million budget and its total lifetime gross worldwide was approximately $675 million, exclusive of home market sales which totaled another $42.7 million domestically (both Blu Ray and DVD sales), as of 1 March 2016. Ben Fritz, "Why Hollywood loves 'Interstellar' director Christopher Nolan; For the coming sci-fi epic, the filmmaker was left alone," *Wall Street Journal*, 2014, published electronically 30 Oct. http://search.proquest.com.www2.lib.ku.edu/docview/1618164803?accountid=14556; "Interstellar," http://www.boxofficemojo.com/movies/?id=interstellar.htm.; "Interstellar (2014) - Financial Information," http://www.the-numbers.com/movie/Interstellar#tab=summary.

into the film, we see lines of vehicles leaving town; each is in a way reminiscent of photographic images from middle America that accompanied the 1930s Dust Bowl. Figure 33, for example, was one of thousands of Farm Security Administration photographs depicting a real-life sandstorm on approximately 14 August 1935.

Figure 32. An oncoming sandstorm (at left) threatens a baseball game.

The image of Earth the film presents is that of a dystopian planet. In the film's opening sequence we see the dead fields and dust-colored world of middle America. To highlight the Dust Bowl-quality, we see interviews culled from Ken Burns' 2012 documentary *The Dust Bowl*. Nolan presents these interviews both in full frame and, later (fig. 34, for example), as interviews playing on television screens. It is possible that the latter presentation is meant to highlight that they, the interviews, are not of the film's world. Or, in other words, Nolan did not create them himself as part of the film. Although the stories heard are connected to the American Dust Bowl of the 1930s, the filmmaker presents them in an un-grounded way.

Figure 33. D. L. Kernodle, Dust storm in Baca County, Colorado, Aug 1935, Nitrate negative. Farm Security Administration/Office of War Information Black-and-White Negatives. [Library of Congress]

The viewer receives no information about the interviewee, the interview itself, or any other evidence that would anchor the interviews to a time/place. The general viewer likely will view this sequence as describing the film's present or possibly it's past, particularly as the first interview we see is full frame and the only fictional one used and is with a grown up Murphy (played by Ellen Burstyn).

Figure 34. Cooper and a guide walk towards the recreation of Cooper's house and farm on (in?) mankind's new world. Note the screen they pass (in the foreground, just right of center); this is one of the several on which we see Burn's documentary playing.

Nolan's use of the documentary footage connects the real world to *Interstellar's* fictional one. Referencing the real past through the documentary highlights how the film's present could easily be the real world's future. In fact, participants in a 2015 survey named drought as the most worrying climate change outcome.[199] While

[199] Richard Wike, "What the World Thinks About Climate Change in 7 Charts," Pew Research Center, http://www.pewresearch.org/fact-tank/2015/11/05/what-the-world-thinks-about-climate-change-in-7-charts/. The Pew Research Center conducted the survey across 31 countries. Globally, 44 percent of respondents chose drought over severe weather (25 percent), extended periods of extremely hot weather (14 percent), and rising sea levels (6 percent). In the US the numbers shifted to: 50, 16, 11, and 17 percent, respectively. For the complete report, visit http://www.pewglobal.org/files/2015/11/Pew-Research-Center-Climate-Change-Report-FINAL-November-5-2015.pdf

planetary overpopulation was not a contributing factor in the 1930s drought, factors presented in the film are at least somewhat similar. In both situations we find a reliance on an unsustainable agricultural model and misuse/poor use of natural resources.[200] In both Dust Bowls these factors lead to crop failure, the transformation of once arable land to dust-blown arid earth, and mass migration.

As we have seen in the films analyzed in previous chapters, once again we find that the planetary situation in *Interstellar* directly illustrates the (negative) outcome of seeing nature solely as a resource. Humankind cannot reverse the current conditions. As Geoghegan points out, on a damaged planet we shift away from looking forward to the future to living day-to-day.[201] This view as demonstrated in the film makes it ultimately impossible to regain a liveable Earth such as that desired by the film's characters. The anxiety that the situation fosters, in addition to the presence of direct memories of an earlier world held by Cooper's father-in-law, creates an inability to hope, making the ability to imagine a new way of life impossible for many (i.e. Cooper's son Tom).[202] The mission to find humankind a new home is the only real option for survival. The planet is descending into an antihuman utopia.

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[200] Penna points out the connection between, "agricultural expansion and the ability to sustain productivity in synchronization with explosive global population growth" and the link between these areas and climate "destabilization." Penna, *The Human Footprint*, 338 (chap. 3, n. 129).

[201] Vincent Geoghegan, *Ernst Bloch* (New York: Routledge, 1996).

[202] Fredric Jameson, *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions* (New York: Verso, 2005).

For most of the film it seems possible that a new home world will be at least a partially posthuman utopia, due to the presence of sentient, non-animal beings. When Cooper's team leaves Earth, in addition to the humans it includes two mechanical beings named TARS and CASE. Physically the large black blocks are in no way anthropomorphized. As McGovern notes they are "an homage to both the computer HAL and the black monolith" from *2001: A Space Odyssey*; when I first saw *Interstellar*, I also immediately thought of *2001*'s black monolith.[203] However the robots have programmable personality traits. For example, Cooper can change just how truthful TARS is, as well as TARS' humor level. Although not human, TARS sacrifices itself in order to bring about the film's ultimate end.

Ecomemories of an edenic, pre-dystopian world exist through both direct memories and postmemories; nostalgia and displaced nostalgia are also clearly present. We see the complete range of both memory and nostalgia in Cooper's family, which consists of three different generations. This allows the viewer to observe a variety of interactions with the film's present, as well as the shifting perceptions of the environment and how humankind's relationship with nature has changed. Cooper's father-in-law Donald is part of an earlier generation. This older generation has shared memories built on experience. For example, during the baseball game discussed earlier, Donald reminisces about what such games were like when he was younger, noting the difference in player ability and the types of food that are "correct" baseball fare. This

[203] McGovern, "Interstellar," 88.

generation also has shared their direct ecomemories with the following generations, particularly with their own children or with a second generation.

This second generation's ecomemory is postmemory. Memory scholars have used postmemory mainly in studying indirect memories of traumatic events. *Interstellar*'s humankind have gone through a series of traumatic events: war, death, famine, pestilence, and the knowledge of probable species (*Homo sapiens*) extinction. These events underline the difference between the film's present dystopian world and its lost eden.

Throughout the film Cooper represents this second generation; he embodies both direct memory and postmemory, as well as displaced nostalgia. It is unclear just how much Cooper remembers of the past; as discussed below, Cooper's personal timeline prior to the film's beginning remains somewhat unresolved within the film. However, I think he has no direct memories of the planet before it started to change. During the baseball game sequence, in response to Donald's memory, Cooper says, "Yeah, well, in my day we were too busy fighting over food to play baseball." While he has direct memories of life once the planet was descending into chaos, he has lived with the previous generation's stories of the past, from which he has imaged an ideal planet, an eden. He longs for that ideal. Because his longing is for a time and place for which he has no direct memory, he embodies a displaced nostalgia. This longing ultimately guides his character.

Cooper has a tenuous relationship with the world for which he longs. Before leaving Earth, other characters recognize and comment on Cooper's displacement.

While enjoying an evening on their front porch, Donald says, "You're the one who doesn't belong. You were born forty years too late or forty years too early . . . Your kids know it," indicating that Cooper would better fit an earlier society. While Donald's statement would seem to place Cooper in the viewer's own time, Cooper's nostalgia is arguably for a world powered by big dreams, a world still ripe for humankind's big ideas, a 1950s or 1960s-type world.[204] As he describes it this earlier time is one of wonder and exploration; "we used to look up at the sky and wonder at our place in the stars." Humankind still looked to the stars and dreamed, dreams that ultimately culminated in the 1960s space race. In fact, at one time Cooper was training as an engineer and NASA pilot; it is not clear whether he finished his training and/or worked in this area.[205] Donald provides one of the few clues we get, commiserating that Cooper "never got a chance to do anything with what [he was] good at."[206]

Cooper's longing ranges beyond human society to the natural world. I argue that Cooper's ecomemory ideal rests on pre-1950s idyllic imaging of nature, itself an ideal of humankind living in harmony with nature. By the film's end, once humankind reaches an apparent eden (i.e. a human made space station) that seemingly embodies the world of Cooper's ecomemory, he finds he cannot stay. He tells a repaired TARS, "I don't much care for this pretending we're back where we started, I want to know where we

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[204] Again, using Feeney's time frame, the film takes place in 2054.

[205] Through the film's dialogue we learn the mission control went down ten years prior to the film's time; we also learn that NASA was "shut down . . . for refusing to drop bombs on starving people."

[206] This occurs in the same front porch scene mentioned earlier in this paragraph.

are." He no longer has the family ties that might earlier have given him pause, and questioning the appropriateness of having created this new ideal world in ways that directly mimic the old planet.

Humankinds fate, in combination with Cooper's nostalgia and the image of nature that he holds, cause him to fill an explorer, colonist, expansionist role; he even indicates that he longs for such a role, telling Donald, "It's like we've forgotten who we are, explorers, pioneers, not caretakers." He goes on to say that "This world is a treasure, Donald, and it's been telling us to leave for a while now. Mankind was born on Earth. He was never meant to die there." When seen in this light, his role is similar to that found in the "go west young man" idea that infused Manifest Destiny in the late 1800s. As in those earlier depictions, the unknown is a possible eden.

The third generation of Cooper's family, his children Tom and Murphy, hold their own postmemories based on both Donald and Cooper's ecomemories. But their postmemories are fainter than their elder's and affect their lives less; in this way theirs are post-postmemories. Post-postmemory consists of memories that are based on postmemories; third-hand memories based on second-hand memories. For Tom and Murphy "dealing with crisis [has become] the characters' chief way of life"; therefore, they are experiencing trauma differently than are Donald or Cooper.[207] What direct memories they do have of nature are of the film's current, traumatic dystopian world. Therefore, they do not maintain a Cooper-like nostalgia.

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[207] Frederick Buell, "Global Warming as Literary Narrative," *Philological Quarterly* 93, no. 3 (2014), http://search.proquest.com/docview/1698103097?accountid=14556. 264-265. 264.

Tom exhibits what Hirsch and Spitzer call "rootless nostalgia," or nostalgia "driven by . . . layered postmemories."[208] Tom enjoys farming and, after his father leaves, he ultimately runs the family's farm as his own. Early in the film Cooper attends a parent-teacher meeting. The principal tells Cooper that test scores have come back and that Tom "is going to make an excellent farmer."

COOPER: He's got a knack for it. What about college?

PRINCIPAL: University only takes a handful. They don't really have the resources for assist—

COOPER: But I pay my taxes. Where's that going? There are no armies.

PRINCIPAL: Well, it's not going to the universities. Coop, you have to be realistic.

COOPER: You're ruling my son out for college now? He's fifteen.

PRINCIPAL: Tom's score simply isn't high enough . . . Well, right now we don't need more engineers. We didn't run out of television screens and planes. We ran out of food. The world needs farmers. Good farmers like you. Like Tom.

Tom's direct memories of life before Cooper left also drive his turn to farming. Just as ideal yet unrealistic dreams drove his father, so too do they drive Tom. While on one hand he recognizes the difficulties (arguably the impossibility) of farming in his

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[208] Marianne Hirsch and Leo Spitzer, "'We Would Never Have Come without You': Generations of Nostalgia," in *Contested Pasts: The Politics of Memory*, ed. Katharine Hodgkin, and Susannah Radstone Routledge Studies in Memory & Narrative (London: Routledge, 2003), 85.

present world, he wants to maintain a farm that would have existed in the world for which Cooper longs. He knows that drought and blight are slowly reducing the number of viable crops. However, it appears he plans to stay with farming until the bitter end. As an adult family man Tom loses one child to an unidentified, dust-caused lung disease, and he violently opposes either his wife or remaining, second son seeing a doctor. Whether this is due to fear or denial, his stubborn adherence to an ideal past could well cost Tom his own family as well as his farm.

Tom occupies less screen time than do others. I believe that this is because Tom represents climate change skeptics/deniers; as an adult most of his on-screen time is spent trying to maintain his way of life. This also illustrates that the world he wants to inhabit is disappearing. Tom's post-postmemory and rootless nostalgia is for the nonexistent eden of Cooper's nostalgia rather than a known "real" world. It seems he is living day-to-day rather than looking forward.

Murphy is quite different from Tom and is, as Cooper says, "her father's daughter." That said, she shares neither her father's nostalgia nor his desire for a lost environment. As a child she questions the present but holds no nostalgia for the past. Unlike her father and brother, she longs for a known past, for the life she knew before Cooper left; as previously defined this longing, therefore, cannot be nostalgia as it is for a known past that did exist. I argue that she does not outwardly long for a lost environment due to her own remove from such an environment, hers being post-postmemories. In other words, Murphy's lack of longing for a lost environment—

utopian or otherwise—is caused by her own distance from anything other than the film's present dusty dystopian world.

Beyond Cooper's ecomemories, which are built on the romantic idealization of nature, *Interstellar*'s plot relies heavily on empiricism. Merchant points out that the "social values of order and control [introduced during the Scientific Revolution] paved the way toward acceptance of a new narrative of dominion over nature."[209] Thus with the rise of reason came the rise of desire and belief in the ability to control nature. That desire ultimately led Earth to its (filmic) current state. In *Interstellar*'s world science and rationality must play a large role if humankind is to find a new home. This view, however, is not entirely accepted in the film's present, 2054.[210]

During the parent-teacher meeting previously described, Murphy's teacher tells Cooper that Murphy has been bringing in his old science textbooks, which include pictures and descriptions of the 1969 moon landing. These books do not reflect the "correct versions" used in her class; space exploration has been erased from Murphy's

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[209] Merchant, *Reinventing Eden*, 66 (see chap. 1, n. 40).

[210] The denial in *Interstellar* is another connection between the film and the real world, where there is considerable distance between the public and scientists on climate change. For example, in 2015 50 percent of US adults versus 87 percent of scientists agree that "climate change is mostly due to human activity." Perhaps unsurprisingly, Americans are deeply divided along partisan lines; the largest gap concerns whether "global climate change is a very serious problem," with 20 percent of Republicans, 41 percent of Independents, and 68 percent of Democrats agreeing. When compared with other regions of the world, the US is consistently below global medians; 45 percent of US adults feel "climate change is a very serious problem," 41 percent feel "climate change is harming people now," and 30 percent are "very concerned that climate change will harm me personally." For comparison, the global medians were 54, 51, 40 percent respectively. George Gao, "15 Striking Findings from 2015," Pew Research Center, http://www.pewresearch.org/fact-tank/2015/12/22/15-striking-findings-from-2015/; Bruce Stokes, "The US Isn't the Only Nation with Big Partisan Divides on Climate Change," Pew Research Center, http://www.pewresearch.org/fact-tank/2015/11/06/the-u-s-usnt-the-only-nation-with-big-partisan-divides-on-climate-change.

generation's textbooks. The teacher explains that the information in Cooper's textbook was based on Soviet propaganda, which helped rationalize the expenses of the Cold War. This was irrational as the money could have been used here in the US. She tells Cooper that the deletions are because "we have to teach kids about this planet" rather than a past one. Extrapolating beyond the film, this editing of history harkens to the Stalin-era erasures in Soviet history and omissions made to rewrite the uncomplimentary past of former colonizers. By not admitting that such events occurred, the students may not learn how good was the world they have never known. They are also less likely to look to the stars or rock the boat with their dreams. The denial of science in *Interstellar* means that those living through the current dystopia receive a very filtered image of the past planet.

Film:* Dr. Seuss' The Lorax *(2012)

Although the environmentalism in my next example is somewhat more obvious than that found in *Interstellar*, the ecomemory presented is altered from that in earlier versions. Ecomemory is again held by an individual (the Lorax), but realizing the idyll seemingly rests on group action. But, as will be discussed, this "return" to what was lost is not unproblematic. In 2012 Chris Renaud and Kyle Balda used computer animation to retell Theodor Geisel's story *The Lorax*. Like the television special forty years earlier, this version did maintain elements of the original story (i.e. the Lorax maintains ecomemories in ways similar to the *LOTR*s Ents). But unlike the 1972 production an added second storyline somewhat overshadows Geisel's tale.

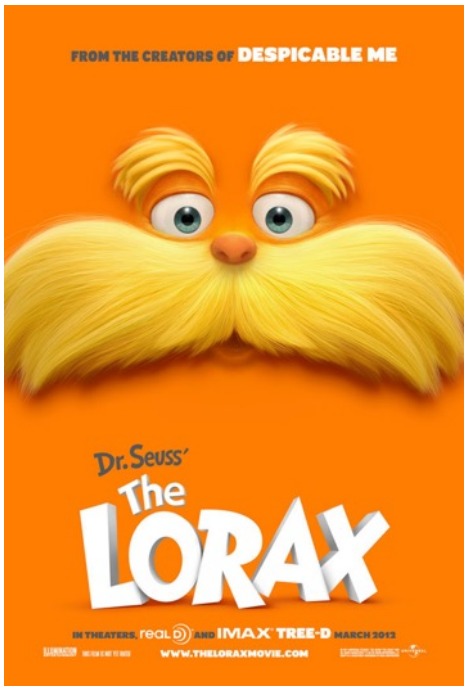

Figure 35. Movie poster for Dr. Seuss' The Lorax *(2012).*

Here the boy-listener is a preteen called Ted Wiggins, who lives in Thneedville (which in this version we do see) and has a crush on his neighbor, Audrey. When Audrey tells Ted that her biggest dream is to have a real tree growing in the yard, he sees it as a way to win the girl. He asks his mother and Granny Norma where he can get a real tree; Granny tells him, "You need to find the Once-ler. . . . [He's] the man who knows what happened to the trees." Once Ted sets out, we begin seeing portions of the original *Lorax* story. Ted "pays" the Once-ler who begins his tale, which is intercut with a story set in Thneedville depicting Ted's fight against the wealthy Mr. O'Hare who sells bottled air. In this version the native nonhuman animals attempt to befriend and then to "fight" the Once-ler, all to no avail. The Once-ler gives Ted the last seed. Instead of ending here, however, Ted returns to town, fights O'Hare and his goons, and convinces the townsfolk to "Let It Grow" (a message emphasized with a song and dance number). In the end the Lorax does come back and befriends the Once-ler.

The updated feature drew on many of Geisel's signature elements (i.e. the use of bright colors and creating a fantastical world), but softened the original environmental message. Some critics felt the added second storyline detracted from Geisel's original message. The film opened to mediocre reviews. *Rolling Stones*' Peter Travers awarded it

one star and stated, "This 3D, animated, idiotically musicalized version of *The Lorax* thoroughly debases the genius of the good doctor's book . . .."[211]

The humans of Ted's world have relied on consumption and there is no indication that they will not continue to do so. Nature's revival seems fueled as much by a "herd mentality" thought process, which is the same mentality that helped lead to the earlier apathy. This difference reflects changes in society's relationship with nature and environmentalism and a tendency to "greenwash" inconvenient environmental facts. In fact, advertisers used the film specifically to greenwash their products. For example, Mazda ran an advertising campaign featuring the new Lorax. Not only does the film disregard the original environmentally cautionary aspect of the story, but it also disregards the ecomemories maintained by the Lorax.

Figure 36 a & b. Images from Mazda's 2012 Dr. Seuss's The Lorax*-based campaign.*

Unlike the earlier versions of *The Lorax* and *Silent Running*, humankind does revive nature. The film leaves no room for doubt about humankind's future, closing as it does with a community-wide song. Therefore, the

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[211] Peter Travers, "Dr. Seuss' the Lorax," *Rolling Stone* (2012), http://www.rollingstone.com/movies/reviews/dr-seuss-the-lorax-20120302. Travers does not indicate whether he saw the 1972 TV *Lorax*, but he does reference the book—presumably having read it.

story ends with the creation of a (possible) eden only made possible by human effort. However, while the Thneedvillians have resurrected the almost extinct Truffula trees, which seemingly corresponds with the Lorax's ecomemories, the harmonic ideal is replaced by the need to shop.

Renaud and Balda's movie highlights the singularity of the Once-ler's memory. In this version, we see humans other than the boy-listener—all of whom lack ecomemory—making it appear that there has already been a collective amnesia or forgetting. The only hint of what has been lost ecologically is a mural by Audrey creates. Audrey paints Truffula trees but they are based on what she's heard about trees, rather than on her own personal, firsthand experience of them. However, unlike *Interstellar*'s Cooper, this memory does not seem to fit as either a postmemory or displaced nostalgia; there is no hint of trauma and no hint of longing for a lost place.

Humankind's impact is lessened in the 2012 adaptation and the viewer is asked not just to connect with the Once-ler but also to actively empathize for/sympathize with him. Unlike the 1970s versions, which only hint at the Once-ler's human-ness, in the new film he is undoubtedly human. He is presented as an "odd duck" in his family, which seemingly is meant to account for his actions and environmental destruction. Conversely, the Lorax appears a more comical, even ridiculous character. This anthropocentric portrayal illustrates the observation that "the easily missed point [is] that the narrator of the story is the Once-ler himself. No surprise, then, that we meet a

Lorax who is 'sharpish and bossy'."[212] The two even appear to be (off again/on again) friends; when the Lorax returns at the film's end, he tells the Once-ler, "You've done good Beanpole. You done good."

The film did not meet with the same highly vocal, logging-centered negative responses as did the earlier book and TV special. While some conservatives did continue to feel that the story was too pro-environment, it was environmental viewers who decried what they argued was added commercialization and commodification. As noted, this reflects the changes seen in the 1980-2004 period and the subsequent influence of what Lebduska calls "checkbook activism."

Television:* Cosmos: A Spacetime Odyssey *(2014)

As in the 2012 *The Lorax*, a new version of another example from chapter 3 appeared on-screen. While there are (somewhat tenuous) connections between the ecomemories of the newer and older *Lorax*es, Carl Sagan's 1980 *Cosmos: A Personal Journey* and *Cosmos: A Spacetime Odyssey* (2014), share very similar ecomemories of Earth.

Work on the updated series began in 2007 under the encouragement of Ann Druyan, co-writer of the original series and Sagan's widow. In a 2014 interview *The*

[212] Bob Henderson, Merle Kennedy, and Chuck Chamberlin, "Playing Seriously with Dr. Seuss: A Pedagogical Response to *the Lorax*," in *Wild Things: Children's Culture and Ecocriticism*, ed. Sidney I. Dobrin and Kenneth B. Kidd, Landscapes of Childhood (Detroit: Wayne State Univ. Press, 2004), 131.

Hollywood Reporter's Carolyn Giardina asked, "Why did you want to bring *Cosmos* back to the small screen?" Druyan responded,

> It seemed we were in a period of intense hostility to science. . . . Something as simple as then-President Bush mispronouncing a scientific word was emblematic of a certain contempt. There was kind of a pride in ignorance. [And] textbooks were under assault for the teaching of established scientific concepts. It was time someone stood up for science and made the case for the scientific perspective. I wanted to remind the world of what Carl Sagan had been trying to teach us, not just the immensity and beauty of the universe, but also the fragility.[213]

Figure 37. Advertisement for updated series, Cosmos: A Spacetime Odyssey.

Druyan's observations perfectly illustrate the shift in views of science noted in the *Interstellar* discussion and the rise of skepticism regarding climate change discussed in this and the previous chapter.

Cosmos: A Spacetime Odyssey (*C:ASO*) in many ways mirrors the original *Cosmos: A Personal Voyage* (*C:APV*): it consists of thirteen episodes (approximately 45 minutes each), has its basis in making science accessible to mass audiences, was hosted by an astrophysicist, Neil deGrasse Tyson, Director of the Hayden Planetarium, and deploys ecomemory in a very similar way. Some episodes even present similar, albeit updated

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[213] Carolyn Giardina, "Creative Arts Emmys: Carl Sagan's Widow Reveals How Seth Macfarlance [Sic] Helped Revive "Cosmos"," *The Hollywood Reporter* (2014), http://www.hollywoodreporter.com/behind-screen/creative-arts-emmys-carl-sagans-723949. Although it is not specified, I believe Druyan is referring to Bush's pronunciation of nuclear as nucular.

story lines. However, while Sagan's show aired on PBS, Tyson's aired on Fox. According to Goodman "what makes *Cosmos* [*ASO*] something truly profound is that it's essentially teaching science in primetime on a broadcast network in 2014—to a country with a strongly religious populace. That is amazingly bold because science is godless. So the idea that Tyson gets an hour on a Sunday night to blow your mind with science is, in fact, mind-blowing."[214] While Tyson himself has television experience, having appeared on *The Daily Show with Jon Stewart*, NBCs *Today Show*, and the PBS series *Nova* and *Nova Science Now*, among many others, it is likely that having Seth MacFarlane as an executive producer helped the new *Cosmos* land such a favorable time slot.[215] The show's premiere episode garnered 8.5 million US viewers;[216] and on imdb.com, viewers have given the show 9.4/10 stars. Critics also generally received he series positively. It was nominated for twelve Primetime Emmy's and won four.[217]

Like Sagan, Tyson does not shy away from discussing the Earth's current environmental situation. For example, during several different *C:ASO* episodes Tyson leads the viewer into a large, stone "Halls of Extinction," "a monument to the broken

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[214] Tim Goodman, "Cosmos: A Spacetime Odyssey," *Hollywood Reporter* 420, no. 10 (2014), http://search.ebscohost.com.www2.lib.ku.edu/login.aspx?direct=true&db=f3h&AN=94917471&site=ehost-live.

[215] MacFarlane has worked on the previous Fox shows *Family Guy* and *American Dad*.

[216] TV By the Numbers, "'Cosmos: A Spacetime Odyssey' Premieres out of This World with a Total Audience of 40 Million Expected Worldwide," news release, 11 March, 2014, http://tvbythenumbers.zap2it.com/2014/03/11/cosmos-a-spacetime-odyssey-premieres-out-of-this-world-with-a-total-audience-of-40-million-expected-worldwide/. Other viewer numbers from weekly reports on tvbythenumbers.zap2it.com.

[217] The four Emmy wins were for: Original Writing for Nonfiction Programming, Original Main Title Theme Music, Sound Editing for Nonfiction Programming, and Music Composition for a Series.

branches of the tree of life"—the, to date, five major mass extinction events Earth has known. There is, however, a sixth hall that is dark and unfilled that we learn will contain the present age.

Figure 38. Tyson looking up at the Halls of Extinction entrance.

Tyson's clearest and most direct handling of environmental memory and issues appears in episode 12, "The World Set Free." This episode focuses on our sister planet, Venus, the greenhouse effect, climate change, and how humankind has contributed to and accelerated these processes. To viewers of the original series, "The World Set Free" might sound familiar. That's because the episode maintained and updated the *C:APV* episode ("Heaven and Hell"), which I analyze in chapter 2.

Tyson sets the stage by describing the greenhouse effect and noting that it is "basic physics, just bookkeeping of the energy flow. There's nothing controversial about it." He then addresses such questions as how do we know that humankind is responsible for climate change? and, this winter was especially cold so, therefore, climate change does not exist, right? Using scientific data, history, and a canine companion Tyson refutes these arguments.

By employing a mixture of direct language and inferences *C:ASO* leads the viewer to feel that the ecological world we have lost (pre-dramatic increases of atmospheric carbon planet) was wondrous. In other words, the show rests on ecomemory. For example, early Venus was very similar to Earth; Tyson opens the episode with "once there was a world not so different from our own" and notes that this world, Venus, "would have seemed like a paradise." Although he does not explicitly state that Earth was at one point such a paradise, by continually connecting the two planets (particularly by often noting how similar they were) Tyson leads the viewer to believe that Earth must also have been an idyllic eden. Or, as he puts it, "once there was a world that was never too hot or too cold but always just right." Indeed, the depiction of Earth's past environment is lush and green, without smog in the air or trash in the oceans. It is due to human actions that this version of Earth no longer exists; he underlines this responsibility by stating, "It is now clear, beyond any reasonable doubt, we are changing the climate." While Tyson does not imply that we can ever fully return to that lost paradise, addressing and altering climate change is the only chance we have to come close to retrieving what we lost, to realizing our ecomemories.

As noted in chapter 2, Sagan is very vocal in his fears for humankind and the planet; Tyson, meanwhile, is more low-key. *C:APV* was written, filmed, and aired at the tail end of the "environmental decade"; environmental issues and the environmental movement were still highly visible. *C:ASO*, however, was written, filmed, and aired just as the environment again was growing in popular discourse. While this might lead one to expect *C:ASO* to sound a clarion call for nature, the show also appeared at a time

when the divide between climate change deniers and believers was growing. According to Druyan, she and her fellow collaborators "weren't interested in going to the audience that already knew that they loved science. [They] wanted to go to the largest possible audience and attract people who'd never even though about it."[218] This, combined with the climate change divide, likely led the producers to present a somewhat "lighter" handling of environmental issues—and placed the most direct discussion of climate change towards the series' end—in order to maintain a robust audience.

Advertisements & PSAs

As in the other examples analyzed in this chapter, visual examples of ecomemory again occur in advertisements and PSAs. We continue to see a mix of messages from businesses and environmental groups alike.

Starting with corporate advertisements I suggest that contemporary greenwashed messages are subtler than were similar 1970s ads. Greenwashing indicates a skepticism about corporate ecologically-friendly changes; it describes claims that specific products or practices—and, by extension, the company itself—are sustainable and environmentally friendly. "Rather than substantially change business practices so as to earn a better reputation many firms . . . turn to PR professionals to create one for them. This is cheaper and easier than making the substantial changes required to

[218] Itzkoff, "'Family Guy' Creator."

become more environmentally friendly."[219] There are various way to greenwash, including: touting green products or actions when, in reality, any changes are simply in response to existing law; exaggerating green actions, no matter how big or small; or simply making corporate donations to environmental groups.

Compare, for example, the 1979 Monsanto print ad discussed in chapter 2 (fig. 13, p 72) and a 2010 Dow Chemical Corporation television ad. In Dow's "Fire" a male narrator underlines the wonders of chemistry over stock footage; classical music plays underneath the narration throughout the ad.[220]

Table 1. Shot list for "Fire."

NARRATION	IMAGE SHOWN UNDER NARRATION
"Even before science was science,	Water cross fades into fire/flames cross fades into an explosion – [Most remaining edits are jump cuts.]
hydrogen bonded with oxygen and oxygen bonded with carbon,	- ladybug crawling on leaf; - misty hills under a reddish moon (may be lava?);
and those were the bonds that linked humankind to humanity.	- Maori(?) man in entrance to cave looking directly at the camera;
Fire was fire.	- sparks jumping;
And the first language, the language of chemistry, was universal and eloquent.	- person having upper chest painted with white dots; - shadow puppet show - red ribbon caught on post (looks like litter);
And the unique ability of chemistry to change everything has never changed.	- golden hued periodic table cross fades with flames; - child writing in notebook; - CU child's face (in classroom?) to

[219] Sharon Beder, "Greenwash," in *International Encyclopedia of Environmental Politics*, ed. John Barry and E. Gene Frankland (New York: Routledge, 2002), 253.

[220] FCB Chicago, "Fire," FCB Chicago, Television advertisement, Jan 2016, http://act.adforum.com/creative-work/ad/player/34465284/fire/the-dow-chemical-company. This advertisement was created as part of Dow's "The Human Element" campaign.

It is still the catalyst in the never ending cycle of need and discovery.	- LS of children in classroom; - chef hold sauté pan over stovetop flames;
It is still the hope of human history to com.	- two men eating noodles in a restaurant, woman standing to left looking away from men (possibly out a window?); - CU hand moving a white knight chess piece; - LS two chess players at a table in front of a relief statue (possibly Soviet-era art?);
It is still the bond impartial between the elements	- needle (?) with red thread; - MS maroon robes of a Buddhist monk;
hydrogen,	- koi in water, box containing the periodic table square for hydrogen superimposes over image;
oxygen,	- red fabric?, box containing the periodic table square for oxygen superimposes over image;
carbon,	- smoke as if a candle were extinguished, box containing the periodic table square for carbon superimposes over image;
and human.	- man playing fetch in a snowy field with dog, with a car, tent, and campfire in the background, box containing "Hu" superimposes over image, box transforms into Dow red diamond logo.

While it is unlikely that either Dow, Monsanto, or a similar company would directly mention the multiple ways in which chemistry has led to environmental degradation (and action), if a viewer saw the ad with no background context they likely would feel chemistry can only lead to good. Therefore, by extension, why would anyone fight chemistry or, more largely, science as the solution to our current environmental situation? Unlike earlier chemical company advertisements (i.e. the Monsanto ad), Dow neither addresses nor acknowledges any environmental effects of using chemistry. Nothing in the minute-long spot is remotely environmentally related, much less anything that would directly address current environmentalist arguments.

The ad does, however, draw/rely on ecomemory. Although subtler than the earlier KAB "Crying Indian," by using a shot of a Maori man standing in a cave entrance (fig. 39) Dow also draws on a similar popular image, depicting in one shot a "noble native" who is closely connected with this land. Similarly, with the exception of the two chess players, most of the humans we see are brown skinned. As with the Maori man, these visual choices, under narration that is in no way linked, seemingly draw on an imagined image of the connection between native/minority populations and the planet. While it remains unstated, the viewer can read the majority of the advertisement as indicative of a pristine environment.

Figure 39. Dow's "Fire," 4th image in preceding shot list. [ACT Responsible via AdForum]

Conversely, environmental group PSAs arguably target "approved" policies and practices more explicitly. Independent of place of origin, the PSAs discussed below all directly deploy ecomemory and nostalgia both to connect with the viewer and, ultimately, drive the viewer to action.[221] While many early-1970s PSAs dealt with litter, climate change has become the "it" topic of the early twenty-first century.

[221] As with *Lord of the Rings*, content "outweighs" country of origin in this study.

Using post-1970s technological advances (i.e. the internet), international agencies have created climate change-themed web-based PSAs. This highlights another change in environmental messaging since the 1970s; since the arrival of broadly used internet, these PSAs can reach much wider, possibly international, audiences than could earlier campaigns.

For example, the firm Tribal London created the web film "A Simple Love Poem" for The Climate Coalition, a UK-based environmental organization. The short features different famous figures from the United Kingdom speaking lines from Shakespeare's Sonnet 18. It closes with on-screen text reading "What felt eternal is changing but we can tackle climate change if enough of us want to."[222] As seen in figure 40, choices of framing and angle, as well as an often muted color palette and connecting the early 21st century's environmental problems with a 1609 sonnet, work to recall elements of Romanticism. Relying on ecomemory, thus, creates a sense of longing for

Figure 40. Nature dwarfs the human figure. Thus, the viewer is reminded visually of nature's grandeur and power relative to that of humankind. "A Simple Love Poem." [ACT Responsible via AdForum]

[222] RSA Films, "A Simple Love Poem," Tribal London, Web Film, 1:49, Jan 2016, http://act.adforum.com/creative-work/ad/player/34509008/a-simple-love-poem/the-climate-coalition.

the (simpler, cleaner) idyllic past.

In addition to ecomemory, a Greenpeace-sponsored web film PSA that spoofs a *Star Wars*-themed Volkswagen ad also taps into American cultural memory. The spoof picks up almost from the VW ad's end. A child dressed as Darth Vader attempts to use "the force" on a VW. Additional children dressed as other *Star Wars* characters gather and march up, some getting out light sabers, to confront Vader. Vader, the other children, and the camera/viewer look up to the sky where we see a Death Star with the VW logo in its crater. Just as in *Star Wars*, laser beams focus over the crater/logo and strike Earth. Closing text states, "VW is threatening our planet by opposing cuts to CO2 emissions. Join the rebellion." The final frame shows the Greenpeace logo, as well as text saying, "Watch episode II" and the web address VWdarkside.com.

Both the ad and the spoof rely on common popular cultural memory in using the popular *Star Wars* motif; however, I feel the use of children also directly connects ecomemory and environmental problems with the next generation. This draws on the question "what are we leaving our children?". As discussed in chapter 2, concern for children fueled many who joined the Earth Day movement. Beyond this, however, the PSA presents VW as antiphonal to an ecomemory ideal. The practices of companies such as VW lead to environmental degradation to the extent that we will not be able to return to any previous state.

Although both VW and Greenpeace released their pieces in 2011, the activist web film appears even more relevant following the mid-September 2015 revelation that VW lied about emissions data both in the United States and Europe. A few days later, in

mid-September, Greenpeace released a new web film continuing the *Star Wars* theme. It also, however, subverts that series, with the main character ethically doubting anti-environmental actions and nostalgic for a better environment.

Storm Troopers walk the streets of London. When told to kill a captive polar bear, who sounds like Chewbacca, one Trooper flashes back to happy times with the bear and ends up running away. A black screen intercuts the narrative; on-screen text reads, "Brian has left the dark side of VW and is in an existential crisis." Contemplating his unhappy life, on seeing an empty soda bottle floating in the river Brian flashes to himself happy among trees—even hugging one—and the cruel life he left behind. Just over halfway through the film's 6:28 minutes, Brian and the polar bear watch the news, which includes a story about him. "It is thought that his relationship with a polar bear is behind his disappearance." The news continues with the story that Greenpeace's ship "Artic Sunrise is heading north to document the rapidly melting Artic sea ice," showing images of polar bears on the ice; Brian and his friend bear share a look. The scene cuts to ice floes, the ship, and Brian hammering a banner into the ice, while, in London, the polar bear watches on TV. The piece ends with "real life" Storm Troopers protesting VW outside a meeting of the

Figure 41. (Former Storm Trooper) Brian hugging a tree in a contemplative moment. [World Insiders via YouTube]

CEOs of various car companies, who will decide whether to continue opposing a European climate change, low fuel and carbon emission law. VW, however, is the only company that does not show, probably, because "they know we're here and they've been scared off."

Like the original PSA, this 2015 short also rests on ecomemory. Here the ideal includes a peaceful relationship between humankind and non-human animals. Like *Silent Running*'s Lowell, Brian resorts to direct action to fight the new system that threatens the ideal. In freeing the unnamed polar bear, Brian calls to mind direct actions taken to liberate caged animals. As with those who fight against using non-human animals in labs or keeping them in zoos, there appears to be no (legitimized) reason for the polar bear's caged situation. While less violent than Lowell, Brian acts on his beliefs.

Figure 42. Brian hammers a banner onto the Arctic ice. The banner depicts Darth Vader with a VW logo over his mouth; the accompanying text reads, "Volkswagen. The Dark Side." The same image and language appeared earlier as a billboard in London. [World Insiders via YouTube]

Conclusion

By the mid-2000s environmental issues again began to draw wide-spread attention. Some of this attention is like that of the 1970s. This includes the use of education and direct action to affect change. Some attention, however, continues the inattentive tendencies of the 1980s and 1990s. Focus in this latter camp argues the validity of climate change and that any action to legally assist the environment is anti-business. The corporate cooptation of environmental concerns continued in film (*Dr. Seuss' The Lorax*) and ads. The division between the different camps of thought leads to uncertainty. There is still hope for change, but it is unclear whether humankind can affect that change—and whether it might even be too late for change.

In this changed image, the past environment is still represented as an eden, however we may have reached a point on our present path where we will not be able to either return to—or create a new—eden. We find this dichotomy embodied in *Interstellar*; we have lost a past Earth, but the film raises the question: could we actually live in a new eden? Particularly if it's one we must create ourselves? As in the 1980 show, the 2014 *Cosmos* uses ecomemory as a carrot, with the dire possible outcomes of climate change as the stick. In these instances, we find a warning that both reflects and reimagines that raised in the 1970s: change is needed otherwise we may descend into either a wholly artificial "eden" (as in the Earth of *Silent Running*) or an irreversible dystopia (as in *Interstellar*).

It is this point, among others, that sets apart *Dr. Seuss' The Lorax*. Change *does* come, in that the Truffula trees of ecomemory will once again exist, but like Lowell's

crewmates the people do not apparently mind the artificial world in which they live. Unlike the other examples discussed in this study the film encourages small action but not larger, more lasting changes. By shifting the Once-ler from the "bad guy" to a "quirky guy" with whom we should empathize, the filmmakers give business discourse prominence while pushing environmental discourse into the background. In my reading of the film, these changes undeniably illustrate the impact of changes in the discourse of the 1980s to early 2000s—particularly a 1980s-like pro-business discourse.

Although the modern world is not dystopian, arguably it holds a trace of Geoghegan's "day-to-day" rather than forward imagining. With uneven widespread and wide-ranging action, local organizations have become bigger "players" in the environmental movement. But these smaller actions do not necessarily foster thinking beyond the today. While I do believe that even small actions help, we have yet to see present discourse gain momentum from such small actions.

Arguably, the visual media of the mid-2000s to mid-2010s present a shifting relationship with nature. They also, however, use a subtlety not found in the media of the "environmental decade" that indicates the continuing influence of the intervening decades.

Chapter 5: In Conclusion

Over the course of the preceding chapters, I have analyzed the evolving discourse related to environmental concerns within visual ecomedia that utilizes ecomemory. In order to frame my analysis within time, I chose to look at ecomedia created between 1970 and the present, during the time frame of the modern environmental movement. To better understand and discuss this discourse, I chose examples from a variety of visual ecomedia: feature films, television programming, advertisements, and public service announcements.

With this chapter I will highlight how each of these ecomedia forms employs ecomemory and the connections between these media within the time periods in which they appeared, as well as between these media across time periods. Following this examination, I discuss this study's limitations and lay out possible avenues for future research. I close this chapter with a brief look at my own journey with environmentalism, which will provide context for the pro-environmental bent of this work and concerns I hold for the possibility of positively addressing current and future environmental issues.

Ecomedia Forms & Ecomemory

I have used four media forms throughout this study: film, television, advertisements, and PSAs. The examples of ecomedia in each of these types utilize ecomemory in ways that are both similar to and different from each other.

Each of the four films analyzed here include ecomemory as part of the larger story and sometimes focus on one or two beings who hold most, if not all, of the existing ecomemory. In *Silent Running* Lowell alone remembers a past environment and wants to return to it, while in *LOTR: The Two Towers* there are two types of beings that embody ecomemory: the Ents and Elves. When the former attempt to revert the environmental destruction of Isengard, it is a group of Ents acting directly for change. Similarly, *Interstellar* may appear to have a single person wanting change, but it ultimately takes more than one person to recreate the lost eden. *Dr. Seuss' The Lorax*, however, both uses and strays from these typically filmic tropes. There is a single hero fighting for the environment: the Lorax; however, it is Ted and the Whovillians who create change. But while Lowell, the Ents, and Cooper all long for lasting change, it is unclear that humankind's changes will last, especially against consumerism.

Television is more variable. The TV special of *The Lorax*, for example, deploys ecomemory as does *Silent Running* of the same period: ecomemory is part of the larger storyline and there is a single environmental hero (the Lorax). Both the original and the reboot of *Cosmos* do use a single narrator/host, but they also emphasize that environmental degradation and change are not due to a single person. Both Sagan and

Tyson present what scientists think a pre-human world could be like and that returning to that eden takes the efforts of all humankind.

Corporate advertisements very rarely employ ecomemory. There are rare cases that do, such as the Monsanto ad analyzed in chapter 2, but it is the exception rather than the rule. The colors and subject of Monsanto's ad remind the viewer of an edenic nature filled with vibrant green grass in which children can play without worry of pollution. Meanwhile Dow's "Fire" very briefly touches on ecomemory by drawing on a long-lasting image of native peoples and the environment. Ultimately corporate ads work to coopt environmental concerns to lessen fears and urgency and increase the bottom line..

Lastly the PSAs, made by pro-environmental groups, typically do deploy ecomemory. That memory at times is conveyed through the images (such as humankind dwarfed by nature in "A Simple Love Poem" and Brian the tree-hugging Stormtrooper). In a way that is similar to what we saw with television, the PSAs included here presume the need for group—rather than lone individual—change.

Making Connections

Since 1970, discourse, actions, and media attention to the environment have not maintained an equilibrium. Instead there has been growth, dearth, and regrowth, although of a somewhat different form. Over the course of this study I have provided evidence that leads me to make connections both within and between the specific individual time period boundaries.

Connecting Within Time

In each of the previous three chapters, I employed discourse analysis and ecocritical and memory studies frameworks to analyze a handful of visual ecomedia that make use of ecomemory. Therefore, I studied each example through a critical environmental lens while briefly historically contextualizing each time period and locating each example within larger environmental conversations.

Beginning with chapter 2, I broke the forty-six-year time span my study covered into smaller pieces of time. Within each time span (1970-1980, 1981-2004, 2005-present) ecomemory in ecomedia followed much the same trend as the environmental discourse.

Between 1970 and 1980, visual ecomedia reflected larger environmental concerns: humankind has harmed the Earth and must act—and act now—to reverse this harm. The decade began with the large-scale awareness, education, and widespread action of Earth Day. Dr. Seuss' *The Lorax* attempted to include children in the larger environmental discussion. The Once-ler enters an edenic world that he ultimately destroys for profit. The Lorax holds on to the memory of that eden as it disappears, attempting to impress on the Once-ler a need to return. A year later, in 1972, the Lorax extended his pleas for action in a TV short film and the feature *Silent Running* took the Lorax's actions (as well as those by such organizations as Greenpeace and Earth First!) further. Here the botanist Lowell remembers an edenic past-Earth, longs to lead humankind back to that eden, and is willing to take deadly action, even at the cost of his own life, to make his dream a reality. Both the TV short film and the feature addressed

issues of clean water and air, through visuals of pollution driving away animals (*The Lorax*) and the edenic alternative of water safe to swim in (*Silent Running*). As part of the larger, real world, national environmental discussion, the imperative for clean water and air led to a string of environmentally-concerned government acts (Clean Water, et cetera). Over the decade, pro-environmental groups created visual pleas for change. However, corporations and special interests created their own material with which to throw doubt on environmentalism, going so far as to provide rebuttals that addressed environmental concerns point-for-point (i.e. Monsanto's 1979 print advertisement). In the years following Sagan's *Cosmos: A Personal Voyage*, a mix of governmental and corporate actions undermined the environmentalism of the 1970s and relegated that discussion to the back of the nation's mind.

The consistency of environmental concerns memories found in the 1970s drastically declined during the next twenty-five years (1981-2004). Rather than standing as a call for change, ecomedia changed its nature: environmental themes and concerns are pushed into supporting storylines, if they appear at all. In these ecomedia, concerns are simplified, less urgent, and more anthropocentric (rather than seeing humankind as part of a larger world). Ecomemory did not generally play a role in ecomedia of the period, reappearing—to a degree—only in the early 2000s.

In chapter 3, I showed how governmental actions tended to be pro-business and rarely took environmental concerns into account. These changes led organized environmental groups to change their methods of working for environmental change. There was growth in a legislative lobbyist branch of larger groups, as well as in smaller

grassroots groups working for environmental justice for all, regardless of race, class, or gender. The direct actions of *Silent Running*'s Lowell became more visible in real world pro-environmental activities, such as tree spiking and property destruction. When environmental images did appear the newspapers and government used terms like "terrorist" to weaken environmentalists' credibility. Numerous quantitative studies illustrate the larger decline in environmentally-relevant magazine images, television programming, and advertisements. These studies largely indicate the decline of environmentally-related material over the 1980s and 1990s, with momentary increases in the 1990s connected with Earth Day's twentieth anniversary and the Kyoto meeting. This downward trend only began to lastingly rebound in the early 2000s. The *Lord of the Rings* trilogy of films forms a bridge between the two periods, with much of the directly pro-environmental aspects of the original literary sources either minimized or completely absent.

Jackson's changes to the environment's role in Middle-Earth heralded the beginning of yet another shift in the relationship between ecomedia and ecomemory. Since 2005 environmental concerns have grown and so too has ecomedia. The shadow of the previous period continues to hang over more recent visual ecomedia: environmental concerns are presently more subtly in this time than they were in the 1970s. Environmental change is needed and, if we make changes, a utopian nature may reappear. Ecomemory again has a presence in ecomedia. However, it is no longer clear if, once found, we would be content with our new utopia; it is even unclear whether or not we have passed a tipping point beyond which a return to the lost idyll is

impossible. This latter is partly due to the (seeming) increase in green corporate marketing and an increased sense that humankind can buy itself out of any environmental problems.

Illustrating these changes, the dystopian future world of *Interstellar* has blatant environmental elements (i.e. the new, modern Dust Bowl), but the environment itself is not the center of attention as it was in *Silent Running*. Similarly, while Neil deGrasse Tyson renews many of Sagan's environmental pleas and concerns in *Cosmos: A Spacetime Odyssey*, he typically does so using more implicit language. He does, however, address the issue of doubts concerning environmental issues, especially climate change. Meanwhile, environmental group web films draw on cultural memory and remain overt, while some corporate ads, such as Dow's "Fire," do not even recognize that there are environmental problems. Over the course of the late 2000s and early 2010s skeptical and denying voices have grown louder and more often lead general discussion about acting to help the environment. In governmental actions of the period, the increasing voice, and influence, of skepticism seem to have led to more public discussions of such actions as debating Arctic drilling and the Paris Climate Change Convention.

From 1981 on, visual ecomedia display a shift in general environmental outlook. Throughout our time on Earth in *Interstellar*, there is evidence that humankind at some point shifted from looking forward to living day-to-day. For this reason, recreating an ecomemory-based eden appears impossible and possibly irresponsible as making the attempt would use money and resources that could be put to a more immediate use. It is arguable that we in the real world are—or possibly have already—made this same

shift. While this may help explain legislative environmental inaction, it should also raise concerns about how humankind proposes to approach the future.

Connecting Across Time

Ecomedia production from 1970 to 2016 has been uneven, there are commonalities to be found. First, although each film and TV characters' specific ecomemories differ slightly, each had a similar base: there once was a beautiful edenic utopia where humankind and nature lived in harmony, over time humankind lost that eden through its own (in)actions, and, therefore, returning to that earlier time would mean returning to an edenic utopian state. In *Silent Running* humankind has given up on ever being able to return to the lost ideal, while the 2012 version of *The Lorax* depicts events so that it appears an easy (and natural) process. The *Lord of the Rings*' Ents and Elves, Seuss's Lorax, *Silent Running*'s Lowell, and the hosts of the *Cosmos* series all speak for the environment; they may do so in differing ways, but ultimately they all feel we have lost (or are losing) an ideal – for *Cosmos*'s Sagan, that ideal was relatively recent and not yet wholly lost in the well of time. These characters urge protection of nature, for humankind to find a way to live in harmony with nature, particularly when, in *Lord of the Rings*, we learn that nature itself remembers and emotes. Middle-Earth's natural memories, in turn, impact those of the Ents and Elves. Several of these environmental characters are willing to go to any lengths, to directly intervene in the course of events to reach these goals: the Ents go to war and Lowell kills his crewmates and, ultimately, himself.

In each example, the collective has edited its own environmental memory, which itself is based on nostalgia and others' ecomemories. In these representations, the world in which we find ourselves is much worse than any version that came before. In this way, creating a collective or group ecomemory within these ecomedia disregards elements of reality, e.g. that there was pollution in the 1950s, that we have exploited nature for its resources for centuries, and that moving into cities and suburbia helped lead to a fundamentally different human-nature relationship. The post-memories *Interstellar*'s Cooper builds from the previous generation's direct ecomemories, leaves him nostalgic for a past he never knew and ultimately drive his desire to affect change.

A first of its kind event, Earth Day continues to serve as a yardstick against which environmentalism is measured. For this reason, throughout this study I use Earth Day and the early 1970s as a point of comparison. Although they mark a change from the ecomedia of the 1970s, the examples I analyzed in chapters 3 and 4 share similarities in tone and volume. The ecomedia sampled from the 1970s-era were overtly environmental and there was little chance we might not receive their environmental messages. Those from later years, however, are subtler in their messages. Even the media within the most recent period have not regained the voice found in the 1970s.

Considerations: Limits & Possibilities

As I noted in chapter 1, there were a variety of elements limiting the scope of this study. Due to time and space restrictions, I could analyze only a small sampling in this

dissertation. These limitations, however, provide openings for further scholarly study and the expansion of the ecomemory-ecocritical-ecomedia body of knowledge.

There are numerous visual media formats; those included here represent only a small few. However, in order to show that my argument was not limited to a single medium, I provided an array of media. Just as I could not include every possible format of visual media, I also could not include every example of ecomedia. Such a task likely would be a lifetime's work. Therefore, further studies can broaden the range of visual ecomedia types used, or take the deep and narrow approach by adding examples within the formats discussed here. Even with those formats I have included there is still much room for expansion; for example, future work might look at documentary films and/or examples in genres beyond science fiction and fantasy. I think it would also be interesting to include more international examples, especially from those countries with a strong Green presence as compared to those with a weaker presence.

It could also be interesting to better understand how and why the discourse surrounding environmental issues in visual ecomedia is two-way—with ecomedia both reflecting and shaping the discourse. Such information likely is best gathered through audience reception studies. With that in mind, to fully discuss this two-way relationship would have greatly broadened the scope of the current study. However, by not including such data and discussion here, the question of the audience remains for later research. Such audience reception research would bring another element to the ecomemory-movement discussion.

I believe it also might be fruitful to look specifically at times when environmental discourse slackened. In other words, I showed that changes in environmental outlook and attitudes during the 1980s and 1990s altered not just the amount of ecomedia produced, but also the larger discussion. Why, then, was environmentalism and the environmental movement able to survive? How could someone become more environmentally aware and concerned when pro-environment discourse while ecomedia became less prevalent than in surrounding periods? Although I have discussed the shifts caused by the changes in popular and governmental outlook and attitudes, it was beyond the parameters of the current study to look at how such changes affect the ability for environmental media to continue to have an impact.

Lastly, there are broader questions about business and the environment left unattended in this dissertation. Particularly, studying in greater depth environmental discourse wholly from a corporate/industry view. Is all corporate visual ecomedia as negative towards environmental concerns as the examples used in this study? Or are there examples that attempt a more positive engagement with the environment?

Being Green

The first step of my own environmentalism grew from Dr. Seuss. *The Lorax* and *The Butter Battle Book* were my favorites of the good Doctor's books; fairly early on, the former book instilled in me an understanding that destroying nature was "bad," while the latter planted what, to me, seemed a simple message about war. These beliefs have only become more rooted and grown as I've gotten older.

In addition to reading, as a child I grew up playing outside with the family dog, especially in the summer. I remember, just as the sun was setting, a truck would come through the neighborhood spraying for mosquitos. I associate this with it being warm, so it may have been just a summertime occurrence or something longer lasting. At the time, admittedly, I did not question the action or wonder what the substance being sprayed was, I simply knew that it helped cut down on mosquitos and that seemed good to me (especially as I seemed a beacon for mosquito bites).

In school I was, in many ways, *that* student: I did not like meat, for several years during middle school for Halloween I dressed up as a "hippie"—complete with protest signs—and I tended to choose topics for book reports or research papers that were a bit random and/or not what most of my peers would have chosen. For example, for a paper in my ninth grade civics class I wrote an argument against the use of nonhuman animals in labs. I was quick to join the high school Earth Club and participated when we marched in the annual Baton Rouge Earth Day parade. At some point in school I remember going on a field trip to the nuclear power plant about thirty miles outside Baton Rouge. Although I probably would not have been able to easily verbalize my opinions, I already had "ideas" about nuclear power. Beyond having vague feelings about wrong and right treatment of the environment and nonhuman animals, which at this point went hand in hand for me, I do not know that I had the knowledge to form arguments stronger than "pollution is bad" or "hunting is wrong."

While I started to become more aware in college, it was really after college that I made major changes with the environment and nonhuman animals in mind. I already

tried to recycle as much as possible; admittedly to the extent that I will pull out soda cans or water bottles or such items from trashcans and bring them home and put them in my own blue bin. I began trying to be more environmentally-minded when shopping. After moving to Lawrence, Kansas, and talking to people here, I made the switch to living a vegan lifestyle (avoiding the use and consumption of any non-plant-based food and clothing). While my reasons were largely due to beliefs about avoiding cruelty toward nonhuman animals, and much of the reading I did at the time focused on this aspect of veganism, I also read about the positive environmental effects of choosing a vegan lifestyle.

Studies are continually supporting the idea that our current food production method contributes greatly to climate change. Not only does the factory farming of "food animals" lead to pollution, it also contributes to the destruction of forests, especially the Amazonian rainforest. Additionally, there are other environmental issues surrounding factory farming, such as waste overflow and air quality.[223] Shifts in farming have also led to increased chemical use; genetically modifying seeds without

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[223] For more on the impacts of factory farming, see: Carrie Hribar, "Understanding Concentrated Animal Feeding Operations and Their Impact on Communities," National Association of Local Boards of Health, 2010, https://www.cdc.gov/nceh/ehs/docs/understanding_cafos_nalboh.pdf; "Environmental Impact of Industrial Farm Animal Production" and "Putting Meat on the Table: Industrial Farm Animal Production in America," Pew Commission on Industrial Farm Animal Production, both at http://www.ncifap.org/reports/; Jeff Tietz, Boss Hog: The Dark Side of America's Top Pork Producer," *Rolling Stone* 14 Dec 2006, http://www.rollingstone.com/culture/news/boss-hog-the-dark-side-of-americas-top-pork-producer-20061214; James E. McWilliams, "The Myth of Sustainable Meat," *New York Times* 12 Apr. 2012, http://www.nytimes.com/2012/04/13/opinion/the-myth-of-sustainable-meat.html?_r=0; "Dismantling the World's Greatest Rainforest," Compassion in World Farming, 31 Mar. 2015, http://www.ciwf.org.uk/news/2015/03/dismantling-the-worlds-greatest-rainforest-f1.

conducting studies exploring what the short or long term effects might be on other nearby plants or nonhuman animals (bee populations, for instance).[224]

Even other industries that use nonhuman animals, such as the leather and wool trades, add to the problem. I have attempted to become as environmentally friendly as possible for transportation and clothing. While my actions may be mere drops in the bucket, I do feel that every little step can help in the long run. That said, I also understand some of the motivations that have driven direct action activists; it seems easy to feel like such large gestures are the only way to effect change. In many ways, I am still the kid reading about environmentalism and pacifism, but I hope that I am also able to act when needed and help others better understand our relationship with nature.

Conclusion

The discourse surrounding environmental concerns is ever evolving, and this is particularly the case within ecomedia, especially that engaging ecomemory. Old World trends in imaging nature made their way to the Americas. These trends, in turn,

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[224] For information on the impact of GMOs, see: Food and Agriculture Organization, "Genetically Modified Organisms, Consumers, Food Safety, and the Environment," United Nations, 2001, http://www.fao.org/docrep/003/x9602e/x9602e00.htm#TopOfPage; Jennifer Ackerman, "Food: How Altered?", National Geographic, http://environment.nationalgeographic.com/environment/global-warming/food-how-altered/; Greenpeace, "Briefing: Environmental and Health Impacts of GM Crops – The Science," Sept. 2011, http://www.greenpeace.org/australia/PageFiles/434214/GM_Fact%20Sheet_Health_%20and_Env_Impacts.pdf.

translated themselves into the ecological memory, shaping how the modern world views their surroundings and how—and what—we remember of a past environment.

Earth Day opened the "environmental decade" of the 1970s, which included the creation of new environmental organizations and new legislative acts and laws. Nature was something that human actions were working to destroy (or, as in *Silent Running*, had already destroyed) and, thus, human action was needed to attempt to save that nature. Collective ecomemory maintained that there had been a better environment "before." This earlier environment, whether it be that of the Lorax's world or of Lowell Freeman's, was edenic and we humans caused the loss of this idyllic world. Not all was lost, however, we may be able to reencounter the idyll.

But the years following the environmental decade saw increased conservatism and a decreased presence of the environment within the discourse. Not only did governmental actions, such as putting environmental regulation into the hands of anti-environmental, pro-business appointees, weaken existing legislation, but the government was able to guide the discussion surrounding a portion of the continuing environmental movement. It cast some environmental actors as being well beyond societal norms. In that way, thinking of those who appreciate wilderness as outsiders, the discourse about nature to a degree returned to that which surrounded medieval wilds. Nature, therefore, was once again a resource to be used, rather than a wonder to protect. As done previously, visual ecomedia reflected the shift in relationship and image. Environmentalist themes were used less often across popular visual media (e.g. films, television, and printed matter), rebounding slightly in the time around Earth

Day's twentieth anniversary and the mid-1990s; however, the overall downward trend returned and only began to turn in the first years of the twenty-first century.

With a new century came yet another change in humankind's discourse about nature. Environmental concern again began to appear and grow. Nature was, once again, something to protect and save. This image, and the desire to regain the eden of ecomemory, reappeared in ecomedia. But there has not been a return of the environmental decade. The shadow of intervening years hangs over both action and image, such as in both *Lord of the Rings* and *Interstellar*, although to differing degrees. While there has been forward movement by some nations, others—especially the United States—have maintained an attitude of inaction. On another level, however, there has been a growth in popular concern and actions. Visual media reflects this uncertainty. While in some, such as *Interstellar*, we (ultimately) are able to find a world very similar to our lost eden, in others (*Cosmos: A Spacetime Odyssey* and "A Simple Love Poem") this return is uncertain; humankind must act, but that action may not be enough or may be too late.

Environmental discourse continually changes. Despite these changes, our collectively held ecomemories and nostalgia have consistently been of an ideal nature, a lost edenic utopian nature. Though the samples analyzed in this study have illustrated this consistency, they have also illustrated and tracked the changes within the larger environmental discussion.

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Note: All film stills by author.

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Figure 2: http://classic.apimages.com/OneUp.aspx?st=sel&showact=results&sort=creationdatelower%3Aalphabetical&sh=14&kwstyle=and&dbm=PY2000&adte=1477345552&ish=x&pagez=60&cfasstyle=AND&rids=db6610ec44e5da11af9f0014c2589dfb&page=1&xslt=1p&mediatype=Photo

Figure 3: http://www.timecoverstore.com/product/three-mile-island-1979-04-09/; https://www.pinterest.com/pin/132434045265001591/

Figure 4: http://amazingmovieposters.blogspot.com/2016/06/silent-running-1972.html

Figures 5-8: Stills: *Silent Running* & *The Lorax* TV special

Figure 9: http://www.barnesandnoble.com/w/dvd-cosmos-dr-carl-sagan/6805887?ean=0804387101097&st=PLA&sid=BNB_DRS_Core+Shopping+Media_00000000&2sid=Google_&sourceId=PLGoP898&k_clickid=3x898

Figure 10: Still: *Cosmos: A Personal Voyage*

Figure 11: http://search.proquest.com.www2.lib.ku.edu/hnpwallstreetjournal/docview/133857033/7E73CFA842F24FDBPQ/13?accountid=14556

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Figure 14: Original from KAB site; following site redesign can no longer find. Alternate source at http://amhistory.si.edu/ourstory/i/photos/environment_poster_lg.jpg

Figure 15: Original from KAB site; following site redesign can no longer find. Alternate source at http://mobile.nytimes.com/images/100000002340395/2013/07/17/business/media/decades-after-a-memorable-campaign-keep-america-beautiful-returns.html

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Figure 20-24: Stills: *The Lord of the Rings* trilogy

Figure 25: http://www.timecoverstore.com/product/three-mile-island-1979-04-09/ ; http://www.timecoverstore.com/product/ocean-pollution-1988-08-01/ ; http://www.timecoverstore.com/product/world-conservation-summit-1992-06-01/ ; http://www.timecoverstore.com/product/the-big-spill-2010-05-17/

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Figure 28: http://search.proquest.com.www2.lib.ku.edu/hnpchicagotribune/docview/172602204/C3CAF3F5072741A6PQ/13?accountid=14556

Figure 29: http://www.nytimes.com/2014/09/22/nyregion/new-york-city-climate-change-march.html?_r=0

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Figure 31: http://www.hollywoodreporter.com/heat-vision/interstellar-has-gorgeous-posters-ever-734367

Figure 32: Still: *Interstellar*

Figure 33: https://www.loc.gov/item/fsa1998018173/PP/

Figure 34: Still: *Interstellar*

Figure 35: http://www.allposters.com/-sp/Dr-Seuss-The-Lorax-Posters_i8724841_.htm

Figure 36: Stills from ad at: https://youtu.be/EAoiBCCb6cE

Figure 37: http://projectfandom.com/johns-profan-review-cosmos-a-spacetime-odyssey/

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Figure 39: Stills from ad at: http://act.adforum.com/creative-work/ad/player/34465284/fire/the-dow-chemical-company

Figure 40: Still from web film at: http://act.adforum.com/creative-work/ad/player/34509008/a-simple-love-poem/the-climate-coalition

Figure 41 & 42: Stills from web film at: https://youtu.be/x59BDg3CnhQ