

A World of Possibilities: An Examination of the Human Impact on the Earth as Portrayed in Environmentalist Rhetoric

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This paper examines environmental rhetoric that creates a stark dichotomy between “old” and “new” Earth: Earth before and after human impact. It argues that, although it is designed to spur the public to action through fear, this rhetorical presentation implicitly leaves its audience with few avenues for productive intervention. This mixed message can frustrate the public, and the presentation can therefore undermine the environmentalist aim to rally the public around its cause.

Edward Burtynsky photographs landscapes that, in his words, have been “totally transformed by man” and are “beautiful on one level, but scary on another” (“Edward Burtynsky on Manufactured Landscapes”). Among his collection is a photo of a copper mine in British Colombia from 1985 (*Mines #17*). The mine looks like an inverted pyramid or a terraced amphitheater, giant-sized steps hewn out of the rock ascending toward the retreating line of greenery that clings to the edge of the chasm. The Earth has been systematically razed to reveal its bright limestone underbelly. The contrast of the bleached Earth, the vivid greenery, and the gray skies makes it a lovely photograph. But lovely does not do it justice. The mine’s harsh beauty captivates as much through its controversial subject matter as through the aesthetic of the photo. To Burtynsky, these transformed landscapes represent the “the dilemma of our modern existence . . . [o]ur dependence on nature to provide the materials for our consumption and our concern for the health of our planet” (“Exploring the Residual Landscape”).

This is the dilemma that the American environmental movement seeks to overcome by urging the public to maintain the health of the planet and prevent “transformations” such as this. For some environmentalists, the photo portrays a landscape not merely “transformed” by man but destroyed by him. But Burtynsky’s work forces a greater dialogue—what else is there to see beyond destruction? What possibilities does this landscape hold that hide behind the initial condemnation? The current environmental movement is characterized by voices that raise alarm at the state of our planet, but can this dialogue be widened to include those that present the destruction differently? To answer that, we will need to look deeply at environmentalist rhetoric, examining environmentalists’ use of fear, to determine how human impact is portrayed—and whether this portrayal is accurate and effective.

This analysis merits a concrete definition of “environmentalist” because the modern environmental movement is vast and multifaceted, and many interpretations of the word are possible. While this resistance to definition deserves research, it is not within the scope of this paper, in which I am concerned less with the nuances of environmental thought and more with the overarching beliefs that define the movement. Therefore, for the purposes of this discussion, I will be using the term “environmentalist” consistently with its definition in the *Oxford English Dictionary*

as “a person who is concerned with the preservation of the environment, esp. from damage caused by human influence” (“Environmentalism”). Within this paper, the term “environmentalist” will simply mean one who believes that (1) humans inflict damage on the environment; and/or (2) preservation of the environment is necessary to counter this threat.

Many environmentalists seek to preserve nature because of its intrinsic value, simply for what it *is*, rather than for its extrinsic value, what it can *do* for humans (Brennan and Lo). Environmentalism offers valuable insights even to members of the public who do not share this belief. It can help us preserve not only the well-being of our planet but the well-being of individuals and of society as well. Consider an example that intimately affects California residents. California’s water system was constructed in reliance on the natural snowmelt of the Sierra Nevada. The infrastructure is suited to fit a specific timing and volume of the snowmelt each year. However, data suggests that annual snowpack is decreasing and that the residual snowpack is melting earlier in the spring as a result of human-induced climate change.¹ Therefore, there is concern that at some point the infrastructure will no longer be well suited to utilize the natural timing and flow of mountain streams because California’s natural environment is changing. Depending on personal beliefs, this change may or may not be inherently negative. However, because Californians have built their infrastructure and lives around how the water cycle in the mountains used to work, a change to that cycle is negative *for Californians*. Fields, businesses, and homes need the water from the mountains. A threat to the natural system at work in the Sierra Nevada is, by extension, a threat to the majority of California residents, which means that we have a vested interest in stopping the climate change responsible. While this example is small in itself, it highlights the broader reasons to heed the environmentalist message: protecting the environment to preserve our lifestyle or the life of our species. Unfortunately, “environmentalism” carries a negative connotation in many segments of American society, which limits the reach and effectiveness of its message, even though it deals with issues that directly affect human lives.

The issue may be the presentation of that message. In this essay, I will focus on the rhetoric encountered in mainstream media. This environmental rhetoric, designed to mobilize the general public, employs a dichotomy between the Earth before human impact and the Earth after human impact. This dichotomy separates the Earth’s history not only between “then” and “now,” but also between “good” and “bad.” Environmentalists hope that the rhetoric works by inspiring alarm—and therefore action—on the part of the audience. However, dissection of environmentalist rhetoric reveals that the divisions between Earth “then” and “now” and Earth “good” and “bad” are exaggerated and that the dichotomy is false. Further, the negative, dichotomy-based rhetoric reduces the reception of the environmentalist message and does not encourage its limited audience to think beyond the confines of the division. Abandoning the rhetoric of the dichotomy may, therefore, make this message both more accurate and more popular.

Establishment of the Dichotomy in Prominent Environmentalist Rhetoric

A notable example of dichotomy-based environmentalist rhetoric is that of Bill McKibben, who calls himself “Author. Educator. Environmentalist” (“About Bill McKibben”). He has authored a dozen books about the environment and contributes regularly to prestigious publications like the *New York Times* and the *Atlantic Monthly*. In 2010 the *Boston Globe* heralded him as “probably the country’s most important environmentalist” (Shivani). An advertisement for his newest book, *Eaarth: Making a Life on a Tough New Planet*, reveals a dichotomy between “old” Earth and “new” Earth, which exemplifies the dichotomy between “then” and “now” found in much environmental rhetoric. In the blurb, McKibben writes, “We’ve built a new Earth. It’s not as nice as the old one; [in fact] it’s the greatest mistake humans have ever made” (“Welcome, Citizens of Eearth”). The labels McKibben gives to the states of Earth—new and old—suggest that Earth has existed in

only these two main, fundamentally different, states: Earth before human impact and Earth after. In addition, he indicates that Old Earth was not only different but “nicer” than and superior to New Earth. Finally, the dichotomy suggests a more subtle idea—that any change on Earth induced by nonhuman factors is fundamentally different than any change induced by human factors. The statement, “We’ve built a new Earth” implies that humans were the only factors of change able to transform Old Earth into New Earth. Disregarding all the volcanic eruptions, meteor strikes, ice ages, evolutions, and extinctions that have rocked our planet throughout its history, in McKibben’s dichotomy, we alone “built” New Earth. Therefore, within the dichotomy’s conceptual framework, our impact on the planet is unique.

McKibben’s introduction to one of his lesser-known projects, an anthology of American nature writing entitled *American Earth: Environmental Writing since Thoreau* (2008), illustrates a corollary of a unique human impact. Any change by nonhuman factors is *natural*, while change by human factors is *unnatural*. McKibben compares the American environmental movement to a war—a war in which the preservation of the environment has been pitted against America’s “commercial” goals (xxvi). War disrupts the normal, natural flow of daily life. War is therefore unnatural. Similarly, the human impact must also be unnatural. If we view Old Earth as the natural state of Earth, then human factors have disrupted that natural state, and changes like the melting snow-pack in the Sierra Nevada are not simply set apart from Earth’s natural state, but mar its purity by their differences. While we may not be fazed, in fact we may even be flattered, by the idea that we have a unique impact on the planet, this corollary is designed to unsettle us.

The fear-inducing dichotomy between Old Earth and New Earth found in McKibben’s texts is used both implicitly and explicitly in other well-known environmentalist rhetoric. For example, a similar idea was offered in a 1989 dialogue featuring Murray Bookchin, a lifelong activist and the founder of the social ecology movement who has been “on the ecological frontlines as far back as 1952” (Chase 27). This suggests that the dichotomy has long been an element of environmental thought. In the dialogue, Bookchin outlines a dichotomy between what he terms “first earth” and “second earth.” He argues that humanity is at a crossroads: “We can contribute to the diversity, fecundity, and richness of the natural world—what I call ‘first nature’—. . . [o]ur societies—second nature—can exploit the whole web of life and tear down the planet in a rapacious, cancerous manner” (33). Bookchin identifies “first earth” with positive descriptors (diversity, fecundity, richness) in the same way that McKibben identified Old Earth as the “nice” version. “Second earth” also parallels McKibben’s New Earth as the diseased wreckage of “first earth.” Most importantly, the two activists’ uncompromisingly negative perspective on humanity seems to be the same. It is we, and we alone, who can “tear down the planet.” It is we, and we alone, that destroy “first” Earth. If the audience members fear the negative consequences of their lifestyle, the logic seems to go, then they will become more likely to change their actions to avoid those consequences.

The dichotomy illuminated by McKibben’s and Bookchin’s work is this: Old Earth is the natural, ideal Earth that was consumed by the war. New Earth is the unnatural, “mistake” Earth that is the casualty of the war. But as noted above, the important issues to consider are how this rhetorical approach/structure invites individuals to engage with the movement and consider human impacts on the environment. Environmentalists’ use of this structure has been, in various contexts and under various names, a continuing topic of discussion among rhetoricians since at least the 1980s. Below I have compiled a brief survey of previous analyses of environmental rhetoric; it is by no means comprehensive, but it gives a sense of the existing arguments regarding this form of environmental rhetoric and moves toward suggestions of another approach.

Review of Rhetorical Critiques

University of Idaho professor and the founding president of the Association for the Study of

Literature and the Environment, Scott Slovic is one voice that has contributed to the discussion. In his essay “Epistemology and Politics in American Nature Writing,” Slovic analyzes the effectiveness of two rhetorical tactics that pervade environmental writing: “rhapsodic” celebrations of nature that praise Earth’s wonders and cautionary “jeremiads” that warn against spoiling them (104). If presented in the language of the dichotomy, the rhapsodic rhetoric celebrates Old Earth, while the jeremiads warn against New Earth. In his analysis, Slovic acknowledges that “the great advantage of the jeremiad—in both environmental contexts and other political contexts—is its shock effect.” However, he argues that “the strident presentation of ideology or environmental information in the form of overt and sustained jeremiad is likely not only to drive non-environmentalists away from an environmentally concerned attitude, but to produce a response of denial even among an environmentally attuned audience.” This suggests that, according to Slovic’s analysis, dichotomy-based rhetoric, especially that which hinges on a jeremiad, may not reach the public in the desired manner. Further, it may instead produce what Slovic terms a “boomerang effect” against the environmentalist message, leading voters and consumers to be apathetic or even hostile toward environmentalism, even when, as illustrated by the case of the California snowpack, society as a whole stands to lose by disregarding the message (105).

Texas A&M affiliates M. Jimmie Killingsworth and Jacqueline S. Palmer echo Slovic’s conclusion that moderated rhetoric is more persuasive than radical rhetoric in their essay “Millennial Ecology: The Apocalyptic Narrative from *Silent Spring* to *Global Warming*.” In their study of Rachel Carson’s *Silent Spring*, they argue that the book “possessed unmatched rhetorical power in its day” due to the fact that its author was promoting “not . . . a return to a pre-scientific era, but . . . a ‘paradigm shift,’ a *revolution* in science” (27). In the terms of this paper, she avoided a dichotomy between a “good” Old Earth and a “bad” New Earth by arguing not for an end to our impact, but instead for a change in how we perpetrate it. Killingsworth and Palmer suggest that to a society in love with the twin notions of science and progress, this message was easier to accept because it was a call to use those values to protect the planet, rather than a call to turn our backs on them in the name of the planet’s protection. Given the similarity of present societal values to those of Carson’s era, this conclusion is still highly relevant for rhetoricians today. It suggests that chastising an audience through the dichotomy is less effective than inspiring an audience through its accepted values.

Finally, Michigan Tech rhetorician Craig Waddell’s essay “Perils of a Modern Cassandra: Rhetorical Aspects of Public Indifference to the Population Explosion” analyzes Paul Ehrlich’s 1968 book, *The Population Bomb*. Waddell argues that Ehrlich treats his readers as “a lower, rather than higher common denominator,” characterizing them as those who “‘would compete for the privilege of shooting’ the last California condor,” rather than those who might try to save it—and that this treatment contributed to the book’s failure to incite change (58). Although Waddell does not address the rhetorical dichotomy directly, Ehrlich’s characterization of humanity is the same characterization that marks the dichotomy: in each, we are creatures who seem to be predisposed to inflict harm on the planet. By extension, therefore, Waddell’s critique of *The Population Bomb* can also function as a critique of the dichotomy, showing that its negative portrayal of humanity may alienate its audience rather than unite it around the common good of humanity.

While critics do not tend to dispute the shock value of the dichotomy, many have suggested that it can be negatively received and consequently does little to advance environmentalist goals. Unfortunately, although the environmental movement requires mainstream societal acceptance and broad-based support to meet those goals, today’s movement has largely failed to achieve that. A 2006 study entitled *The American Environmental Values Survey*, which was funded by the Sierra Club, Earthjustice, and ecoAmerica, concluded, “No matter how you look at it, America’s environmentalists have an image problem. They have disconnected with Americans, or Americans have

disconnected with them. . . . Overall, only 44% of Americans would be willing to label themselves as ‘environmentalists’” (SRI Consulting). McKibben himself admits the movement’s ineffectiveness in the introduction to his anthology, lamenting that, despite the “many great battles” that have been won, “the war [for the environment] goes badly” (Introduction xxii). If environmentalists are not reaching their audience, how can resources as important as the Sierra Nevada snowpack, the water supply of many Californians, be protected?

Thus, the question is why the environmentalist message is not reaching the public. It may be, in part, a function of how humans are portrayed in the dichotomy. As described in Waddell’s piece, we are the lowest common denominator; we are only—and that “only” is key—only characterized as destroyers of the Earth. This rather simplistic characterization of humans is made possible by the equally oversimplified characterization of nature produced by distorting its identity through the concept of the Old Earth as ideal.

Idealization and Misrepresentation

Idealization of Old Earth

Idealization of Old Earth is the first problem with the rhetorical dichotomy. Timothy Morton, a professor of English specializing in literature and the environment at the University of California at Davis, explores the distortion of nature in environmentalist rhetoric in his book *Ecology without Nature* (2007). Morton combines an analysis of literature and philosophy to reach the conclusion that the concept of “nature” implicit in the dichotomy is actually hindering our relationship with the natural environment (7). Essentially, Morton argues that artists and writers (like those in McKibben’s anthology) have “[put] something called Nature on a pedestal and [admired] it from afar, [which] does for the environment what patriarchy does for the figure of Woman. It is a paradoxical act of sadistic admiration” (5). In a patriarchy, women are revered for their “woman-ness,” for their “not man-ness,” for their “otherness.” In the space between woman and man created by the pedestal, the woman is mystified. The man sees her, but he cannot touch her, he cannot know her. Therefore, the pedestal creates a distorted view of women. In the eyes of the man, she becomes a romanticized version of herself, therefore ceasing to be her actual self. Morton argues that our view of nature has been similarly distorted, that we are gazing up at nature on a pedestal: a pedestal created by artists, writers, and activists who portray nature as unrealistically grand.

This grand portrayal of nature is exemplified by the work of environmentalist icons who helped shape the movement we know today, figures such as John Muir and Ansel Adams, in addition to their modern counterparts like McKibben and Bookchin. For example, in his short piece “A Windstorm in the Forests,” Muir describes the “towering” trees in the forest of the Sierra as “mighty waving goldenrods, ever in tune, singing and writing wind-music all their century-long lives” (91). Everything about these woods is magical, from the trees’ paradoxical might and fragility to the wind-music with which they serenade Muir. Sprinkled with descriptions like this, the piece conjures an image of nature that is “fresh,” “joyous,” “immortal” (97). It casts a spell on the reader, making us want to join him as he “push[es] out into the woods to enjoy” a “beautiful and exhilarating” California storm (92). The jarring blacks and whites of Ansel Adams’s *Moon and Half Dome* are similarly breathtaking. A black cliff looms out of the foreground of the photo, casting its shadow on Half Dome’s face, which is already marked by the scars of erosion. Over the powerful, shadowy cliffs hangs a brilliant three-quarter moon. As the *American National Biography*’s section on Adams testifies, photos like this “create a sense of the sublime magnificence of nature . . . [which is] often more powerful than the actual thing.” Therefore, “[w]hen people [think] about the national parks [or] the environment itself, they often [envision] them in terms of an Ansel Adams photograph” (Turnage). Environmentalists hope that these images capture the imaginations and

spirits of viewers, and that the photos' magnificent portrayal of the environment entices them to care for the real thing.

But trees do not sing and the world does not appear in dramatic black-and-white contrast. While these portrayals of nature capture nature's ethereal beauty and thereby move their audiences, they are distortions of reality. As such, they are problematic because they present their audience with a false world, an Earth that does not exist except in theory. Nevertheless, I believe that this is what McKibben has in mind when he refers to Old Earth. I do not mean that he believes in singing woods or a black-and-white reality. But in the introduction to his anthology, he writes, "[N]ature [today] is no longer innocent or invulnerable" (Introduction xxii). Certainly, those words could describe Muir's and Adams's idealized nature. (From now on, I will denote this idealized vision of nature by capitalization, calling it "Nature.") McKibben's writings suggest that nature was once Nature. Thus, the notion of Old Earth and a lost Nature are fundamentally the same idea; both depend for their coherence on a dichotomy between old and new, Nature and nature, "then" and "now." However, this means that dichotomy-based rhetoric essentially puts an ideal Nature on a pedestal and admires it from afar without acknowledging that the ideal never existed. It renders an image of Old Earth that is merely a beautiful shadow of what it really is—oversimplification through idealization. Thus the environmental movement attempts to motivate its audience to protect a Nature that never existed. Logically, it seems impossible to protect a nonexistent entity. Therefore, because the public is bound to sense this flaw in reasoning, the rhetorical choices are ineffective.

Misrepresentation of Human Impact

The second problem is that the public understands that the earth has undergone many changes unrelated to human actions, and therefore at some level people likely understand that the dichotomy's portrayal of human impact is false. Slavoj Žižek, a renowned Slovenian philosopher and professor of philosophy and psychoanalysis at the European Graduate School, rejects the notion of an ideal Nature by contrasting Earth's long and turbulent history with the romanticized version of events. His work illuminates how we might reconsider the dichotomy-based depiction of human impact. In an interview included in the film *Examined Life: Philosophy is in the Street*, Žižek compares the rhetoric of a lost Nature to "secular version of the religious story of the Fall." It is as though our actions have excluded us once again from the Garden of Eden. But, Žižek argues, there was no Eden from which to fall: "[T]here is no Nature: nature is not a balanced totality . . . nature is a big series of unimaginable catastrophes." Žižek asserts that it is wrong—dangerous, even—to promote the idea that "the existing world is the best possible world in the sense that it is a balanced world disturbed [only] through human *hubris*" (Taylor et al.).

To Žižek, nature is instead "a big series of unimaginable catastrophes." These catastrophes are precisely the natural, nonhuman factors of change that McKibben and others gloss over in the dichotomy. But, to Žižek, these catastrophes cannot be ignored. According to the logic behind the dichotomy between Old Earth and New Earth, catastrophes caused by nonhuman entities are natural occurrences and catastrophes caused by human entities are unnatural acts of war. However, can we really claim that our catastrophic impact is unnatural if nature itself is just "a big series of unimaginable catastrophes"? As Žižek states, nature is "from time to time contained in a fragile balance, but then [it] explodes again" (Taylor et al.). It is just as much the explosions as it is the balance between them. Even the features that seem to be the most enduring—like the wise, immortal giants that comprise the Sierra Nevada, down whose faces snowmelt has flowed at the same time each year since before we can remember—even their might is temporary. They were raised from the Earth and will be eroded down just the same. Earth's own tumultuous history defies the rhetoric that suggests that humanity's impact is unnatural.

This rhetoric persists, however, because environmentalists like McKibben and Bookchin hope that it raises alarm at the speed and scale of humanity's geological footprint. That one species could fundamentally alter the planet in a nanosecond of geological time seems to violate some ancient, unwritten law that governs our world. However, to the best of our scientific knowledge, neither the rapidity nor the scale of humanity's impact is unique, so if we are breaking Earth's laws, they have been broken before, and it might be quite natural to break them. For example, Earth experienced equally rapid change during the Cretaceous-Tertiary (K-T) extinction, which is most famous as the extinction that killed the dinosaurs. Most experts believe that the K-T extinction was caused by a meteor strike or a giant volcanic eruption approximately 65 million years ago, which increased atmospheric debris, altered the global climate, and catalyzed the mass extinction. This change happened very rapidly, at least in terms of geological time, illustrating that rapid change does not necessarily imply unnatural change (Cowen). In addition, we are not the only species to have single-handedly altered the planet on a macro scale. Approximately 2.45 billion years ago, a species of bacteria called cyanobacteria evolved the ability to photosynthesize. Photosynthesis is very efficient relative to other energy-creating processes, and the population of cyanobacteria grew dramatically. Because oxygen is a by-product of photosynthesis, the amount of oxygen in the atmosphere also increased significantly, from below 10% to higher than our current atmospheric content of 21% (Biello). This triggered another mass extinction of anaerobic life forms and the rapid evolution of aerobic life. Thus, the power of one species to completely change the planet is not unique; the notion that our impact is unique effectively raises alarm at the plight of the environment, but it is scientifically incorrect. Though the public may not know the details of K-T or the scientific name of cyanobacteria, the limited reception of the environmentalists' message suggests that they do remember enough to recognize that human impact is not unnatural.

I do not mean to minimize the fact that I am comparing human impact on the planet to events that caused mass extinctions. It is alarming that enough similarities exist between human impact and the meteor (or volcano) that killed the dinosaurs to merit a comparison, but just because our impact is alarming does not mean that it is unnatural. To use Slavoj Žižek's phrase, nature is *already* "a big series of unimaginable catastrophes." We add one more, but we should not flatter ourselves to think that our impact is extraordinary in the grand scheme of things. If our impact—albeit explosive and catastrophic—is natural, then labeling our impact as a war is a false comparison. Environmentalist rhetoric would be more accurate (and arguably more effective, which I will discuss later) if it portrayed humans as just one part of the war *of* nature.

Charles Darwin, the father of evolution, alluded to this view in his groundbreaking work, *On the Origin of Species*. The very last sentences in that book read,

Thus, from the war of nature, from famine and death, the most exalted object which we are capable of conceiving, namely, the production of the higher animals, directly follows. There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved. (Darwin and Appleman 441)

Here again is a war, but it is a war fought within nature, the war of nature. Nature as a war—this is what I believe Žižek was referring to when he talked about nature as fragile and prone to explosions. Nature is not a stagnant entity, but one that is always evolving, always at war. Darwin even states that this war has been playing out since the appearance of "a few forms" or "one," indicating that this evolution, this change, this war is as old as life itself. Thus, the war can never destroy nature because nature *is* the war.

An Evolving Integration

As creatures of the Earth, we are part of evolution and we are part of the war. We can destroy certain elements of nature, but we have no more power to destroy nature itself than asteroids or cyanobacteria. The issue with the dichotomy is that it fails to recognize this. Its very structure paralyzes us: as the creators of New Earth, we are not allowed anything besides a destructive impact, even if we intend otherwise. This can, for some individuals, make the whole environmentalist movement seem fruitless. How can recycling, using alternative energy, and driving hybrid cars counteract an inevitable destruction of the “natural” state of nature? It is impossible to begin to address the melting Sierra Nevada snowpack, for example, if we are destined to devastate it anyway.

However, the idea that humans are not at war *with* nature, but instead are part of the war *of* nature, suggests that we have been integrated with nature across all of its history in which our species has been present. We were first hunter-gatherers, then budding agriculturalists, then builders of cities and traders of goods. Our role on Earth has metamorphosed and continues to do so, which suggests not an abrupt dichotomy between Old Earth and New Earth, but an evolving integration in which our place in the world may change, but the fact that it changes does not mean that we become disintegrated.

By portraying the human impact as an evolving integration, instead of through the dichotomy, the environmental movement may appeal to more than just 44% of Americans. Whereas the dichotomy has our failure imbedded in its structure, an evolving integration lends itself to the possibility that we can find a middle ground between our needs and the needs of the planet. Therefore, rhetoric based on an evolving integration would make environmentalist goals seem more achievable and the environmental message subsequently more appealing.

In order to preserve our world to the greatest extent possible, environmentalists must engage a broader audience. As mentioned earlier, Rachel Carson’s *Silent Spring* provides an example of how they might do so. Essential to her success was that she engaged the public by making the issue personally and socially relevant and then provided her audience with a path to a solution that conformed to society’s accepted values. By writing a book for lay readers, as opposed to an article for a scientific journal or other specialized, scholarly publication, she took her cause directly to the “public and its agents in government” (Killingsworth and Palmer 29). Further, she illustrated not only what was happening, but why the public should care, dedicating four of her twelve chapters to the direct effects of pesticides on human health (Lytle). This is not to say that her book was devoid of the ecocentric arguments against pesticides that environmental purists prefer. Interspersed with such ecocentric arguments, however, she gave all Americans a reason to listen to her, even if they cared nothing for Muir’s waving goldenrods and Adams’s black-and-white moonscape. After harnessing the full attention of her audience, Carson provided a solution that was within the values and the abilities of society at the time. As Killingsworth and Palmer show, instead of rejecting science altogether, she advocated for a change, through the “relatively new science of ecology,” for “ecologically sensitive biological means of protecting crops, with no loss in productivity, no retreat from the progress of the ‘green revolution’ in agriculture” (29). Thus, whereas dichotomy-based rhetoric paralyzes its audience, Carson provided her readers with a course of action, a way out of their crisis.

In order for the environmental movement to reach the audience it seeks, it must also provide the public a way out of today’s crises. It must also, as Carson demonstrates, convince members of the public that the preservation of the environment would benefit them. This would ensure that even people who are not drawn to preserve the environment for ecocentric reasons will support the environmental cause.

Note

¹Data published in *Science* from six hundred sites in the western United States shows that snowpack has decreased in 85% of locations since measurements began in the 1950s. The data also showed that snow was melting as much as three weeks faster in some locations (Service).

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