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Intermedial Apocalypticism and the Growing Anthropocene Crises

Abstract: The central concern of "Intermedial Apocalypticism and the Growing Anthropocene Crises" is to understand the complexities involved in answering why, despite the saturation of filmic media with progressive messages about the environment, things continue to get worse. The observations primarily grow out of discussions of the 2015 Disney production of Brad Bird's *Tomorrowland* and, to a lesser degree, of a segment of the NBC fantasy comedy series *The Good Place*, and it uses other material as relevant. Expanding upon one of the steps in Jørgen Bruhn's proposed three-step methodology for intermedial ecocriticism, this article suggests that in addressing the formal qualities—the music, the acting, the editing, the cinematography, and so on—of film, questions about scale, physical and ethical proximity, and narrativization are, perhaps, critical. Understanding how media present these may lead to a better grasp of how and why some media strategies are effective at inspiring changes in behaviour, and others perhaps less so.

Keywords: intermedial ecocriticism, activism, ecophobia, climate change narratives.

Introduction

Recent theorizing about the possibilities for comparisons across media borders enable productive ecocritical discussions of the growing presence of apocalyptic warnings that have become a staple across a diverse and growing spectrum of media. What Jørgen Bruhn terms "intermedial ecocriticism" offers an interdisciplinary nexus of theoretical, methodological, and practical matters. To understand how intermedial ecocriticism might work, it is necessary to articulate a base of understanding of what ecocriticism is and what its

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visions are as well as what the goals and objects of intermedial studies are. A methodology for the fusion of these two fields—intermedial ecocriticism—might begin with Bruhn's proposed three steps, each of which perhaps need to be expanded. In this article, I will expand on one of those steps and will briefly apply the methodology in order to come toward an understanding of the potentials and limitations of filmic media with regard to the increasing climate change content within filmic media. Indeed, the popular consciousness is more full of climate change data than ever before, yet the practices that promote climate change are, paradoxically, also accelerating at seemingly exponential rates. While I will anchor my discussions here primarily on the 2015 Disney production of Brad Bird's *Tomorrowland* and, to a lesser degree, on a segment of the NBC fantasy comedy series *The Good Place*, I will also bring into discussion other material as relevant toward the end of this article. The goal here is to understand why, despite the saturation of filmic media with progressive messages about the environment, things continue to get worse. A methodology for producing analyses across the borders of diverse media, however, is very far from simple, and examining the formal qualities of different media themselves and how they interact is absolutely critical in understanding the effectiveness of these media in their translation of data across media borders.

Ecocriticism and Intermedial Studies

To start with, then, it is useful to have some definitional matters about ecocriticism and intermedial studies addressed at the outset. By its nature, ecocriticism is a transdisciplinary, praxis-oriented critical and analytical approach to cultural products. It is driven by a conviction that anthropogenic derogations of the environment have reached critical levels and that change is needed. It has, at times, shunned theorization and to this day lacks a definitive methodology. Intermedial studies, on the other hand, is of a more theoretical and methodological flavor. It is, like ecocriticism, a nascent and developing field. Lars Elleström has been at the forefront of defining it: "The phenomenon whereby the properties of all media partly intersect and the study of this same phenomenon," he argues, "are called intermediality" (Elleström 4). The language of ecocriticism and intermedial studies are obviously different, particular to their respective subjects. Intermedial scholars have their own term for what I, trained as an ecocritic, a few lines above called "cultural products," and although it is an imperfect and complicated signifier, "media" is the term intermedial scholars use. Intermedial ecocriticism is a meeting of Intermedial Studies and ecocriticism. It is the brainchild of Jørgen Bruhn, who defines it according to its focus and promise: "Intermedial Ecocriticism is the conviction that the ecological crisis is not a problem or a condition restricted to investigations in the natural sciences, or that possible solutions to the crisis can be reduced to technological solutions. The humanities need to play a role in the

question" ("Towards an Intermedial Ecocriticism" 119). Indeed, Intermedial Ecocriticism may help us to understand why Anthropocene crises are growing exponentially rather than diminishing, as the warnings grow more numerous across various media.

Methodologically, Intermedial Ecocriticism must satisfy the particularities of different media across media borders without crude reductivism or a dogmatic and colonizing conceit. Bruhn's three step methodology is worth quoting in full here. Bruhn describes three consecutive steps:

> in the first, descriptive step, the main aim is to define and analytically describe the fundamental features of the media type in general and the media product in particular. In the second step, after having established the basic features, the aim is to specify, by way of an analysis and interpretation, the exact ways in which the affordances of the media product enable or disable specific aspects that are to be represented. In the third and final step, the results of the analysis can be compared to the analysis of one or more media products. ("Towards an Intermedial Ecocriticism" 127)

Bruhn goes on to expand on each of these three steps. It is step two, however, on which I will narrow in to suggest that in this step, a methodology for an Intermedial Ecocriticism must address at least the following four issues in subheadings below (and these are not necessarily separate functions/modalities):

1. how various media calibrate scale (slow violence, hyperobjects, Anthropocene, and so on);
2. how various media image physical proximity of represented object to audience (who *really* cares about polar bears anyway, and why?);
3. how various media intermediate ethical proximities of represented objects to audiences (meat is murder);
4. the degree to which various media narrativize data (which is really a similar question to the one Bruhn addresses[1]). Matters relevant here include:
   a. strategies of representation—things such as personification, psychologizing (giving data human desires and emotions), demonizing (creating antagonists out of nature), and how various media imagine the relations between human and nonhuman agencies (the relationship between people and the environment): e.g., ecophobic[2] (human as victim to antagonistic nature, often gendered), biophilic (nature as beautiful and worth preserving—stewardship position), ecosystemic (human suffering as part of a larger body of suffering within an ecosystem of loss), and so on.
   b. exposure—how is the data represented, over-exposed, and commercialized to the point of saturation, and how does this create numbness and boredom and influence the production of knowledge itself?

c. destabilization of generic categories of the media themselves, with factual accounts melding into fiction, and vice versa.
d. medial complicities in ecophobia: the degree to which media carry across ethical positions that aid and abet ecophobic positions.

But these, obviously, do not function uniformly across media. Indeed, the core of my thesis is here, with the matter of proximity, which explains why the translation of scientific and philosophical data across media borders, though compelling in their force when expressed, for instance, in filmic media, end up having very little demonstrable effect on how people actually live their lives. So, while I will discuss scale, proximity (physical and ethical), and narrative issues, it is really the matter of proximity (and how it is that different media function based on presumptive proximal relations) that seems to be key to questions about audience engagement. An intermedial ecocritical analysis (step two of Bruhn's proposed methodology, with my four subset issues) of the *Tomorrowland* and *The Good Place* snippets can productively expose why these films produce little demonstrable motivation for changes of behavior.

1. How various media calibrate scale

In terms of their calibration of scale, my filmic samples—one, a Walt Disney Production with an estimated $190 million (US) budget; the other, an episode of *The Good Place*, an NBC Television fantasy comedy series—establish a grandness that puts the topic well into the shadows of comprehensibility.[3] In translating the mega issues of popular science (and who *hasn't* heard of or *doesn't* know about the disappearance of bees, butterflies, and glaciers anyway?), the formal qualities of each of these media bear importantly on how media calibrate scale. While the question of representing the vast scales of climate issues have been problematical for literature,[4] filmic media have the important formal capacity of achieving what Jan-Christopher Horak has described as "an expansion of human vision, a means of entering a world that was invisible to the human eye, an extension of the physical body of the subject" (459) that brings the object closer to our perceptions. This is evident most clearly in the speeded-up effects of massive flooding, for instance, in Roland Emmerich's *2012* and the radical "climate change" in his *The Day After Tomorrow*, neither of which are plausible in terms of the temporality of their development but nevertheless offer stunning visuals. These visuals are persuasive insofar as they seem to present physical, concrete evidence for the eye of the thing represented. In *Tomorrowland*, the startling visuals of a clean and efficient future world are a sharp visceral contrast to the narrative that the film employs—a narrative that mediates scientific data but in a way that is ineffective. To unpack some of this, a piece of dialogue spoken by Governor David Nix, a character in the film *Tomorrowland* proffers useful analytical insights.

It is worthwhile first digressing a bit here to explain what I did in the oral version of this article, delivered as a keynote talk at the *Intermedial Ecocriticism: The Anthropocene Condition Across Media and the Arts* conference at Babeș-Bolyai University in August 2019. I explained that the vision of our climate-induced imminent doom is a real media phenomenon, and then I read the following script, initially pretending that it was part of my own academic talk:

> How do you think this vision was received, how do you think people responded to the prospect of imminent doom? They gobbled it up… like a chocolate eclair! They didn't fear their demise, they repackaged it — it can be enjoyed as video games, as TV shows, books, movies, the entire world wholeheartedly embraced the apocalypse, and sprinted toward it with gleeful abandon. Meanwhile, your Earth was crumbling all around you. You've got simultaneous epidemics of obesity and starvation. Explain that one. Bees and butterflies start to disappear, the glaciers melt, the algae blooms. All around you the coal mine canaries are dropping dead and you won't take the hint! In every moment there's a possibility of a better future, but you people won't believe it. And because you won't believe it you won't do what is necessary to make it a reality. So you dwell on this oh terrible future. You resign yourselves to it. For one reason — because that future doesn't ask anything of you, today. So, yes, you saw the iceberg, warned the Titanic, but you all just steered for it anyway, full steam ahead. Why? Because you want to sink.

Without pause, I continued on the Titanic motif as follows: "The Titanic is sinking, and they're writing a strongly-worded letter to the iceberg. How much more evidence do they need?" It was nerve-wracking to use such direct, second-person comments to a live audience, so I quickly identified the two quotations and their sources.[5] I had made my point: the function and effect of these seemingly compelling and powerful words really depends on how they are mediated—their medium of delivery, in other words. The keynote was, as this article is, driven by the recognition and frustration that despite the growing popular consciousness of and mass media representations about environmental issues, the most obvious changes are simply not happening (and when they are, the wrong reasons are often the drivers).[6]

The two filmic snippets are revealing. Something different happens with different media. Spoken by a professor during a keynote, the words have some rhetorical force. Same words— even better performed—but in a film somehow lack the commitment, the force, and the affective purchase. Saturating diverse media with eco-messages isn't going to be enough, so we needn't sit paralyzed in the headlights of self-reflexivity, wondering at our inertia and indolence. We may agree in righteous indignation that future generations will look back at this Age of Stupid[7] and wonder why we didn't do more, but let's face it: entertainment isn't activism. The clichés of Governor Nix from *Tomorrowland* and Michael from *The Good*

Place validate rather than diminish the ungraspable scale of the issues they describe. The audience has heard these things that have become clichés—and clichés are not effective at producing change. In terms of a visceral response, perhaps the best that we can hope for from these snippets is a groan. But these narratives are a part of a larger production on screen that is quite unlike a conference talk, and because of other formal devices that work much better at calibrating scale, narrativizing science clearly involves many strategies.

The acting and the mise en scène themselves are powerful counterbalances, as it were, to the rather ineffective dialogue. The dialogue by Nix is accompanied by a sad score playing mournfully in the background, while Hugh Laurie delivers the clichés with exasperation and a sense of utter frustration at the very obviousness of the message he offers. The effect of this is to powerfully counterbalance what would otherwise be simply clichés. The dramatic visuals and the jumpings back and forth from a dismal present to a clean and bright future also affectively counterbalances the dialogue. The question, then, becomes one about whether these formal qualities—the music, the acting, the editing, the cinematography, and so on—are enough to convey the scale of climate change sufficiently to allow the emotional and intellectual proximity that would evoke solution-oriented responses.

2. How various media represent physical proximity

Lacking concrete description of precisely *how* it is that the audience can grasp the issue in a manner sufficiently concrete to establish the kind of personal involvement that results in action, *Tomorrowland* and *The Good Place* distance the subject, rather than offer a sense of physical proximity. Representing physical proximity is important in motivating action. News coverage of twin towers collapsing as a result of terrorist attacks on New York produces a very different visceral response for those living in Manhattan than for those living in, say, Whitehorse or Cape Town. *Tomorrowland*'s Nix mentions the paradox of obesity and starvation, and the implied meaning is that there are production and distribution problems rife in the industrial food system; yet, these are not specified and are not clear. Mention of obesity might hit a personal register for some, but it does not do so in a way that leads to or gestures towards a cause or a solution. Similarly, Nix's mentioning of the growing absence of bees, butterflies, and glaciers simply fails to register meaningfully. Most of the audience has never seen a disappearing glacier (except mediated through photographs, TV, and film), and most of the audience probably does not take much notice of bees (until stung) or butterflies. Lack of physical proximity engenders lack of ethical proximity.

The emotional proximity—the exasperation of Nix and Michael—is insufficient to move, and without intending to be a media snob, I do think that it is fair to say that this material simply lacks the visceral *gravitas* of, say, Gustav Flaubert, Fyodor Dostoevsky, or Toni Morrison. One might argue that because *The Good Place* is comedy, one can hardly

expect *gravitas*. Yet, the 2008 Disney-Pixar *WALL-E*, also a comedy, manages, as Alexa Weik von Mossner explains, to "secure the emotional engagement of the audience and provide the much-needed comic relief in the face of global environmental disaster" ("Love in the Times of Ecocide" 165). It is not only the unlikely love story of *WALL-E* but the mise en scène and the proliferation of contemporary images in their 800-year trajectory in particular that bring this film into considerable proximity—enough, perhaps, to encourage mindfulness of polluting behaviors. And while *WALL-E* avoids the intermedial insertions of narrativized science and does not seek on any level to make those complex issues graspable intellectually, it does bring matters within affective grasp.

3. Intermediating ethics

Making hard science graspable involves not only describing the issues in sufficiently comprehensible lay terms but also in terms that have sufficient physical proximity to enable a sense of ethical proximity and connection. In the case of *Tomorrowland* and *The Good Place*, Marshall McLuhan's theory that "the medium is the message" bears revisiting. Many media *may* help prompt people into action, but whether they do so or not is largely dependent on their form or type. For McLuhan, "it is the medium that shapes and controls the scale and form of human association and action," and he fears that the "'content' of any medium blinds us to the character of the medium" (*Understanding Media* 9). The character of *Tomorrowland* (or any film), *regardless of content*, is different than the same character in a painting, a Tweet, a video game, or an academic talk. Traditional filmic media asks little of us except that we sit quietly in a darkened theater and watch—certainly a more passive role than playing a video game, listening to an academic talk, or reading a book. There are two issues that immediately arise from McLuhan's theory. One is that, according to him, content has no bearing on shaping the forms of our responses. The dichotomy between form and content that this entrenches is deeply problematical. Nevertheless, the form of the media is critical for understanding why, despite media saturations with eco-messages, things are continuing to worsen. The second big issue that arises from McLuhan has to do with the very question about what constitutes media itself. For McLuhan, a medium is any "extension of ourselves" (7) and a medium will introduce a "change of scale or pace or pattern... into human affairs" (8). Defining media in such a broad manner perhaps opens onto a wide set of problems, since virtually everything we produce—including pillows and pencils—might fall under the rubric. The common dictionary definition is sufficient for the purposes of this article, and the summary from the *Oxford English Dictionary* that Christina Ljungberg makes is as good as any: a medium is

> a means by which something is expressed, communicated or achieved; a substance
> through which a force or other influence is transmitted; a form of storage for

computer software, such as magnetic tape or disks; a liquid with which pigments are mixed to make paint; with the plural 'mediums', a person claiming to be able to communicate between the dead and the living, that is, between our lived world and an imaginary one; or the middle state between two extremes. (Ljungberg 83)[8]

More important for the purposes of this article, however, is a common and agreed understanding of the term "ecomedia." I use the term ecomedia in the broadest sense to include any media that deals with environmental issues, either implicitly or explicitly, and this includes a great variety of very different kinds of media: print media (books, magazines, newspapers), television, movies, video games, music, smart phones, various kinds of software, social media, the Internet, and others (see also Estok "Virtually There"). "Ecomedia studies," meanwhile, is best defined by Stephen Rust "as a historically situated, ideologically motivated, and ethically informed approach to the intersections, of media, society, *and* the environment" (87, *italics* in original). But ideologically motivated or not, the affect of a given eco-medium is critically influenced by the form of that medium. Watching a non-documentary film such as *Tomorrowland* or even a semi-documentary film such as *The Age of Stupid*, an audience suspends engagement with the real world for the duration of the film and then returns to the garish light of reality from the darkened theater or room. It is like awakening and leaving the dreamworld behind. And it bears repeating that watching a film is more a passive activity than reading a book. It would be a mistake, however, to assume that the medium is the be-all-and-end-all here, since watching Al Gore's *An Inconvenient Truth* is no less a passive activity than watching *Tomorrowland*, to be sure, and it *did* "grab people in the gut" (Bruhn and Gjelsvik 123).[9]

4. Narrativizing Data

a. Strategies of representation

A fourth issue that must arise when we analyze and interpret media is about *how* a given media narrativizes data. There are many aspects to this topic. Children's stories can translate scientific data into kid-friendly personifications, as in the Dr. Seuss classic *The Lorax*. Hollywood films often translate hard scientific data through personifications that appeal to a large constituency—hence, the recurrence of images of a gendered antagonist (an angry and spiteful Mother Nature). The personification possibilities are endless. While analyzing the strategies of representation are surely important, it is quite beyond the practical scope of this article to offer such analyses, which could include discussions about psychologizing (giving data on human desires and emotions), demonizing (creating antagonists out of nature), and the imaging of relations between human and nonhuman agencies (the relationship between people and the environment). Among the types of relationships actually being represented,

too, there is a wide range of possibilities. The spectrum ranging from ecophobic (human as victim to antagonistic nature, often gendered) to biophilic (nature as a beautiful thing to be preserved—stewardship position) offers one set of possibilities. There are useful models that Clive Hamilton *et al.* discuss, such as the ecosystemic model, wherein human suffering is part of a larger body of suffering within an ecosystem of loss; the geological approach, which sees human relationships with the earth in the history of rock deposits; the "step change" approach "describes an even wider notion of human impact on the planet, including transformations of the landscape, urbanisation, species extinctions, resource extraction and waste dumping, as well as disruption to natural processes such as the nitrogen cycle" (Hamilton *et al.* 3). Art, broadly speaking, is important in representing data, hard scientific facts, and complicated theories that might otherwise be difficult to digest. Scott and Paul Slovic have described "the need for numerical information and the difficulty that the human mind has in attaching visceral, emotional meaning to numbers" (4). The main task from an intermedial perspective in narrativizing data is to make as much information accessible to the audience as possible—a difficult task when much of the data is expressed in the language of the professional fields that produced them. As Alison Hawthorne Deming explains, "Art is necessary because it gives us a new way of thinking and speaking, shows us what we are and what we have been blind to, and gives us new language and forms in which to see ourselves" (122). Using story in the service of communicating hard data has its own risks, both of "dumbing down" the material and trivializing it by over-exposure.

b. Exposure

For some time now we have seen the world in high resolution images which travel with inconceivable speed throughout many parts of the world. The sheer surfeit of information produces its own effects, and the "kicks just keep getting harder to find" (some readers may be old enough to remember the song from the *Paul Revere and the Raiders*). The speech by Governor David Nix about how "you people" aren't doing enough in the film *Tomorrowland* is, for all of its moving rhetoric about people not responding to the prospect of imminent doom, just another in a long line of counter-productive ecomedia narratives. Not only are they counter-productive, in the sense that they reproduce (and sell for profit) the ecophobia, heterosexism, and misogyny that got us into this mess; worse, they articulate the very thing, the humanistic narcissism, that will always prevent any change for the better, a narcissism of which the term "Anthropocene" freely indulges. If we really want ecomedia to encourage activist engagement, then we need to understand that part of the problem is that the "kicks just keep getting harder to find."

A month before I presented the oral version of this chapter in Romania, it was the 50th anniversary of Apollo 11 and the first moon landing. I was five, but I remember it

well because my father told us to be quiet while he explained the significance of what was happening. My brother had to hold the antenna so that our old black and white TV could hold the picture. I was excited beyond words. A few years later, the excitement had somewhat diminished, and I remember the sense of stagnation that seemed to have crept in as the men on the moon seemed bored, playing lunar golf and riding around in their moon buggy. The sense of stagnation and social rot seemed to come to a head with Watergate and Nixon's fall from grace. The kicks just keep getting harder to find indeed. We need more the more we get, but there is a numbing effect to all of this apocalyptic narrative— whether it is news, film, music, print, or other media—with which we increasingly entertain ourselves. Disastrous (as well as terrorist) events "have," as Nixon (not Richard, but Rob) explains, "a visceral, eye-catching and page turning power," a power that materializes the present and dematerializes more long-term emergencies. Rob Nixon wonders "how can we convert into image and narrative the disasters that are slow moving and long in the making, disasters that are anonymous and star nobody, disasters that are attritional and of indifferent interest to the sensation-driven technologies of our image world" (3). Nixon's concern is with bringing those slow disasters which do not seem immediate into public consciousness, those events which are not Hurricane Katrina or 9/11, those slow and predictable ecological deaths. Perhaps one of the reasons these are difficult to bring into public consciousness is the very fact that they *are* more predictable than the sudden surprises which kill thousands. Representations of disaster and environmental adversity, meanwhile, often take the same shape and effect of representations of terror, and we might as easily use a description of terrorism to designate a weather event such as Katrina as "an evil that lurks beyond the pale of diplomacy, international relations, or the rule of law" (Nichols 136). The fact that sensational news does stimulate us at least into indignation (which may well be a step before action), combined with the fact of overlaps in our thinking about terror and environment, on the one hand, and the fact that tragic narratives have extended their rather narrow focus from the fall of individuals to the fall of our entire species, on the other, puts ecocriticism in a good position. Ecocriticism in an age of terror is well situated to challenge how we see and represent the world and to do so specifically by unveiling the dishonesty and violence that populate our narratives and our imagination about the natural world. Intermedial ecocriticism, likewise, is perfectly situated to examine why and how some media work with some data but not with others.[10] The mere presence of so many media today, some new, many not, however, can be a bit much. Is there anyone reading this who is *not* overloaded, over-worked, over-stimulated, and exhausted?

Reputable mainstream media in fully industrialized nations offer a constant barrage of images and narratives about the state of the world that have the effect of producing spectatorial subjects who, though they may indeed care about the traumas they witness, are, nevertheless, effectively disempowered by the volume and speed of the images. There is much

to be said about how and why and when inundation produces saturation points, and there is certainly a need for empirical research[11] on these matters: "understanding how the human mind works when faced with quantitative information enables us to better counteract our innate insensitivity to certain kinds of information and to better compose multidimensional communication strategies that will be salient for our own readers, listeners, and viewers" (Slovic and Slovic 7-8). Some of the work carried out on psychic numbing (or what Paul Slovic has termed *compassion fade*), in particular, becomes important for the conversation here for understanding why things are getting worse. Susanne Moser discusses psychic numbing and apathy extensively in *Creating a Climate for Change*. She notes that "while several writers have suspected that environmental problems may contribute to numbness and apathy [...] only a few empirical studies have actually examined the emotional and cognitive responses to climate change, its impacts and solutions" (68). Such research is critical in understanding why ecomedia is perhaps having less effect than one might wish.

There is no question that Finnish media theorist Jussi Parikka is correct to note that "media structure how things are in the world and how things are known in the world" (1). But we are living in an age of post-truth (the OED word of the year for 2016): as Lee McIntyre explains in his compelling little book of the same title, by giving equal time to contesting opinions, "the media only succeeded in creating 'false equivalence' between two sides of an issue even when there were not really two credible sides" (77). The result is that we now live in an age when Western leaders seem to have entirely abandoned evidentiary standards and when "alternative facts" and raw opinions vie for supremacy in the production of knowledge: McIntyre notes (citing the OED) that post-truth is "the idea that feelings sometimes matter more than facts" (13). McIntyre is right to observe that this "undermines the idea that *some things are true irrespective of how we feel about them*" (11), and he adds that "what seems new in the post-truth era is a challenge not just to the idea of *knowing* reality but to the existence of reality itself" (10—all *italics* in original). The sheer volume of media representations in effect produces "knowledge." A hint from a corrupt leader such as Donald Trump about the possibility of this or that garners attention and traction until utter nonsense becomes plausible fact. And it is not just Trump and his "senior counselor" Kellyanne Conway and her "alternative facts," but the very way in which news becomes a kind of entertainment in the 21st century (possibly in part the effect of the blurring of virtual and actual worlds) is itself a problem.

c. Destabilization of generic categories

Slovic and Slovic discuss the numbness that results from over-stimulation and the distancing effect of numbers and how "we feel very little difference in thinking about the possible loss of eighty-eight lives rather than eighty-seven" (7), but there is also a clear

numbness that results from generic confusion and blurrings, and we must address it. In Ruth Ozeki's *My Year of Meats*, it is precisely such radical blurrings of fact and fiction that the Beef-Ex company seeks, since it will

> "develop a powerful synergy between the commercials and the documentary vehicles, in order to stimulate consumer purchase motivation." In other words, the commercials were to bleed into the documentaries, and the documentaries were to function as commercials. (*My Year of Meats* 41)

In a way, *My Year of Meats* is radically revolutionary in a formal sense, *does* push and blur the boundaries of fiction, and, in so doing, involves the reader in a kind of narrative we have never before seen. This novel, with its bibliography and documentary material and narrative science produces results in the real world, in part because of the seeming unpredictability of the synthetic growth hormone diethylstilbestrol (DES) it describes. DES is a trigger of a kind of intellectual or conceptual terrorism, and Ozeki's descriptions of DES have a real effect on the world. People who read the book can't help but become more mindful of the beef that they eat—if they continue to eat beef at all. Many of my students become vegetarian.

But it goes the other way, too, with fact miming fiction. Miming life writing, news media are intermedial translators that bring stories to a more personal level. Not just news media: scholarly work also often begins with a "where I was when it happened" prologue, both effectively situating the author and personalizing the narrative. In some ways, it seems that narrative itself has changed since September 11, 2001. Does the blurring of genre risk trivializing the rise of global sea-levels, the causal nature of global warming, and the dwindling of global diversity by offering such serious eco-narratives as entertainment? Does using such a serious topic for entertainment in *Tomorrowland* and *The Good Place* similarly trivialize it? One would think that news of our imminent demise would have a greater effect on how we live our daily lives—except that neither *Tomorrowland* nor *The Good Place* are news: they simply use facts from real life for their fictional worlds. One also wonders at what point real news becomes entertainment and what the effects of this are. We become agitated at best but remain passive "spectators to future ruin" (Morton *The Ecological Thought* 2) rather than active witnesses. Living in an age of spectatorial complicity means having such blurred boundaries among the various kinds of narratives that we produce as to be unable to distinguish fact from fiction—and also, to a great extent, numbed and unable to really care.

d. Medial complicities in ecophobia

Another issue across the spectrum of media (but differently among each) that is relevant to the topic of why things are getting worse is the transmission of counter-productive and contradictory ethics: violence in video games; sexism in film, news, gaming, and so

on; speciesism; ecophobia—these are serious roadblocks to change. Ecomedia often act as transmitters of ecophobia through their enmeshment with other rights-denying behaviors. The lack of racial or cultural diversity in *Tomorrowland*, with leadership in the hands of middle-aged white men in the film, is inexplicable, especially given the fact that the people who suffer the most from climate change and environmental crises are *not* middle-aged white men. The enmeshment of ecomedia with ideologies that have a proven record of marketability and consumption is indeed problematical. We know, for instance, that sexism sells well, and it sells whatever it is attached with. A recent Brad Pitt film entitled *World War Z* shows this with a doctor ranting about nature in the following manner:

> Mother Nature is a serial killer. No one's better. More creative. Like all serial killers, she can't help the urge to want to get caught. What good are all those brilliant crimes if no one takes the credit? Now the hard part—while you spend a decade in school—is seeing the crumbs for the clues there. Sometimes the thing you thought was the most brutal aspect of the virus turns out to be the chink in its armor. And she loves disguising her weaknesses as strengths. She's a bitch.

And then there is a regular sort of guy, Alvin Duvernay in *The Age of Stupid*, talking in the most reasonable colloquial tones about the worst storm ever to hit an American city:

> You stare Mother Nature in the eye. Usually, she's fairly benign. Then she comes along, methodically, ruthlessly. And then she stands toe-to-toe with you and dares you. *Dares* you: "Go ahead and get your best equipment out. Go ahead. Do it. Let's dance."

It is easy and reasonable to relate to this (and who wouldn't, when not so doing seems unpatriotic?), but such sexist, anthropomorphic and clearly ecophobic metaphors of a malevolent nature are counter-productive and are simply not going to help make our environmental crises any better; on the contrary, such sentiments (although they may sell well) are simply perpetuating the idea that nature (and women) are to be controlled. This is the very kind of sexist ecophobia that has produced the kinds of troubles we currently face.

But it sells well, and there is receptivity to endorsements of attitudes that deprive others of liberty; after all, these very attitudes have allowed slave owners, sexists, and colonialists (the founders of the US) to thrive. Does it sell well? *World War Z*, for instance, had a production budget of 125 million dollars (US) and grossed $552,639,571 worldwide (*Box Office Mojo*). Sexism sells, as does ecophobia. In a set of analyses touching on *The Day After Tomorrow*, Hunter Vaughan discusses how the "grandeur of spectacle [proves] enormously successful on a commercial level, catering to heightened audience fears in an age of increasing uncertainty and unpredictability" (30). Much media indeed plays on this uncertainty, this ecophobic fear of the unpredictability (indeed, uncontrollability) of nature and the subsequent threats it is imagined to pose. Director Roland Emmerich was very much aware

that he was portraying Nature as a "bad-guy," a thing to be fought, an angry opponent to be feared but finally conquered. He is quoted as having said "I don't need a monster or a villain. Just the weather." This kind of thing doesn't help. Narrativizing nature as an antagonist to be conquered is part of the problem, not part of the solution. While media form is clearly pivotal in the translation or intermediation of data, there is equally clearly, as we have seen, much more involved.[12]

Conclusions

Parallel with the work in the hard and social sciences, blockbuster films and documentaries have offered a barrage of narratives about climate change, narratives that have had little demonstrable effect on changing the behaviors that are causing the problems. Intermedial ecocriticism enables productive comparisons across media borders, in the process, becoming a nexus for a number of theoretical, methodological, and practical issues. Bruhn's proposed three step methodology seems viable, and it is clearly the second step— the "analysis and interpretation"—that is the most complicated and important. Moving forward means understanding that there is no foolproof template and that this rough template must be expanded or contracted, depending on the medium. The apocalypticism appearing in film is also appearing in print media (books, magazines, newspapers), in academic papers and discussions in the Humanities and hard sciences, on television, in video games, in music, through cell phones, in various kinds of software, in social media, through the Internet—in short, it is an intermedial apocalypticism we are witnessing, and it will likely intensify after Covid-19.

End Notes

1. Bruhn asks importantly as follows:
    a) How, from an intermedial point of view, do the media products represent scientific research related to global warming?

b) How, from an intermedial point of view, do the media products employ strategies that make hard science directly related to the everyday experience of non-experts in climate science? ("Towards an Intermedial Ecocriticism" 129).

2. In *The Ecophobia Hypothesis*, I defined ecophobia as follows:

The ecophobic condition exists on a spectrum and can embody fear, contempt, indifference, or lack of mindfulness (or some combination of these) towards the natural environment. While its genetic origins have functioned, in part, to preserve our species, the ecophobic condition has also greatly serviced growth economies and ideological interests. Often a product of behaviors serviceable in the past but destructive in the present, it is also sometimes a product of the perceived requirements of our seemingly exponential growth. Ecophobia exists globally on both macro and micro levels, and its manifestation is at times directly apparent and obvious but is also often deeply obscured by the clutter of habit and ignorance. (2)

3. Timothy Morton calls these kinds of things "hyperobjects"—"things that are massively distributed in time and space relative to humans" (*Hyperobjects* 1).

4. Ursula Heise poses a series of questions in this regard:

If the Anthropocene indeed calls for a scaling-up of the imagination, how might that imagination translate into narrative? What characters and plot architectures would it involve? What models do existing narrative forms offer for telling the story of our climate-changed presents and futures? (279)

Adam Trexler has posed very similar questions:

What tropes are necessary to comprehend climate change or to articulate the possible futures faced by humanity? How can a global process, spanning millennia, be made comprehensible to human imagination, with its limited sense of place and time? What longer, historical forms aid this imagination, and what are the implications and limits of their use?" (5)

To address these questions means having a sufficiently broad scale—one big enough and small enough.

5. The second is from Michael in *The Good Place*.

6. I have discussed elsewhere the recent trend toward veganism and how it is a patriarchal appropriation of positions feminists have long lived and theorized about, an appropriation in the service of muscular individualism (see also my forthcoming "Merchandizing Veganism" and Laura Wright's "Men, Meat, and Hegan Identity: Veganism and the Discourse of Masculinity").

7. *Age of Stupid* is a 2009 Franny Armstrong climate change film set in 2055 looking back and asking "what happened?"

8. See Elleström, who argues that, "as a term, 'medium' should... be divided into subcategories to cover the many interrelated aspects of the multifaceted concept of medium and mediality" ("The Modalities of Media" 12).

9. Bruhn and Gjelsvik are borrowing this phrase from James Balog's comments in *Chasing Ice* about how people want "something that grabs them in the gut" rather than to hear dry statistics, numbers, graphs, and so on—the very intermedial materials that made Gore's documentary such a success.

10. Bruhn elegantly and humorously captures the gist of this matter in noting that "It would, for instance, be rather difficult (but not totally impossible) for the otherwise highly developed and

utterly sophisticated medium of symphonic classical orchestral music to express, clearly and unambiguously, the three major changes made in the state budget of the Swedish state from 2018 to 2019 – whereas that would be relatively easy to do in a short, written journal article in a daily newspaper" ("Towards an Intermedial Ecocriticism" 144).

11. Alexa Weik von Mossner's argues for the importance of "empirical research [that] can… help in substantiating theoretical approaches to narrative" (*Affective Ecologies* 24).

12. Parts of this paragraph appear in different form in my *The Ecophobia Hypothesis*, pages 54 and 60.

Works Cited

Box Office Mojo, by IMDbpro. "The Day After Tomorrow." n.d. https://www.boxofficemojo.com/release/rl1716291073/

Bruhn, Jørgen. "Towards an Intermedial Ecocriticism." *Beyond Media Borders*, vol. 2, edited by Lars Elleström, Palgrave Macmillan, 2021, pp. 117–48.

_____, and Anne Gjelsvik. *Cinema Between Media: An Intermediality Approach*. Edinburgh U.P., 2018.

Deming, Alison Hawthorne. "Getting Beyond Elegy: Nature, Culture, Art." *What's Nature Worth: Narrative Expressions of Environmental Values*, edited by Terre Satterfield and Scott Slovic, University of Utah Press, 2004, pp. 112–24.

Elleström, Lars. "Introduction." *Media Borders, Multimodality and Intermediality*, edited by Lars Elleström, Palgrave, 2010, pp. 1–8.

_____. "The Modalities of Media: A Model for Understanding Intermedial Relations." *Media Borders, Multimodality and Intermediality*, edited by Lars Elleström, Palgrave, 2010, pp. 11–48.

Estok, Simon C. "Merchandizing Veganism." *The Routledge Handbook of Vegan Studies*, edited by Laura Wright, Routledge, forthcoming 2021.

_____. *The Ecophobia Hypothesis*. Routledge, 2018.

_____. "Virtually There: 'Aesthetic Pleasure of the First Order,' Ecomedia, Activist Engagement." *ISLE: Interdisciplinary Studies in Literature and Environment,* 24**,** 2017, pp. 4–21.

Hamilton, Clive, Christophe Bonneuil, and François Gemenne. "Thinking the Anthropocene." *The Anthropocene and the Global Environmental Crisis*, edited by Clive Hamilton, Christophe Bonneuil, and François Gemenne, Routledge, 2015, pp. 1–13.

Heise, Ursula. "Science Fiction and the Time Scales of the Anthropocene." *English Literary History*, vol. 86, Summer 2019, pp. 275–304.

Horak, Jan-Christopher. "Wildlife Documentaries: From Classical Forms to Reality TV." *Film History*, vol. 18, no. 4, 2006, pp. 459–75.

Ljungberg, Christina. "Intermedial Strategies in Multimedia Art." *Media Borders, Multimodality and Intermediality*, edited by Lars Elleström, Palgrave, 2010, pp. 81–95.

McLuhan, Marshall. *Understanding Media: The Extensions of Man*. Routledge, 1964.

Morton, Timothy. *Hyperobjects: Philosophy and Ecology after the End of the World*. University of Minnesota Press, 2013.

_____ . *The Ecological Thought*. Harvard U.P., 2010.

Moser, Susanne C. "More bad news: the risk of neglecting emotional responses to climate change information." *Creating a Climate for Change: Communicating Climate Change and Facilitating Social Change*, edited by Susanne C. Moser and Lisa Dilling, Cambridge U.P., 2007, pp. 64–80.

McIntyre, Lee. *Post-Truth*. MIT Press, 2018.

Nichols, Bill. "The Terrorist Event." *Representing Humanity in an Age of Terror*, edited by Sophia A. McClennen and Henry James Morello, Purdue U.P., 2010, pp. 127–42.

Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Harvard U.P., 2011.

Ozeki, Ruth. *My Year of Meats*. Penguin, 1999.

Parikka, Jussi. *A Geology of Media*. University of Minnesota Press, 2015.

Paul Revere and the Raiders. "Kicks." By Paul Revere and the Raiders, Midnight Ride, Columbia Records, 1966.

Rust, Stephen. "Overview: Flow—An Ecocritical Perspective on Broadcast Media." *Ecomedia: Key Issues*, edited by Stephen Rust, Salma Monani, and Sean Cubitt, Routledge, 2015, pp. 87–98.

Slovic, Scott and Paul Slovic. "Introduction: The Psychophysics of Brightness and the Value of a Life." *Numbers and Nerves: Information, Emotion, and Meaning in a World of Data*, edited by Scott Slovic and Paul Slovic, Oregon State U.P., 2015, pp. 1–22.

The Age of Stupid. Directed by Franny Armstrong, Spanner Films, 2009.

The Day after Tomorrow. Directed by Roland Emmerich, Twentieth Century Fox, 2008.

The Good Place (Season 3, episode 10). Created by Michael Schur, NBC Universal Television, 2019.

Tomorrowland. Directed by Brad Bird, Walt Disney, 2015.

Trexler, Adam. *Anthropocene Fictions: The Novel in a Time of Climate Change*. University of Virginia Press, 2015.

Vaughan, Hunter. "500,000 Kilowatts of Stardust: An Ecomaterialist Reframing of *Singin' in the Rain*." *Sustainable Media: Critical Approaches to Media and Environment*, edited by Nicole Starosielski and Janet Walker, Routledge, 2016, pp. 23–37.

Weik von Mossner, Alexa. *Affective Ecologies: Empathy, Emotion, and Environmental Narrative*. Ohio State U.P., 2017.

_____ . "Love in the Times of Ecocide: Environmental Trauma and Comic Relief in Andrew Stanton's *WALL-E*." *Eco-Trauma Cinema*, edited by Anil Narine, Routledge, 2015, pp. 164–79.

World War Z. Directed by Marc Forster, Paramount, 2013.

Wright, Laura. "Men, Meat, and Hegan Identity: Veganism and the Discourse of Masculinity." *The Vegan Studies Project*. University of Georgia Press, 2015, pp. 107–29.