A thesis submitted to the Department of Environmental Sciences and Policy of Central European University in part fulfilment of the Degree of Master of Science

Crisis, disaster, and dystopia in environmentalist narratives

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July, 2019

Budapest

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ABSTRACT OF THESIS submitted by:
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for the degree of Master of Science and entitled: Crisis, disaster, and dystopia in
environmentalist narratives

Month and Year of submission: July, 2019.

This thesis explores what messages the three narrative elements of crisis, disaster, and
dystopia convey in the film *Snowpiercer* (2013), and then seeks to evaluate how those
messages were understood by audiences. The analysis was conducted based off of the
assumption that environmentalists construct social issues out of ecological theories. In order
to evaluate the messages conveyed by the aforementioned narrative elements this thesis draws
on theories from different branches of the environmental humanities. It incorporates an
element of empirical ecocriticism in its attempt to understand audience reactions. Focus
groups were used as a tool for evaluating audience reactions. The results of the analysis of the
film and the focus group results suggest that these elements are useful in conveying
environmentalist messages in that focus group participants were successfully able to identify
environmental concerns connected to each of these messages and draw conclusions about how
they related to issues in the real world.

Acknowledgements

I'd like to express my gratitude to my advisor Dr. Alan Watt for his thoughtful suggestions on this thesis. I'd also like to extend a thank you to my family and friends for their support throughout the writing process. And finally, I'd like to thank my department for equipping me with the skills and background to carry out this analysis.

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INTRODUCTION

The last two years have seen the publication of a steady torrent of scientific and journalistic articles declaring that the world has reached a turning point in the climate change crisis and forecasting what sort of disasters it will bring. The October 2018 *Special Report on Global Warming* released by the IPCC made the dire assessment that the world was likely on track to warm by 1.5 degrees above the temperature of pre-industrial levels in the period between 2030 and 2052 along with predictions of the far reaching and dire consequences including sea level rise, ocean acidification, and more severe and inhospitable weather (First 2018). This report led *Forbes* magazine to declare 2018 a 'tipping point' of climate change and the *New York Times* to call on world leaders for immediate action (Ellsmoor 2018; Board 2018).

This came only two years after a relatively hopeful development in the fight against climate change, the 2015 Paris Agreement, a voluntary international agreement to take measures to keep global warming below 2 degrees above pre-industrial temperatures with a target of 1.5. This agreement was hailed by some as a great achievement in international cooperation against climate change (Rajamani 2016). Others concluded that it was a great aspiration, but largely insufficient given the scale and urgency of the problem (Clemencon 2016). Despite his skepticism however, Clemencon (2016) concluded that the Paris Agreement was a success in the sense that it signaled an unprecedented extensive agreement about the urgency of climate change.

This increased sense of urgency has not only been acknowledged in international agreements and scientific publications. It's found a place in fiction as well. The last two decades have produced a great number of climate related books, films, and TV. In fact, a term has even been coined to describe the genre, 'cli-fi' an abbreviated form of the phrase climate-fiction (Tuhus-Dubrow 2013). Besides the sheer number of productions there has also been

an explosion of scholarly inquiry into the effects of these works on audience beliefs about climate change.

Griffin (2017), from her research on which specific aspects of movies about climate change affect audiences, concluded that audiences do not always identify climate change as a theme in fictional movies that depict it, and responses to these depictions vary depending on different elements of the film such as the respondent's preconceived ideas about climate change. Two key elements she (2017) identified as having a strong effect were speed and severity.

In this thesis I hope to investigate what these elements, in different forms in fiction can contribute to climate change narratives. Then in order to move beyond literary analysis and to gain some understanding of how the narrative is actually received by audiences focus group methodology will be employed. Specifically, the hope is to understand how audiences respond to these narrative elements and whether they find them reflective of crises in the real world.

Film was selected as the medium for investigation for a number of reasons. The most important being its relatively broad reach. A 2002 study produced by the National Endowment for the Arts concluded that in the US at least, literary reading declined sharply in the period from 1982 to 2002 (Bradshaw et al. 2004). Rust et al. (2012) however write that the world is experiencing an unprecedented time for media access, with people having access through the internet to more media and more different kinds of media than they ever have before, and he suggests that that alone justifies its investigation. And finally, a scholarly interest in these films has also emerged, to which this thesis will contribute.

The key film I identified for analysis was *Snowpiercer* (2013). Besides, containing the three narrative elements of interest for this analysis, a number of other characteristics lend this film to further exploration. For one it's a rather international film in many ways. It was

globally distributed suggesting it holds at least some relevance to different audiences across the world.

Additionally, the source material and production process drew from a number of different countries. The screenplay was based off of a French graphic novel of the same name. The film's director is from South Korea, and this is his first English language film. And the characters in the film are also played by a relatively diverse set of actors. In fact, it was the director's stated intention that the film depict a microcosm of the world (Franich 2014). So perhaps as a result of these attempts at globalism we can assume that this film reflects a broader set of cultural perspectives than it otherwise would have.

Finally, the story and film are considered to have artistic merit. Metacritic, a website which aggregates the scores of professional movie reviewers, as of the writing of this thesis gives the film an 84 percent rating, and rotten tomatoes which aggregates both professional and user reviews gave the film a 95 percent rating (CBS Interactive Inc 2019; Fandango 2019). Besides this, the story itself seems to have held consumer's interests, and production has begun for the story to be adapted as a television series on TBS.

LITERATURE REVIEW

AN OVERVIEW OF THE ENVIRONMENTAL HUMANITIES

The environmental humanities are a discipline or set of disciplines that differentiated from either literature departments or environmental history departments in the US in the early 2000's (Nye et al. 2013). The primary intention of studying the environmental humanities is to better understand the ways that people interact with and construct the environment by synthesizing each of the scientific, social, and cultural factors at play in environmental issues (Nye et al. 2013). Nye and his colleagues (2013) write that the essential characteristics of the

environmental humanities are that they are interdisciplinary, international, and action oriented—often intending to shape policy or perception. In that way they are the perfect starting point for the analysis contained in this thesis. What follows is a brief overview of the relevant historical and theoretical developments in the environmental humanities beginning with their source material or environmentalism

Although environmentalism developed as a discourse of its own in the 1960's it wasn't until much later that environmentalist literary criticism emerged evaluate this discourse in any sort of systematic or academic way (Hansen and Cox 2015; Heise 2006). While ecocriticism and a plethora of related disciplines have since developed, Heise (2006) laments their slow development, relative to the types of critical analysis that developed out of other 1960's cultural movements such as feminism.

Heise (2006) specifically attributes the slow development of ecocriticism, to the influence of French philosophers on literary criticism. She (2006) writes that other fields of literary criticism under the influence of the French tended to be concerned with subjectivity and the role of identity in one's experiences, and that nature was evaluated as a sociocultural construct which had been used to bolster the ideological claims of certain groups. She (2006) goes on to extrapolate that this created a tension between the fields critical examination of other social movements and the field of environmentalist criticism because environmentalism's perceived relationship with ecology and scientific theories were seen as upholding an objective view of nature rather than allowing for the individual to construct it.

Moos and Brownstein (1977) write that environmentalism as a discipline is 'earth bound'. They (1977) go on to explain this statement to mean that environmentalism is primarily concerned with understanding rather than remaking the environment, which seems again like a rejection of the notion that environmental issues could be socially constructed. While it is true that the environmentalist's task is concerned with scientific laws and

ecological theories about earth and the biosphere, constructivist theories however are not absent from or incompatible with environmentalist thought.

Hansen (2015), in order to demonstrate how concepts in environmentalism could be socially constructed despite this connection with the natural sciences asks us to consider the simple fact that "not all environmental problems are recognized as such." In this easy observation it becomes clear that there is more to environmentalism than parroting scientific theories for a broader audience (Moezzi et al. 2017). Instead there is a process by which environmental problems may be socially recognized and not all environmental problems successfully undergo the process of social recognition (Hansen 2015).

This idea was perhaps most concisely articulated by Passmore (1974) when he drew a distinction between 'ecological problems' and 'problems in ecology'. The latter he defines as typically scientific questions, which can be understood by formulating and testing ecological hypotheses, while the former are the problems that arise when people take a normative stance toward some feature of the environment or develop a cultural attitude towards ecology (Passmore 1974). This is a useful distinction, that will be employed throughout this thesis. These two scholars demonstrate that not only are constructivist ideas compatible with environmentalism, they are essential to it, contrary to Heise's implication.

Accepting now that environmental problems are socially constructed, consider the process by which they are constructed. According to Garrard (2004) this transformation should be mediated by the creators of cultural works. He (2004) writes that it is the work of environmentalists to make meaning out of problems in ecology and transform them into ecological problems by creating cultural products that make moral arguments for how some environmental condition should be. As an example, he (2004) uses Rachel Carson's *Silent Spring;* he makes the case that it was commercially and persuasively successful because it effectively completed this task of turning a problem in ecology into a social evil. He (2004)

also writes that Carson's persuasive success was due to the book's literary rather than scientific merits, in particular her use of narrative elements like dystopia.

In that vein Griffin (2017) emphasizes that narrative, especially in fiction, helps audiences both remember and understand scientific facts reinforcing the idea that fiction could play a vital role in the process of transformation. Manzo (2017) refers to Lorenzoni et al. (2017)'s discussion of engagement when elaborating on this point. She (2017) writes that the role of cultural works concerning climate change is to "share information and promote understanding; to foster affective engagement and show people why they should care; and […] to motivate [..] people to act." Each of these processes is crucial to the transformation of problems in ecology into ecological problems.

Now that we have established a sense of the utility of environmental messages, as well as the development of their study let's look more closely at the fields of criticism themselves in order to get a sense of how scholars understand different aspects of these messages, and how different aspects of them can help or hinder the transformation process from problem in ecology to ecological problem. The oldest and most established field is ecocriticism (Heise 2006).

Ecocriticism according to James and Morel (2018) is one of the most international branches of literary criticism. Glotfelty (1996) wrote that:

> "What then is ecocriticism? Simply put, ecocriticism is the study of the relationship between literature and the physical environment. Just as feminist criticism examines language and literature from a gender conscious perspective, and Marxist criticism brings an awareness of modes of production and economic class to its reading of texts, ecocriticism takes an earth-centered approach to literary studies"

This is one of the most often cited definitions of ecocriticism, although it is also quite general. Buell (2005) writes that the discipline neither contributed to the environmental humanities nor literary criticism besides offering an additional topic of investigation, and explicitly criticized ecocriticism for not developing any new methodologies. James and Morel

(2018) on the other hand write that while the wide scope and lack of defining statement has led some to criticize the field, it has also allowed it to develop dynamically.

There were however, some early attempts at providing a framework. According, to the Horwath (1996) in his seminal essay on ecocriticism, the discipline can be separated into four components: ecology, ethics, language, and criticism. Ecology he (1996) writes represents the "the relations between nature and culture". Ethics he (1996) defines as a means to make sense of historical social conflicts. Language is how the world is represented in words; and criticism refers to the judgement of the merit of these works as a whole (Horwath 1996). He (1996) suggests that these are the essential components scholars can use to systematically evaluate environmental messages in literature.

Environmental communications exist at the boundary of the environmental humanities and the social science of communications. Cox and Depoe (2015) developed a theoretical framework of environmental communications that complements Horwath's writing about ecocriticism. They (2015) reduce environmental communications to what they call its three central assumptions. The first of these is that environmental problems are produced in the physical world by the way that humans interact with the biosphere and they are also produced socially by our interpretations of those problems (Cox and Depoe 2015). The second is that the ways that people choose to represent the physical world both influence and are influenced by human interests (Cox and Depoe 2015). The third is that various human and social contexts can help or hinder the production of various representations of the environment, and that these productions also affect the discourse or representations (Cox and Depoe 2015). This framework is interesting because it accounts for the reflexivity between cultural creation and social processes.

Cox and Depoe (2015) write that these analyses are useful in that they can be used to better understand the contexts in which environmental communications are produced as well

as how these communications are useful in understanding and responding to the environment. Additionally, from these assumptions its easily possible to deduce lines of inquiry along which to evaluate environmental messages. For example, when considering a cultural product in terms of the second assumption one might investigate which social interests a certain representation of the physical environment serves.

The next field of environmental humanities that has produced a useful framework for evaluating environmental cultural productions is ecomedia. One of the fundamental ideas of ecomedia is that the world is the commons shared by both humans and non-humans, so to this ends ecomedia often explores two central themes (Rust et al. 2015). The first is that society, media, and the environment are indelibly linked, and that media and social systems influence how humans conserve or exploit natural resources while the second is that understanding these links is enriching to society and potentially useful in influencing and stimulating action in response to environmental problems (Rust et al. 2015).

Ecomedia analysis also examines some of the formal elements of media. One of the most useful is framing. Soles and Chu (2015) write that any visual media necessarily literally imposes a typically rectangular frame including the subject but perhaps more importantly excluding many other things. They (2015) claim that by evaluating the chosen subject, how its presented, and the negative spaces where things were excluded, it's possible to better understand the ideology embedded in an image. This provides an accessible starting place for the analysis of images.

To expand on this investigation into images, we'll look to the realm of ecocinema. Wiloquet (2010) emphasizes the unique utility of the field in its ability to interpret the "vocabulary and techniques particular to the visual medium". In her (2010) discussion of films in ecocinema she makes a distinction that places films relating to the environment into two general categories. The first category is ecofilm, which she defines as explicitly activist;

she writes that these are usually art films that challenge the status quo and present an alternative to anthropocentric views (Wiloquet 2010). The other category, environmentalist films, she (2010) writes are typically Hollywood films which reinforce business as usual behavior. She (2010) writes that Hollywood films stereotypically use environmental issues as fodder to seem relevant, but rarely espouse any kind of cohesive environmental narrative in the way that ecofilm does. Ingram (2012) purports that with this distinction Wiloquet (2010) suggests that analysis should focus on cognitive rather than what he calls affective or emotional elements in environmental film. He (2012) defines affective elements as triggering visceral responses and having more to do with physical feelings while emotional elements trigger emotional feelings.

Ingram (2012) questions Wiloquet's notion of the superiority of ecofilms through his examination of several ecofilms and their effects on audiences. He (2012) concludes that while the genre may indeed provide a more salient critique of environmental issues, audiences, especially those without any formal training, may have trouble understanding and connecting to these critiques because of the formal strategies that film makers use to express them, such as deliberately slow pacing (Ingram 2012). He (2012) writes that confusion or boredom in audiences could prevent them from taking away any messages from films. In this case environmentalist film, or popular film that explores environmentalist themes, may be a more apt teaching tool for the general audience, even if it doesn't necessarily provide the radical critique that Wiloquet advocates (Ingram 2012).

Besides Wiloquet's two broad categories, there three other oppositional pairs that often come into play in ecocinema studies. They are, "art and popular cinema, realism and melodrama, and moralism and immoralism (Ingram 2012). Ingram (2004) interrogates the features of the typical Hollywood melodrama and provides insights into how these features affect the environmental messages in films.

He (2004) writes that in the most typical melodrama there is a hero, who in the end triumphs over an environmental villain on the merit of his own actions. The villain typically takes one of two forms, the poacher in movies about wildlife conservation and in other movies the villain is typically a personification of corporate interests (Ingram 2004). If a movie lacks a villain, blame may simply be displaced onto an ambiguous 'they' (Ingram 2004). The hero if virtuous, according to Ingram allows viewers who identify with him and to deny their own role in environmental degradation, on the other hand if the hero's responsibility in the situation is acknowledged, blame can be misallocated to an ambiguous 'we' representing the collective responsibility of humanity in environmental degradation but not taking into account any social differences such a class (Ingram 2004). Additionally, the hero versus villain story can serve the purpose of individualizing and simplifying complex environmental issues (Ingram 2004). The villain on the other hand may personify the abstract forces responsible for environmental destruction, however it typically it also maintains the framing of the conflict as individual and allows viewers not to acknowledge their own complicity (Ingram 2004).

Ingram (2004) however is careful to note, that not all scholars view melodrama as an insufficient mode of conveying environmental messages. He mentions Slotkin's arguments in favor of melodrama. Slotkin (1993) purports that the individual representations in melodrama do not necessarily individualize broader societal issues and power dynamics, and in fact the narrative surrounding the hero, his motivations and inner life, can preserve the complexity necessary to successfully explore environmental issues.

In all Ingram (2012) cautions against overreliance on formalism in ecocinema analysis. He (2012) notes that while the formal elements of a film will contribute to the way that the audience perceives it, they are not all automatically understood by all audience members in the same way and are ultimately evaluated in the context of the narrative.

Therefore, the film as a whole must be considered because the audience will interpret all of the elements of the as a whole and according to the context of their individual experiences. This is related to the notion of polysemy which states that "a particular signifier always has more than one meaning, because "meaning" is an effect of differences within a larger system (During 1999)." The system in this case referring not only to the larger narrative containing the formal elements but also the social contexts of the viewers.

Tong (2013) writes about environmentalist film that "[…] the audience does not sit passively in front of the screen, but rather participates actively in the world of multimedia." It's out of this idea that the field of empirical ecocriticism emerged. Empirical ecocriticism is one of the newest branches of the environmental humanities. Its aim is not only to evaluate cultural productions for environmental messages, but to somehow measure the impacts of these messages on audiences. Estok (2015) writes that the utility of employing an empirical framework within the discipline is in evaluating how environmental messaging functions within the literary or in this case media system. He (2015) uses Steven Tötösy de Zepetnek's definition of a literary system which includes the "production, distribution, reception, and the processing of texts".

The need for this kind of interpretation was articulated by Miall (2006) when he wrote that literary criticism without an empirical component to test different hypotheses was simply interpretation rather than theory as no attempt could be made at proving or refuting such interpretations. Estok (2015) further justifies this empirical inquiry in terms of environmentalist ideas. He (2015) writes that speculating about the metaphor or purpose of aspects of nature will do little in terms of real-world conservation efforts, however understanding how these texts produce or reproduce societal attitudes toward nature might be useful in affecting change.

Miall (2006) summarizes the theories underlying this kind of empirical analysis by breaking them into a few major themes. The first is that as a discipline empirical literary analysis should focus on the emotional responses to literature of average readers, rather than investigations by academics or experts. Another is that literary reading is or should be what he refers to as 'dehabituating'—that through literary reading audiences should encounter new or different perspectives (Miall 2006). Interestingly, he (2006) also cautions against an adhering to closely to the idea that certain formal elements necessarily produce certain responses in audiences and encourages researchers to focus on the relationship between text and reader.

Although a number of fields and subfields have emerged in order to make sense of environmental cultural products; they all however more or less grapple with how problems in ecology are defined and how environmentalists' messages are crafted, disseminated and understood. The analyses contained in this thesis will draw on theories and ideas from each of these disciplines to provide a comprehensive analysis of a work of dystopian film.

CRISIS

Some scholars have noted that besides the slow growth of environmental humanities, there has also been noticeable stagnation in the production of climate related fiction. Rimmer (2015) cites a 2005 essay in which prominent American environmentalist and journalist Bill McKibben laments the insufficiency of climate change fiction and posits that this is both a symptom and a reflection of climate change's lack of a cultural meaning (McKibben 2005).

Tuhus-Dubrow (2013) disparages fiction writers and novelists specifically for their seeming reluctance to take up the mantle of writing about climate change. She cited a 2005 article in *The Guardian* by Robert MacFarlane where he emphasizes an urgent need for what he calls an 'imaginative repertoire' dealing with climate change (MacFarlane 2005). Both

Rimmer (2015) and Tuhus-Dubrow (2013) go on to note the rapid acceleration in the development of such a repertoire in the decade preceding their articles, and both connect this proliferation to the perception that climate change has reached the point of crisis.

In 2006 Heise wrote that the increase in the number of branches within the environmental humanities was also a reflection of worsening ecological problems. MacFarlane (2005) in fact describes climate change as the greatest existential threat to humanity since nuclear proliferation and concludes that it's not only fitting but necessary for cultural creators to begin to play a role in defining the problem for a larger audience. So my analysis will draw on this idea that crisis or the perception of crisis can stimulate action or the desire for action.

DISASTER

The utility of disastrous or apocalyptic rhetoric is a hotly contested issue in environmental communications and environmental humanities. Ingram (2004) refers to Athanasiou's criticism that apocalypticism belies 'political despair' rather than empowerment and creates an easy target for opposition groups. On the other hand, Ingram (2004) writes that it's possible to interpret apocalyptic elements as an expression of the desire for radical change.

The answer to what makes an apocalypse despairing rather than radical may lie in Garrard's (2004) discussion of the tragic versus comic apocalypse. Tragic visions of the apocalypse, he (2004) writes, are deterministic, they frame the end as an inevitable catastrophe, which includes no room for human agency. While what he (2004) refers to as the comic apocalypse emphasizes the end as a possibility and emphasizes human ability to change course and to resist the end.

DYSTOPIA

The term dystopia entered popular usage to incorporate Malthusian projections of overpopulation and societal collapse with Mill's notion that technological development inevitably improves society and contributes to people's wellbeing (Stableford 2010). Coincidentally, around the same time in the mid-19th century the discipline of ecology emerged to describe the discipline that was emerging from attempts to understand earth's systems, primarily as they related to agriculture.

Stableford goes on to explain how the development of ecology and the understanding of the complexity of ecological systems was imbued with a sort of mysticism by literary romantics who rebranded ecological ideas as proof of the harmony of their constructed Nature (2010). From the romantic harmony of Nature, it was a short leap to pessimism about civilization's disharmony with Nature and eventual dystopian projections about the result of this disharmonious relationship (Stableford 2010). Moos and Brownstein (1977) write that the contemporary man is conscious of the unsustainable relationship of society to nature, and that through this consciousness understands that the world as they know it will not exist for future generations which produces what they describe as a despairing attitude towards the future. Speculation that the future will be worse is necessarily dystopian. This bolsters Stableford's (2010) claims to the close relationship between ecology and dystopia.

While dystopian writers found material for their claims in projections of ecological disaster, Moos and Brownstein (1977) express disappointment that utopian speculation rarely if ever seriously engaged with environmental or ecological thought. Environmentalists as well often seem more willing to invoke dystopia in service of their messages. This isn't meant to suggest that invoking dystopia is always a successful means of directing cultural attention towards ecological problems. For example, consider two of the most prominent 20th century environmentalist books, *The Population Bomb* and *Silent Spring,* which both employed

dystopian imagery and speculation in service of their environmental ideas. While both produced vast cultural impacts, the dystopian aspects of *The Population Bomb* which were ultimately unfulfilled, made it an easy target for those who disagreed with environmental messages (Garrard 2004) which is an often-invoked criticism of dystopia in environmental messages (Hughes and Wheeler 2013).

Hughes and Wheeler (2013) specifically write about the role of technology, in dystopian environmental narratives. They (2015) contend that technological progress in the context of dystopia tend to result simultaneously in a movement towards representations of nature as a garden that has been tamed by technology but away from nature as wilderness which reflects the tension between the 'nature' and technology.

METHODS

The analysis in this thesis will come in two parts. The primary analysis will blend several of the ideas from different fields of environmental humanities in order to critically evaluate the film *Snowpiercer* (2013). And a secondary mode of analysis will be employed through collecting and analyzing a focus group to understand whether audiences made meaning of the film in the predicted ways. The basis for this analysis comes from a newer field of environmental criticism called empirical eco-criticism.

Theoretical Framework

SNOW PIERCER ANALYSIS

In this section I'll outline the theoretical framework I constructed in order to draw useful conclusions from the chosen methods of analysis. Underpinning all of my analyses is the idea that ecological problems are socially constructed and that depictions of the environment produce and reproduce attitudes towards it. So, then the task was to develop a framework in order to evaluate this process of construction, in terms of the chosen narrative elements.

If you recall, Griffin (2017) identified speed and severity as two elements of environmental problems that affect audience perceptions. This thesis will shift the focus from which elements affect audience perceptions, to gauging how certain preselected elements affect audience perception. Speed and severity can exist in different combinations. The three of interest in this analysis will be crisis, which is a combination of increasing speed and severity. Disaster, which will represent a high level of speed and extreme severity, and dystopia, with little if any speed and extreme severity. These will be the three narrative elements I examine in this thesis.

The narrative elements this framework will be structured around were chosen in part because of their ubiquity, they can be found in all types of climate communications from news, scientific articles, fiction, and even music, and in part because of the academic interest in each of them. Scholars have studied depictions of disasters or dystopia and written ad nauseum about whether global climate change should be referred to as a crisis. There has been little investigation however into how each of these elements affect audiences taken together.

Crisis has long been as essential component of constructing environmental narratives. Heise (2006) suggested that the slow growth of environmental humanities was due to philosophical differences, I assert that it was instead the absence of crisis. The 1960's and 70's, like today came at the end of an extended period of relative peace and prosperity. The most pressing existential threats in the west at the time were the Culture War, the Cold War, the Vietnam War. And the types of analyses that flourished were those that directly addressed these threats, namely feminism and socialism (During 1999). While there were predictions of eventual overpopulation and resource depletion, these must have seemed remote possibilities in the face of the genuine existential crisis of nuclear proliferation. In the face of what seemed to be the 'real' problems, environmentalism was easily relegated to the outskirts.

Consider again, Rachel Carson's *Silent Spring*, a landmark of the environmental movement published in 1962. In order to make a point about pollution invoked Cold War imagery and nuclear proliferation as a metaphor to express the gravity of environmental pollution—a maneuver that would seems unnecessary now that ecological problems are their own crises.

In fact, ecological problems have become so identified with crisis that they are invoked as a metaphor for other perceived problems. For example, cybersecurity problems were described by Thompson (2019) as the 'climate change of the internet'. Carson is a good

example of how crisis is produced. While, her book was indeed grounded in scientific theory, its success was in creating the perception of crisis using the invocation of dystopia. And on the flip side of the coin, the proliferation of cli-fi in recent decades is a good example of how crisis is reproduced. The crisis in this case existed in public consciousness before being reflected and reproduced in communication.

After recognition of a crisis typically comes a response. Responses to crisis can vary greatly. In some cases, it provokes urgency, such as with the Paris Agreement. Urgency is a positive force which motivates action in order to avoid disaster. In other cases, it may provoke anxiety. Anxiety on the other hand is negative. It produces a sense of despair or helplessness, and ultimately resignation to impending disaster. And it may also provoke outright rejection and apathy, a denial that crisis is in fact taking place.

Disaster is closely related to the notion of apocalypse; however, I chose to hew more closely to disaster rather than apocalypse in this framework in order to emphasize the fact that the world continues afterwards. Disaster is an event that results in the sudden transformation of a system. Disaster can occur unexpectedly or as the result of a prolonged crisis. It could also precipitate a crisis. Environmental disaster in these analyses drives social transformation. So the most interesting aspect of disaster it's transformative potential, and whether in the wake of disaster societies are positively or negatively remade.

In this framework dystopia is the speculation that as a result of crisis or disaster society will organize itself in a less equitable and less just way. That instead of managing the crisis or disaster in a way that benefit of all people, there will be winners and losers. Dystopia by definition is speculation that the future will be worse. For this thesis dystopia is a caricature of injustice in present society. A warning of what's to come if the status quo is preserved.

By investigating audience responses to fictional depictions of these narratives, the hope is to to understand more about how they understand these ideas in the real world and connect them to environmental problems.

There is no single set of methods or overarching theoretical model that guides ecocritical analysis, instead the discipline is united under the common aim of bringing "ecological consciousness to the study of […] cultural productions" (Oppermann 2006). This has led some to accuse the discipline of being incoherent (Buell 2005), but in a positive light it forces scholars to consider carefully the most appropriate theories and methods for their own research. Buell (2005) also writes that, "The majority of ecocritics, whether or not they theorize their positions, look upon their texts of reference as refractions of physical environments and human interaction with those environments".

Finally, the language and ethics of the film will be examined according to the definitions given by Horwath (1996). And Cox and Depoe's (2015) assumptions will guide the lines of questioning within these sections. In order to do this my analysis will focus on the reactions and transitions between crisis, disaster, and dystopia. I'm interested in how an ecological problem might progress through these three stages and the aspects that help or hinder it.

FOCUS GROUP
Preparation

In order to gauge the reactions of the audience to the selected film, focus group methodology was employed. Focus groups are well suited to this sort of research question for a variety of reasons. During (1999) writes that a given symbol or signifier may simultaneously have different meanings to different consumers or groups of consumers because meaning making is a collective process to which each consumer brings their own experiences. This is also one of the theoretical underpinnings of focus group theory (Wilkinson et al. 2004) and

part of the reason that it is particularly suited to this task, it's a tool that allows the researcher some access not only into the meaning audiences generate from texts but also their process of meaning making. There are many ideas about how best to hold a focus group.

The first step in planning a focus group is devising a questionnaire according to your research question. Liamputton (2015) writes that the questioning portion of the focus group should begin with an introductory question in order to gain a basic understanding of the participants' attitudes toward the subject before proceeding to a transition question in order to gradually guide participants' discussion toward the target area. After this he (2015) suggests asking focus questions in order to direct the discussion more completely toward the area of interest. Finally, the questionnaire should include summarizing and concluding questions. The questionnaire I developed for this focus group adhered to this format. In addition, it included a number of possible follow up prompts and questions in the event that the original question did not generate much data from the participants. These were written according to Liamputtong's (2015) recommendations for 'probe and prompt' questions.

Conducting

During the actual focus group, participants were extremely forthcoming with their responses which frequently directly addressed the themes of this research. For that reason, it was not necessary, and in fact would have been intrusive and stilted the discussion to adhere strictly to the questionnaire. Liamputtong (2015) writes that focus groups of this structure, where the researcher does not adhere closely to a questionnaire and instead responds to the participants, can be likened to in-depth interviews.

Besides developing a questionnaire, one of the main difficulties in preparing for a focus group is recruitment. Powell and Helen (1996) recommend six to ten participants per group, although acknowledge that smaller groups are possible. I found recruitment to be my

greatest difficulty. In my first attempt at recruitment, I advertised a movie screening with a fixed date. My minimum desired number of participants expressed interest, and on the day two dropped out because of unexpected circumstances. In my next attempt, I decided that imparting some flexibility in the date encourage more participation. I was still only able to recruit my maximum number of desired participants as opposed to the recommended over-recruitment. On the day of the screening two participants backed out. In this case the screening continued, since it still met the set minimum of four participants.

Before the participants arrived, they were warned that the film they would watch might contain upsetting material including violence and offered the opportunity to back out of participation. This warning was reiterated before the beginning of the movie. On the day of the screening I emailed my volunteers to confirm their participation. Two participants dropped out, leaving me with only four participants. I arrived early to set up the movie and refreshments. After all of the participants arrived, I introduced myself, and asked the participants to introduce themselves in order to establish a rapport. Participants were then given a few moments to chat and have refreshments before the movie.

After introductions, the movie began movie. Participants were largely quiet during the movie although there were scattered interjections. After the movie participants were offered the opportunity to use the bathroom and top up their snacks before the discussion began. Participants were also asked for their permission to record. Recording was done using a smartphone for convenience as well as unobtrusiveness. During the focus group the researcher is specifically encouraged to act as a moderator to a discussion, interjecting as little as possible besides encouraging participation and posing questions (Wilkinson et al. 2004). As per Liamputtong's (2015) guidelines questions began from general to specific. In this particular focus group, there were no problems eliciting responses as participants were extremely talkative. I did experience a dominant talker. According to Liamputtong's (2015)

recommendation, I tried to encourage more participation from other members of the group by addressing them specifically, as well as to direct my attention away from the dominant talker and to the other participants. This seemed somewhat successful in eliciting more responses from other participants.

From the literature it was apparent that there are a number of common configurations and best practices where it concerns arranging a room for a focus group. Vaughn et al. (1996) write that a circular table is superior to other shapes in that it encourages all participants to engage equally rather than to speak to the person directly across from them. Hennink (2007) add that the circular table also creates a discussion like atmosphere, encouraging participants to comment and respond directly to each other rather than to the moderator as an intermediary. Additionally, for comfort and practicality in terms of resting or serving refreshments Stewart et al. (2014) suggest that the participants be seated around a table.

Unfortunately, for my own focus groups replicating this optimal arrangement was not possible. I was restricted to holding the screening in my university, and could not reserve a room of appropriate size, set-up, and availability that included a circular table. Instead, I held my group in a room with a rectangular table, and comfortable chairs for watching a movie. Participants were seated at the long end of the rectangle, while I and the movie screen were at either of the short ends. During the discussion, despite my occupying what Hennink (2007) refers to as a 'dominant seating position' at the rectangle, I attempted to remove myself from the discussion and discourage participants from directing their comments to me by placing my computer between myself and the participants as a physical barrier. This was demonstrably successful, in that during the focus group participants directed their comments towards each other rather than towards me.

Debriefing was done according to Stewart et al. (2014)'s recommendations. After all of questions were asked, and the discussion seemed naturally to be coming to an end,

participants were offered the opportunity to have more refreshments, add any concluding remarks, and thanked for their participation.

Analysis

Joffe and Yardley (2004) write that the most unique and valuable aspect of focus group research is the method of data collection rather than analysis, consequently there are a variety of acceptable techniques of analysis and it's common for researchers to employ multiple methods (Rabiee 2004). The focus group results will be analyzed using grounded theory and the methods outlined by Charmaz (2014) as she writes that these methods allow the researcher to understand how participants collectively create meaning from the experience. This type of analysis seemed well suited to my research because as Charmaz (2014) writes it allows for investigation into the reciprocal effects between individuals and social processes. Charmaz (2014), it's important as a first step to transcribe the recording of the focus group and then develop analytic codes based on which patterns can be located in the data. She (2014) notes that it's important to integrate the processes of data collection and analysis in order for emergent trends in the data to shape the data collection process.

Rabiee (2004) describes this integration as the 'analysis continuum' to emphasize its nonlinearity, however she does break analyzing the data down into four steps. The first being generating the data through conducting a successful focus group, then identifying a thematic framework from notes and data, highlighting and sorting quotes, and finally sorting them into thematic categories (Rabiee 2004).

In its most basic form content analysis involves creating categories and counting the number of times that they are mentioned, while thematic analysis is similar but generally involves greater attention to other qualitative aspects of what was said (Wilkinson et al. 2004). The theory that guides content analysis is that the researcher may only access what is

being said, for example a mention of fear cannot be considered an observation of fear; this divorce from context has been accused of limiting the researcher to only surface level observations (Wilkinson et al. 2004) Thematic analysis on the other hand, allows for more complexity. For example, the researcher may code inductively, taking ideas from the raw data, or deductively, finding examples of a pre-existing theory within the data (Wilkinson et al. 2004). Since the goal of this research was to evaluate whether the environmental messages that could be derived from an ecocritical analysis were actually perceived by audiences, there was a blend of inductive coding, searching for what messeges were mentioned as well as deductive coding, placing them into categories determined by the larger framework.

After, studying the data and notes from the focus group, I coded the data for mentions of global warming or climate change, connections between inequality and environmental degradations, plausibility, and disaster. Special attention was made as to whether or not the participants contextualized their responses in terms of the movie or the real world as well as whether they expressed any sense of urgency or anxiety over the idea.

ANALYSIS AND DISCUSSION

SNOWPIERCER

Snowpiercer is a 2013 film by director Bong Joon-ho that depicts a dystopian society that sprung up in the wake of a disaster. In order to counteract global warming, developed nations undertook a global geoengineering initiative to cool the earth by shooting an experimental chemical into the atmosphere. Their project did in fact cool the earth but calamitously so, freezing the surface of the earth and killing most of its inhabitants. Those who survived only managed to do so by boarding a massive train, build to withstand the harshest elements and propelled by a seemingly eternal engine. The movie begins seventeen years after this accident, and during this time the audiences is told that the train has been completing a yearlong circuit across all of the continents. On the train the inhabitants must adhere to a rigid social structure based on the classes of their tickets. The plot of the film revolves around rebellion against that social order.

The film is unique in that it is difficult to situate within the traditional dichotomies of ecocinema. With its star-studded cast and large production budget it would be difficult to call an art film (IMDB 2019). However, in content some of the long deliberate shots and extended silences bring in some formal elements of art film that could be quite challenging to audiences. Then, while the film is certainly melodramatic as opposed to realistic, it doesn't neatly follow all of the associated tropes of melodrama. Our hero's decisive action in the end doesn't redeem him and certainly doesn't "restore balance" as Ingram (2004) writes of melodramas. Indeed, despite making few if any pretentions to realism, the film subverts the traditional tropes of the melodrama. And finally, in terms of moralism or immoralism, despite the narrative in some ways working to inspire sympathy with our main character he is ultimately unsympathetic and amoral. Despite, all the heavy-handed metaphors and over-wrought action there is in fact a lot to make sense of in this film.

Crisis is deftly employed in *Snowpiercer* (2013) in a way that caricatures the present environmental crisis, without entirely depriving it of complexity. The film deals with three major crises. The first is global warming. The fact that this happens outside of the temporal frame of the movie relegates it essentially to the place of history—a thing for the audience to accept as having happened. Presenting as a foregone conclusion that global warming will reach an alarming state of crisis is a bold choice in terms of environmental messaging and could lead to immediate rejection of the idea by the audience. On the other hand, it frees the narrative from the need to justify this position and allows it to focus entirely on constructing a post-climate crisis world.

The central action of the film centers on the second crisis. It's an uprising of the tail class passengers lead by our hero Curtis played by Chris Evans. The passengers of the lowest class of the train are forced to occupy deplorable conditions. It's cramped and windowless, they're fed only protein bars which we learn later in the movie are made from ground insects. And this situation, although deplorable is not immediately depicted as a crisis. It's only slowly, throughout the beginning of the film that the situation escalates into a full blown crisis. First, an old man is taken for his violin playing ability. When he protests about leaving his wife, she's beaten. Then two children are taken with no explanation. The father of one of the children, throws a shoe at the woman from the first class who's ordered the children to be taken.

As punishment, his arm is put through a window on the train until it freezes solid, then smashed before all of the other tail class passengers. Mason, played by Tilda Swinton, is the representative from the first class who oversees this punishment. While waiting for the arm to freeze, she treats the passengers of the tail class to a rambling and incoherent lecture about preserving order for the greater good of all the passengers on the train, likening them to

the shoe that was thrown. The punishment and this speech serve the dual purpose of inspiring fear of authority and fear of the outside.

In terms of environmentalism, this attempt at heightening fear of the outside can be read as an extreme depiction of the alienation of man from nature. Indeed, not only is the outside world of this movie extremely inhospitable to people, they are physically shut away from it on the train. The people in the tail class haven't even seen the outside world for seventeen years, and the only interaction with it is associated with violence.

Curtis, our hero has been planning an uprising, waiting for action, for a long time. However, eating the protein bars, living in the terrible conditions, even watching an old woman being beaten or children being taken for mysterious purposes didn't generate enough urgency to set action in motion. We know this because when his sidekick character, Andrew, suggests action in response to each of these provocations Curtis tells him to wait for a signal. In the end, it's not a sense of crisis that eventually spurs Curtis to action, it's opportunity.

During her speech Mason let slip that the guards' guns were 'useless'. Other passengers took that to mean that they weren't authorized to shoot, but Curtis suspects that it means they have no more bullets. On this suspicion he forges ahead with the uprising, escalating the situation into crisis, and plunging the train into violence and chaos. This has interesting implications when applied to environmental crises. It suggests that while situations may become increasingly dire and urgency may generate plans, action ultimately depends on opportunity. It's also a depiction of an attempt to correct an inequality making the situation even worse.

The largest crisis of the film is so large as to almost be invisible. It only enters the frame of the film at the very end, although it is hinted at throughout. Several times throughout the film inanimate items such as cigarettes and bullets are said to have gone 'extinct' meaning that there are no more of them on the train. This use of the word isn't simply a peculiarity, it

serves a reminder of the inevitable extinction of everything on the train, including humanity. That is the fact that, for all the worship of the eternal engine propelling the train, it's impossible for it to go on forever. If that were not immediately clear or understood from subtle implications, it becomes apparent how fragile their existence on the train is at the end of the movie, when we learn that the children have been taken to replace 'extinct' parts of the engine. This could be read as a reflection of the inherent unsustainability of the idea of perpetual growth that underlies capitalism.

Disaster

Disaster is where this film shines. The movie begins and ends with two disasters, like bookends. The first of which sets the plot in motion. This of course, is the accidental freezing of earth. It's a great trick to start a movie after the end of the world. Placing it in the past adds an element of fatalism. Not only is it necessarily impossible to have agency over past events, the people of the past, in an attempt to avoid the catastrophe of global warming actually caused an unforseen catastrophe amplifying this feeling of futility. In this sense the first disaster can be read as a tragic apocalypse. In terms of communicating environmental messages, the tragic apocalypse is considered ineffective and perhaps even detrimental (Hughes and Wheeler 2013). However here we should heed Ingram's caution against reliance on formalism and following any hard and fast rules, because this is only the beginning of the story. That again is an incredible trick, to place an apocalyptic event, which for all intents and purposes could be considered the end of the world, at the beginning of the narrative upsets the traditional ways of considering the tragic apocalypse.

The closing disaster of the film is the destruction of the train. If the trouble with the first disaster is that it was incomplete and left the previous social order in place (Canavan 2014), the trouble with this disaster is that it's too complete. Viewers are treated to a long

scene of destruction as the train explodes, derails, and tumbles down a mountain. The scale of this destruction alone could allow viewers to dismiss it as pure melodrama. And then in a beautiful wide angled shot framed by the snow-covered mountains, two survivors emerge from the smoldering destruction amplifying the absurdity of the situation.

The survivors are Yona, a sixteen-year-old girl, born on the train who we learn earlier in the movie has never even seen dirt before and Timmy, a young boy, one of the children who was taken at the beginning of the film to replace part of the trains engine. Bady (2014) writes that, although the two characters manage to survive the impact of the train and can be seen outside that there is no hope for them. He (2014) writes that the image of two children whose entire world has been destroyed and who are suddenly thrust into a barren unaccommodating landscape only to immediately greeted by a polar bear is not a message of hope for humanity, and that we might as well consider humanity doomed.

However, if we consider the ending in terms of the anthropocentricity versus ecocentricity it is a startlingly ecocentric take for a mainstream film. If a viewer were to take for granted that the end of the movie were actually the end of humanity, what we do see is that nature, that is the world outside of human construction, has persisted without intervention. It's especially salient because the animal we're shown is a polar bear, a clichéd representation of the conservation movement.

But let's be good movie go-ers for a moment and suspend our disbelief for just a little longer. If we try to read this final scene as a message of hope, what then is the hope? This brings us to the most important aspect of the final disaster which is its intentionality. It's hard to believe that Curtis thought even for a moment that blowing up the engine of the train would not lead to its destruction. When the idea is first presented to him, he thinks it's insane and even prevents Nam and Yona from blowing up the train themselves. He isn't convinced that it's necessary until he sees the children, hidden in the engine being used as machines, at

which point he realizes that the train cannot continue. From his reaction of horror and disgust, he seems to take moral objection to this use of children, but beyond morality, this confirms what the movie has been hinting at, that the engine is not eternal.

So he decides system is too rotten to preserve or be reformed. Then the hero of our story, with full intention, knowing that there will be casualties, that he will likely be a casualty, blows the train up.

It's as if in a moment, he understands that the system can be preserved and prolonged only through more savage acts of violence and more deeply entrenched inequality. Canavan (2014) writes that this act was a rejection of necrocapitalism—the system of capitalist economic growth which necessitates on death and destruction. It could also be read as removing them from the treadmill of production, or the endless production of more goods for the sake of growth at the expense of the environment (McClanahan et al. 2017). Having the hero of the story ultimately destroy rather than save humanity, contributes to what Aaron (2007) describes as amoralism which she considers an important part of ethical cinema. It does this by making it difficult, if not impossible for audiences to identify with Curtis as a hero. This complicates the melodramatic hero narrative that seemed to exist on the surface of the film.

The film first portrayed Curtis as an un-selfish hero, a charismatic leader of his people. Slowly throughout the film, this perception erodes. During one of the long battle scenes, we see him make a choice to further the revolution, rather than save Andrew, his sidekick's, life. In the penultimate scene, he makes a revelation about not simply participating but leading the violent cannibalism in the early years of the train. Each transgression escalates the difficulty of audience identification, until finally Curtis is almost as much a villain as any of the other characters.

This is a complicated message in terms of environmental issues. While it could be understood as a caution against overemphasis on moralism and individualism, it's a hard one to make sense of. Without a hero it's not clear who should be responsible for solving the issues of inequality and destruction. And without any moral direction, it's difficult if not impossible to say what the correct course of action should be.

However, if we look at the ending as the death of an unethical and unsustainable system perhaps there is hope. After the earlier disaster society was preserved and distilled into its worst elements. But after this disaster viewers are presented a clean slate. And while it's easy to read the naivete of the children as what will lead to their demise, it could also be read that these children were the least likely to replicate the damaged previous system.

The film showed that children of the first class were all indoctrinated in school, singing songs praising the eternal engine and parroting the rhetoric used to justify the unjust class system. The other boy who had been taken, is so obviously convinced that the train must continue running even at his own expense, that he won't allow himself to be rescued. Yona and Timmy however are different. From the beginning of the movie, when Timmy ran away with the protein block that Curtis asked him for, to the end when he climbs out of the engine despite having been told not to, we're presented the image of a mischievous, spirited little boy. And Yona, simply existed outside of the system. She was in prison with her father for an undetermined period before the beginning of the movie.

So if viewers are looking, if they want a message of hope at the end of the movie it's not in the destruction, but in the possibility. With the old system literally fallen away, these two children have infinite possibility to remake the world. In terms of environmentalism this is a radical idea, as radical as the idea Ruekart (1996) claims to be at the heart of ecology. He writes that ecology was always a radical science in that it challenges the generally accepted

economic principle of perpetual growth. In that sense, ecology calls for nearly as complete a destruction of the system as the one presented in the final scene.

Dystopia

Following each disaster, the world is remade. The action of the movie takes place in a dystopia between two disasters. The train is organized into a rigidly hierarchical social structure based on the classes that were issued at the departure of the train, an obvious caricature of decreasing rates of social mobility in the or present moment of global capitalism. Canavan (2014) writes that the political economy of the train has been misread as capitalism, since in ideology it bears no resemblance to a market economy, however he concludes that the destruction of the train represents a rebellion against what he calls an impending necro capitalist future. In this sense, the social structure on the train is actually a brilliant way to depict the end results of global capitalism. If we presume the world before the train was the current world, the fact that society remade on the train includes all of the social evils that are the result of global capitalism, the entrenched hierarchical inequality, without the system in place that created them reflects the cognitive gap that currently exists. It's an inversion of the fact that while world leaders are willing to enact policies addressing the evils that are the result of the system, very few are willing to connect it to the need for systematic change. While it bears no resemblance in terms of economic theory the point is it doesn't need to if there is a refusal to connect cause and effect.

FOCUS GROUP RESULTS
Crisis

The results related to crisis were the most ambiguous of the focus group. Participants made only six references to climate change, four of which were latent or implied rather than manifest or directly observable (Joffe and Yardley 2004). In this discussion participants were

able to identify the components of crisis of this framework—the rapidly worsening situation—in the movie and connect them to issues outside of the movie.

One of the most interesting remarks made concerning crisis belied a sense that action taken hastily was likely to backfire. The participant said in reference to a discussion of solutions to climate change in the actual world, "Skepticism [of climate change] makes a fast solution impossible but like in the movie a lot of people agreeing quickly on a solution that may not work could also be a problem."

All references to crisis were connected to action, whether it be suggested action or criticism of the current course of action. This supports the theory that crisis generates the desire for action. The criticism of action though was more aligned with the messaging of the movie that opportunity is what ultimately decides whether or not an action will be carried out.

This seems to connect to another aspect of their discussion of action which involved agency. They mentioned that the characters in the film were ultimately disempowered and that most of their actions were futile. This sentiment was specifically connected to Wilford's claim that he and Gilliam orchestrated the revolution as a means of population control. They said that this reflected the conditions of the world, where the powerful impose solutions to environmental problems on the least powerful. They offered the examples of restricting driving in New Delhi or encouraging people to switch to electric cars in the Netherlands. They expressed doubt that any such individual action would have any significant positive effect and rejected attempts at imposing any of these solutions on the individual by those in power.

Another interesting theme emerged out of their discussion, was really responsibility. Connected to each mention of crisis and each proposed action the group made statements of responsibility. They generally felt that the onus of action was being placed on individuals and people at the bottom, those with the least power, while the responsibility for harm was with

the most powerful people. They said that this was reflected in the depictions of power in the film. In this sense, it was not only the efficacy of any proposed solution that was important to the audience, but also the ethic. It's unclear from their responses whether having a movie with unambiguous wrong and right actors and actions would have made this allocation of responsibility easier, but it was interesting to not the both the movie and the audience displayed this same ambiguity.

Disaster

The disastrous elements of this film seemed to make the strongest impression on the focus group, and it's what they immediately zeroed in on. There were five comments directly addressing disaster. At first the disasters were challenging for participants to contextualize. The first comment of the focus group actually, dismissed the disasters as didactic and also confusing.

The participant said, "I feel like it was trying to send the message ruining the system is what you should do, but also the system might be working too well and if you do then everything will get destroyed. Maybe it doesn't have to go this way." To which another participant responded, "Yeah, maybe there's a middle. Maybe, it's not destroy all humanity or leave." In this sense, it seems as if the focus group participants observed in the film the capitalist ideology that Canavan (2014) in that they saw the movie as saying that the system, however wretched, ought to be preserved because things would be worse if it were destroyed. It's interesting that participants immediately rejected this ideology.

Even so Curtis's decision to cause the final disaster and perhaps destroy humanity struck participants as extreme. They felt it was disingenuous to portray completely destroying humanity as a viable solution to what they understood as a critique of society. They wanted a more moderate solution of reform as opposed to destruction. This presents an interesting

challenge in terms of environmental messaging if we accept Ruekhart's assertion that ecology is inherently radical. In this sense, perhaps Wiloquet (2010) was correct in that in response to Hollywood films, audiences will takeaway primarily anthropocentric notions. None of the participants, expressed any sentiment relating the destruction of human societies to the liberation of nature.

The response to the first disaster, global warming was somewhat more positive, at least in terms of conveying environmental ideas. The group seemed wary of quick, extreme solutions that could lead to disaster, like the one that landed the characters of the movie on the train. They expressed the belief that disaster was inevitable, not because action was impossible, but because they didn't think the right actors would act quickly enough. The way they talked of disaster betrayed a sense of resignation. One participant compared climate change to the plague and concluded that it was fine because some people will survive a climate disaster, even if they all don't. Other participants expressed agreement both verbally and by nodding. The only pushback against this resignation was a mention of the fact that those most poised to suffer the affects of climate change, had the least responsibility in terms of emissions. Other participants agreed with this evaluation but concluded that since those least responsible were also least empowered, little was likely to be done about this.

Dystopia

Focus group participants successfully read the dystopia as a critique of the status quo. At one point one of the participants exclaimed, "Maybe we're on the train." To which the other members of the group enthusiastically expressed agreement, both verbally and through nodding. They not only connected the inequality depicted in the movie to inequality in the world, they also connected that inequality to environmental destruction.

One participant remarked that globally unequal distribution was a greater problem than overpopulation in terms of environmental destruction. Another participant refined that sentiment to point out that distribution is not only unequal globally, but also within countries, and that poverty and degradation lead people to make choices that pollute such as driving older cars or consuming plastics.

They identified the peculiarity of the unequal organization of the train in the movie. One participant remarked that, the passengers in the tail class could have eaten regular food if they weren't having sushi in the first class. They also found it strange that the passengers of the tail class seemed to exist essentially to suffer. They expressed difficulty suspending their disbelief when it came to this point. In all, it is promising that the group was able to identify social inequality as a theme of the film.

CONCLUSION

The goal of this research was to identify the ways that three common narrative elements of fiction were used to express messages about climate change and then try to evaluate whether these messages were received by the audience and how they related to the audience's own ideas about climate change. The results were somewhat promising, but further research is certainly warranted. The audience seemed able to identify and discuss each of these narrative elements, with little to no prompting. Furthermore, they were able to make connections between these narrative elements and climate change in the real world.

The audience had strong and fairly clear reactions to the dystopian and disastrous elements of the film. They expressed hope to avoid disaster, but ultimately expressed resignation to the possibility of it. While in terms of dystopia they, were able to identify the elements of society depictions of dystopia were criticizing and a fear that these conditions were worsening.

This research might be useful in crafting not only environmental fiction going forward, but also non-fiction. If the job of environmentalists is to help society make meaning out of the scientific exigencies of climate change than understanding the ways in which audiences can make sense of different narratives and as they relate to the larger world might be useful.

There were however a number of limitations to this research. For one, only a single film was considered. It would be interesting for further research to apply these ideas to multiple films in a comparative way or perhaps to compare fictional versus non-fictional depictions of these narrative elements. It might also be interesting to employ other quantitative methods, such as a before-and-after survey or analysis of discussions of these films on forums on the internet or in comments.

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