Radboud University



Masking the Destructive Force of a Dying Climate:

Reflections on the Portrayal of 'Environment' in Hollywood in the 2010s using The Lorax, Interstellar, and Avengers: Infinity War



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Date: 24 August 2020 Supervisor: Frank Mehring Masking the Destructive Force of a Dying Climate - Mastebroek, S4699262 1

NORTH AMERICAN STUDIES

Teacher who will receive this document: Frank Mehring

Title of document: Masking the Destructive Force of a Dying Climate:

Reflections on the Portrayal of 'Environment' in Hollywood in the 2010s using

The Lorax, Interstellar, and Avengers: Infinity War

Name of course: MA Thesis

Date of submission: 24 August 2020

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Word count: 26,493

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Acknowledgements

First off, I wish to thank my supervisor Frank Mehring for his help in thinking of a topic, and his encouragement to explore more aspects of film than I initially considered exploring, as well as for the patience he showed and his willingness to let me continue trying. Thank you, Frank.

Second, I want to thank my friend amazing Mina Raja for continuing to support me and cheer me on even when I personally did not think there was any use continuing. Thank you also for your help when I needed to bounce ideas off of someone and when I needed to figure out what musical terms to use, as I had no musical background myself. Without your support, this thesis may not have existed.

Lastly, I want to thank my awesome cat Loki, who made sure to keep my stress levels low by reminding me to have fun and go outside from time to time, and who accompanied me through many long days and nights of working on this thesis. Thank you Loki, you are the best companion I could have asked for.

Selected Filmography

2012. Directed by Roland Emmerich, Columbia Pictures, 2009.

After Earth. Directed by M. Night Shyamalan, Sony Pictures Releasing, 2013.

Avatar. Directed by James Cameron, 20th Century Fox, 2009.

Avengers: Infinity War. Directed by Anthony Russo and Joe Russo, Marvel Studios, 2018.

Blade Runner 2049. Directed by Denis Villeneuve, Warner Bros. Pictures, 2017.

Elysium. Directed by Neill Blomkamp, Sony Pictures Releasing, 2013.

Ender's Game. Directed by Gavin Hood, Summit Entertainment, 2013.

Happy Feet. Directed by George Miller, Warner Bros. Pictures, 2006.

Home. Directed by Tim Johnson, DreamWorks Animation, 2015.

Idiocracy. Directed by Mike Judge, 20th Century Fox, 2006.

Interstellar. Directed by Christopher Nolan, Warner Bros. Pictures, 2014.

IO. Directed by Jonathan Helpert, Netflix, 2019.

Mad Max: Fury Road. Directed by George Miller, Warner Bros. Pictures, 2015.

Mortal Engines. Directed by Christian Rivers, Universal Pictures, 2018.

Nausicaä of the Valley of the Wind. Directed by Hayao Miyazaki, Studio Ghibli, 1984.

Noah. Directed by Darren Aronofsky, Paramount Pictures, 2014.

Over the Hedge. Directed by Tim Johnson and Karey Kirkpatrick, Paramount Pictures, 2006.

Pom Poko. Directed by Isao Takahata, Studio Ghibli, 1994.

Princess Mononoke. Directed by Hayao Miyazaki, Studio Ghibli, 1997.

Snowpiercer. Directed by Bong Joon-ho, The Weinstein Company, 2013.

The City of Ember. Directed by Gil Kenan, 20th Century Fox, 2008.

The Day After Tomorrow. Directed by Roland Emmerich, 20th Century Fox, 2004.

The Lorax. Directed by Chris Renaud, Universal Pictures, 2012.

The Maze Runner. Directed by Wes Ball, 20th Century Fox, 2014.

Wall-E. Directed by Andrew Stanton, Walt Disney Studios Motion Pictures, 2008.

Abstract

Masking the Destructive Force of a Dying Climate:

Reflections on the Portrayal of 'Environment' in Hollywood in the 2010s using *The Lorax*, Interstellar, and Avengers: Infinity War

This study provides reflections on the extent to which the environment is present in three Hollywood films that came out in the 2010s and were all received well, scoring high profits at the box office and receiving good reviews from both professional critics and audience alike.

Using the theories of ecocriticism in ecocinema and ecomusicology, *The Lorax*, Interstellar, and Avengers: Infinity War were analyzed on the basis of their textual, visual, and auditory elements and how these connect the films to nature and to the issues of the environment that they present, in comparison with other films distributed around the same time that discuss the environment in some way. The study also considered the reception of the three films by both professional critics and the general audience through the use of reviews sourced on movie rating website Rotten Tomatoes.

The analysis of the films showed that depending on the years they came out and the genres of the film, the films either showed their environmental message overtly, or they showed their message in a more covert way, cloaking it with metaphors and pushing it to the background in favor of other topics. Despite this, the study found that the issues with the environment are generally portrayed in a hopeful sense, as a solution to the degradation of the climate is often available, whether it be through changing our ways or going off planet.

The findings of this study indicate that Hollywood's stance on the environment has not changed much, but the increasing obscuring of the ecocritical message in films over the years suggests that perhaps we are heading to an era in which the environment is no longer openly discussed in blockbuster productions.

Keywords: Ecocriticism, ecocinema, ecomusicology, environment, climate, The Lorax, Interstellar, Avengers: Infinity War, Hollywood, American Popular Culture

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Introduction

In 1996 Christopher Reeve gave a speech at the Oscars in which he said that film has the power "to present painful but important issues to the public." (Reeve). Since his speech, many films have come out that do just this, such as Wall-E (2008), which offers a concerning image of a possible future of ecological destruction due to the influence of humanity on the environment and Mortal Engines (2018), which considers a future in which the earth has been destroyed by war and the remaining humans are now scavenging for resources, desperately trying to stay alive, while still in constant conflict with one another. The environment has become a prominent issue in recent years, and due to the work of activists, it is becoming increasingly difficult for the leaders of the world to ignore it. The increasing pressure to act now was put into words by Swedish activist Greta Thunberg, who began the "School Strike for Climate" movement in 2018 and garnered so much media attention that she was invited to speak at the 2019 climate conference of world leaders (Alter et al.). As the pressure builds, the realization begins to settle that the issues the world face must be dealt with, and soon.

The main question this study concerns itself with is how Hollywood films in the 2010s portray the issue of the environment, and how the characters of the films are portrayed in relation to nature and the environment. In order to adequately answer this question, it will be divided into parts. The films will be investigated in terms of the message they show in relation to the problem and their possible solutions, where key sequences of the film will be examined more closely. Do they show that humans are good or inherently bad? Is there hope for humanity at the end of the film? If the films do suggest a solution, what type of solution is this? Is it possible for humanity to thrive and survive on Earth or must the population of these imagined worlds go elsewhere? What emotions do the visuals of the films signal? How does the soundtrack of the films interact with the visuals and the narrative of the films, and what does this say about the view on the climate? And lastly how are these films received by reviewers? Is the emphasis in reviews put on the climate aspects of the film or is this issue glossed over?

The Aims of the Current Study

While the fields of both ecocriticism and environmentalism are interested in literary studies, new technological developments and the rise of television and film contributed to a widening of the possible fields of inquiry. Several studies have looked at climate change in films, and have applied the fundamentals of ecocriticism and environmentalism to both documentary films (e.g. Hegglund; Ivakhiv; Rust) and fictional films (e.g. Ingram, Green Screen; "Rethinking Eco-Film Studies"; McDonagh & Brereton; Moore, "Green Screen or Smokescreen"; Murray & Heumann, On the Edge; Murray & Heumann, That's All Folks?; Woolley). These studies often investigate the extent to which a film fits with a particular theory by looking at character details and main goals and the imagery used in scenes. The message of the film can show the standpoint held by the studio and portrays a possible course of action for humanity.

Below, the study of ecocriticism in film will be discussed further, showing that it produces different outcomes in studies due to the differences in the theories used. What many of the available studies currently have in common is that they focus mostly on the audience response to the films and general messages promoted by the films than on more specific details. This study will therefore not only focus on the reception of films and the message that is presented by them, but will attempt also to consider the different constituents of a film and how these relate to the message on the environment and the issues faced by it that is present in the film. An example of this would be the music of the film, and what this adds to the overall message of the film, whether this reinforces or counters the film's message. By focusing more on the individual constituents of the film, this study hopes to add a new layer to the study of ecocriticism in film.

Taking into account the issue raised by Ingram and others on the assumed audience, this study will attempt to consider realistic audience responses as well aside from the theoretical audience of ideal spectators ("Rethinking Eco-Film Studies"). In order to adequately compare the observations made using the theories of ecocriticism and environmentalism, this study will take into account the actual audience of the films by looking at several reviews for each film. Reviews will be taken from well-established national newspapers such as the New York Times and The Guardian, and will be sourced via the online movie review website *Rotten Tomatoes* and other online comparison pages. Reviews by critics will be used, but reviews by the general audience of the film will also be considered in order to paint a picture of both the "ideal" response of professional critics, and the actual

response of the audience. These different responses, by critics and by the general audience, will be compared to the results gotten from theorizing on the studies, to see whether the actual audience made similar observations on the ecocritical aspects of the film, or whether they saw things differently or perhaps did not connect the film to its ecocritical aspects at all.

In order to connect the theories used in this study to different styles of climate change film, three Hollywood films from the 2010s have been chosen to represent larger categories in dystopian films. These films have been chosen not only as representation of different genres, but also for their success at the box office. Each of the chosen films excelled at the box office when the revenue is compared to the estimated expenses of the film.

To cover the subgenre of animated films, and in particular, children's animated films, this study will look at 2012's *The Lorax*. Despite this film having been the subject of different studies already (e.g. Moore, "Green Screen or Smokescreen"; Starosielski; Wolfe), this study will inevitably come to different conclusions, or at least highlight different points of the film as important or as relating to ecocriticism. In the genre of animation, the limits of possibility are stretched much further in regards to the landscape. While CGI can make a "real" landscape seem desolate, it cannot be made to look too surreal or the effect of realism will be lost and a live action film will come out looking cartoonish, breaking the suspension of disbelief. Animation does not have this limiting factor, as when all elements of the 'animated illusion' are unified, this can in fact aid in the promotion of the suspension of disbelief (Bishko 25). The lack of a limit to the possibilities promotes a wider range of possibilities regarding the world building, and makes animation an interesting object of study regarding the possible futures of climate change.

Covering the subgenre of postapocalyptic science fiction films, this study considers Interstellar (2014). This film suggest a solution that is off-world, rather than on Earth, as is the case in *The Lorax*. This film also demonstrates the sacrifices that must be made in order to save human life. Furthermore, the film blends in elements of science fiction with the postapocalyptic narrative, providing a different viewpoint. The targeted audience is suspected to be mostly adults or young adults, touching on a different demographic than *The Lorax* as well. The film further sets itself apart by detailing the gradual decline of life on Earth instead of glossing over it or starting the film after the earth's inhabitability has already declined (Kaplan 145). Kaplan, in her novel Climate Trauma: Foreseeing the Future in Dystopian Film and Fiction further states that the film takes a different standpoint morally as well, suggesting that in order for humanity to survive, those left living on Earth will perish while a

new planet will be inhabited with new life (145). Most films do not venture into this territory and rather see an event occur that saves most if not all inhabitants of Earth.

Lastly, to cover the subgenre of superhero action films, whilst simultaneously looking at global blockbusters, this study considers Avengers: Infinity War (2018). The genre of superhero action films is important to consider as the heroes of these films are often meant to be examples to the world, which suggests that their stance on climate change and the environment should be one that is admirable and good. In this film, the threat that faces humanity is not so much climate change as it is an alien supervillain, Thanos, wiping out half of all life using six artifacts that make him all-powerful, capable of wiping out half of the universe with just a snap of his fingers. Thanos' motivation, he claims, is the lack of resources in the universe. By culling the herd, he believes he is ultimately aiding the continuation of life (Avengers: Infinity War 01:47:00). The apocalyptic threat in this film is thus an outsider who is trying to solve overpopulation and the exhaustion of resources that threaten the climate to the extent that it can no longer support life. This film is interesting to consider because rather than showing humanity solving the issue of climate change driven by overpopulation, it focusses on the prevention of a possible, but cruel, solution to climate change. The emphasis is on the heroes, but by considering the supposed villain of the film as both a threat and as a savior, and considering the soundscape surrounding each character and the visuals that accompany them, the ecocritical message of the film can change drastically. Overall, the issue of climate change in this film seems to be overlooked or ignored by the heroes, which presents an interesting viewpoint for consideration.

Ecocriticism

When Ralph Waldo Emerson published his *Nature* in 1836, the term 'ecocriticism' had not been coined yet. It was not until 1978 that William Rueckert developed the term to describe the practice of applying ecological concepts to the study of literature (McCarthy 279; Rueckert 71). However, looking back, some theorists have suggested that Emerson's work was, in fact, the first instance of a work of literature that engages with nature in a similar fashion to ecocriticism (Buell 13). Other proposed first works are 1923's Nature in American Literature by Norman Foerster, which established the professional specialization of ecocriticism (13), and 1964's The Machine in the Garden by Leo Marx, which appears to have started the American ecocriticism debate (14). This debate focused primarily on the different descriptions of nature in literature and the way these played into society's view of nature versus the built environment (14).

The fundamental task of Ecocritics has been described as being the evaluation of texts "from the viewpoint of environmental concern, and by doing so [to] introduce environmental criteria into general cultural debate" (Kerridge, "Ecocritical Approaches"). Their hope is to change public opinion on the environment, and inspire better behavior towards the planet and humanity's place on it (Kerridge, "Ecocritical Approaches"). This approach has been linked to both conservationism and activism (Ingram, Green Screen; Kerridge, "Ecocritical Approaches"). Especially the first inceptions mentioned above may have been part more of the movement of conservationism. This movement started in the late nineteenth century and focused on nature as a resource that required management by humans (Ingram, Green Screen 13).

The field of ecocriticism is close to the field of environmentalism in its aims, which started gaining traction in the United States around the 1960s, and gets a lot of its inspiration from Leo Marx's The Machine in the Garden as well (Buell 14). Environmentalism, however, does not focus solely on the appearance of nature and the environment in literature and other forms of art, but also studies it on its own. Both fields of study have gone through considerable growth in the 1980s as the climate became a bigger issue for the governments of the world, that demanded acute academic attention (3-4). Especially ecocriticism has been concerning itself more and more with the issue of climate and climate change. The rise in the amount of authors publishing fiction dealing with climate change in one way or another contributes to a rise in studies concerning how literature deals with the climate (Trexler and Johns-Putra 189).

The study of climate change is not easy. There is no clear definition of what counts as evidence of climate change as there is no blueprint that shows which anomalies can be ascribed to a changing climate, and which are just outliers (Trexler). Despite the difficulty in finding evidence, the aim of climate change studies is to come up with a vision of what the future will look like, and how the progression of climate change can be stopped (Kluwick; Trexler). This aligns with the general aim of the study of ecocriticism in that most studies attempt to provide some form of assistance to governments and individuals in stopping and reversing climate change. However, as Trexler also points out, it is hard to know what climate change will look like. This is where the field of literature comes in. In literary works, authors have the liberty to explore different possible realities, to see how climate change might play a role in our daily lives in the future. As mentioned before, the increased interest in climate

change from authors of fiction has likewise increased interest from the academic fields of ecocriticism and environmentalism.

Advantages and Disadvantages of Ecocriticism and the Study of Film Murray and Heumann argue that beside the study of what types of messages are present in a film, what the film comments on and what it promotes in relation to the environment, investigation should expand to the practices behind the creation of films (On the Edge 2). Hollywood received an industry-wide grade of only a C for the environmental impact of their productions, meaning the extent to which their productions impacted the environment either negatively or positively, through pollution or through efforts that were put in place to aid in the recovery or nourishment of the environment (Corbett & Turco). The knowledge that Hollywood performs this poorly in their environmental practices helps to further inform the investigation into the messages presented in large productions.

There are examples of films that attempt to offset the environmental footprint of production by investments in the planting of trees or other environmental programs. The Day After Tomorrow (2004) and Syriana (2005) were both reportedly carbon-neutral productions because they offset their carbon dioxide generated by planting trees (Murray & Heumann, On the Edge 2). However, the lack of general guidelines for this sort of compensation and the fact that the overall performance of the film industry with regard to the environment is rather poor, aid in the formation of a negative image of the film industry. This negative image reflects on the productions put out by Hollywood, and makes whatever positive environmental message a film propagates, seem less sincere. Moore argues for this in relation to *The Lorax* (2012), a film adaptation of a Dr. Seuss children's books about a creature that speaks for the trees, that has a famously environmentalist message, which received heavy criticism for the addition of advertisements to Dr. Seuss's original message of "environmental harm caused by overconsumption" and for its new message of consumption ("Green Screen or Smokescreen" 539).

The problem of investigation described by Murray and Heumann is visible in most studies that focus on various popular Hollywood films in relation to climate change. There are some that look at the studio and the environmental processes of the production, such as Moore, but many studies focus on the films themselves in relation to environmentalism and climate change (e.g. Balmford et al.; Leiserowitz; Manzo; McDonagh & Brereton; Norton & Leaman; Salvador & Norton). In these studies, there is a tendency to focus on the effect a film has on the consumers. The role of the production team behind the film is sometimes

mentioned in remarks on the film's aim as given on marketing websites, such as in Balmford et al. (1713), but more often than not the film is seen as a standalone item. Instead of focusing on the creators, it is only the creation that is being considered.

This attitude can be seen as both positive and negative. On the one hand, as a film is often a production of several hundreds if not thousands of people, with a core team of perhaps a dozen people making all the important decisions, it is difficult to pinpoint exactly whose views the film reflects. Merely stating that a film reflects the viewpoint of the script's author or the executive producer does not reflect the workings of the industry accurately. On the other hand, in evaluating a film as a standalone production, the message can be misinterpreted. Moore's manner of considering a film, which holds in account the aim that is marketed by the production company, seems to be a more complete manner of evaluation. Moore's view is based on the hypercommercial nature that she describes as having taken over the industry ("Green Screen or Smokescreen" 541-542). Furthermore, taking into account the standpoint of Anderson and Gray, that films are "iterations of entertainment supertexts, multimedia items that can be expanded and resold almost ad infinitum" (175-176), it seems to be essential in this time of commercialization to consider the standpoint of the production team behind the film as well.

Aside from the connections that several studies make between environmentally themed films and the effect those have on their audiences, previous work has also considered the form of entertainment in itself and the presentation of films as part of climate discourse (Brereton; Rosteck & Frentz; Salvador & Norton). Rosteck and Frentz consider the methods employed in the documentary An Inconvenient Truth (2006) which help its message get across to viewers, while Salvador and Norton perform a similar investigation for *The Day After Tomorrow* (2004). Both films are found to have an underlying mythic narrative of the hero's journey (Indick). However, in An Inconvenient Truth this is found to aid in making Al Gore a sympathetic character (Rosteck & Frentz 16), while in *The Day After Tomorrow* it is seen as a disruption of the message (Salvador & Norton 59). The idea of the myth contributing to the narrative does not only have to do with the format of the film as a documentary film, however, but rather has to do with the manner in which the story is executed. In *The Day* After Tomorrow there is no collective survival, there is only the individual whose smaller personal world is saved. Considering these studies, it therefore is important to consider which values are portrayed by the main character in the underlying narrative, and whether there is a sense of collective unity or whether it is about the survival of the individual at the cost of the

collective. This type of investigation seems to be lacking attention in most other studies on individual films, where, as mentioned before, the focus is more on the response given to the film as a whole and individual aspects of the film are considered less.

While the narrative structure of films is often linked to the message that a film relates to its audience, especially in relation to its ending (Brereton; McFarland; Salvador & Norton), Stacy Alaimo suggests that the placement of a message is not important, as it is the gravity of the message itself that leaves an imprint with the viewer (qtd. in Ingram, "Rethinking Eco-Film Studies"). Ingram compares the different views and concludes that in this aspect of the study of film, as in many other aspects, there is no one correct view, because the hypothetical audience referred to in studies is different from the actual audience of a film ("Rethinking Eco-Film Studies"). This then raises the question whether any theory presented on a film can be seen as accurate when it is clear that the investigation was not performed with an actual audience but rather relied on the "ideal spectator" as its hypothetical audience (Steiner qtd. in Ingram, "Rethinking Eco-Film Studies"). Taking this observation into account, the importance of reflecting on the response from the actual audience is stressed, rather than considering just the theory and forming conclusions based on that.

Apart from the issue regarding the assumed audience of ideal spectators used by many studies into films, Ingram also raises the issue of the correctness of opposing theories. He does so by comparing the field of exact sciences with that of the humanities and posits that while in an exact science, two or more opposing theories cannot all be correct, in the humanities it depends on the theory applied what the outcome of a study will be, making it possible for there to be different viewpoints for the same source material ("Rethinking Eco-Film Studies"). The interdisciplinary nature of the studies of environmentalism and ecocriticism make this formation of multiple theories more feasible as well, since laying the emphasis on a different constituent of these fields would provide a researcher with different answers. If an ecocritical study focused on the literary aspects of a work on climate change and its intertextuality with other works on the topic, different statements could be made about the degree of environmental thought than if the study focused on the sociological dimension of the climate change present in the work. The comparison of studies is therefore complicated due to the different stances that are taken by different researchers, and the various aspects of the studies of ecocriticism and environmentalism they focus on. Even in the more specialized field of ecocinema research, there still exist differences in what studies use as their primary research field.

Ingram suggests that as there is no unifying theory of ecocriticism in film, the search for different theories should continue unhindered. He further finds that while combining certain aspects of different theories can be helpful to studies in some cases, applying two entirely different theories simultaneously and using each of them fully is not desirable, due to the incompatibility that arises ("Rethinking Eco-Film Studies"). The "layering" that is suggested as an alternative to what he calls a "both/and" approach will be applied in this study as well (Elsaesser & Buckland qtd. in Ingram). To ensure that there is no great incompatibility while multiple theories are consulted to construct a review of the films in this study, the theories will be matched in a specific manner to create a new way of studying film. This theoretical methodology will be discussed in further detail in the first chapter.

After the next chapter details the theoretical framework of the study, each film receives its own chapter to consider the abovementioned questions, starting with *The Lorax*, followed by Interstellar, and ending with Avengers: Infinity War. The study then presents a discussion of the findings from the different films before it tries to draw a conclusion based on these findings and implications these may have for the field of ecocinema and ecocriticism in films.

Chapter One: Ecocinema and Other Theories on the Environment and the Movies

In the introduction to this study, Emerson's Nature has already been mentioned as possibly the first novel to engage in the study now referred to as ecocriticism. Other books were also mentioned in a short overview of the history of ecocriticism, environmentalism, and how these studies connect to film studies. This chapter will elaborate further on the history of these fields and how they came to intertwine. Then current trends in research will be discussed, before the methodology of the current study is set up and explained.

An Overview of the Past

As stated in the introduction, the field of ecocriticism was not named until the second half of the twentieth century. Lawrence Buell argues however, that even with the field formally unnamed, it has in fact been around for far longer. "The 'idea of nature'," he argues, "has been a dominant or at least residual concern for literary scholars and intellectual historians ever since these fields came into being." (2). As an example of the influence of the perception of nature and humanity's place in it, he refers to the story of Genesis in the Judeo-Christian tradition of beliefs. The existence of man as dominant over nature in this story of creation has shaped human beliefs for centuries, despite protests that the original text refers to "cultivation" rather than "domination" (2). With this example, Buell illustrates how without there being an official study connected to the interrelationship of humanity and nature in literature, there is still evidence of the effects that the portrayed interrelationships have had on human thought. It is thus made clear that the unofficial study of ecocriticism and proof of the existence of critical thought on ecology reach far back in time to the beginnings of critical thought. In order to consider the history of the 'official' field of research, the ecocriticism that we know today, a necessary jump in time must be made to the more recent past.

Cheryll Glotfelty lists the 1920s as beginning of the study of ecocriticism, a standpoint that this study's introduction shows to be held by Buell as well (13). Both sources consider this decade to be an important start in the field of study because it marks the publication of Norman Foerster's Nature in American Literature: Studies in the Modern View of Nature in 1923. This publication is often considered as the start of early ecocritical writing (Mazel 6), while mainstream interest for the field of ecocriticism came later. Some do believe that modern ecocriticism began with this publication, but it is difficult in retrospect to assign it to a particular field of study. The fact that publications that resemble ecocriticism remained few and far between after this publication suggests that this was either an outlier and that the

mainstream study of modern ecocriticism started later, or that this publication did not in fact start a new stream of critical inquiry into literature.

Another suggestion for the start of ecocritical writing lies in the 1960s, coinciding with the beginning of modern environmentalism in the form of the publication of Rachel Carson's Silent Spring in 1962 (Clark 77; Garrard 1; Marland 847; Palmer 166). This book begins with a pastoral description of a small town "in the heart of America where all life seemed to live in harmony with its surroundings" (Carson). Before long however, the imagery turns dark and describes a landscape ravaged by "mysterious maladies" and devoid of non-human life. Without skipping a beat, Carson immediately tells what caused this destruction, "[no] witchcraft, no enemy action had silenced the rebirth of new life in this stricken world. The people had done it themselves." This shows the tone of the book, that reflects on the changes to nature as made by man and accuses humanity of destroying their own habitat. "[The] founding text of modern environmentalism," Garrard states, "relies on the literary genres of pastoral and apocalypse, pre-existing ways of imagining the place of humans in nature" (2). This passage refers once more to the long history of the study of nature and critical thought on humanity's place in it. Silent Spring called attention to humanity's negative influence on the environment regarding air pollution and the widespread use of chemicals harmful to the environment in the agriculture sector (Wehr xxii).

Glotfelty mentions several other seminal studies published in the 60s and 70s that influenced the fields of study of literature and the environment, namely Roderick Nash's "Wilderness in the American Mind", published in 1967, Joseph Meeker's *The Comedy of* Survival: Studies in Literary Ecology, published in 1972, and Annette Kolodny's "The Lay of the Land: Metaphor as Experience and History in American Life and Letters", published in 1975. Along with these studies, William Rueckert published his "Literature and Ecology: An Experiment in Ecocriticism" in 1978, the study that is widely believed to have originated the term 'ecocriticism' (McCarthy 279; Rueckert 71), as mentioned in the introduction. After the coinage of the term ecocriticism, many other terms have been used to describe the field of study, such as ecopoetics, literary ecology, and environmental literary criticism (Lemmer 224). Of the many terms, however, ecocriticism enjoys the most attention, perhaps for its ability to describe the study in not just one medium, but across various media.

The publication of studies on environmentalism in the 1960s and 70s shows that the study of ecocriticism and environmentalism began to rise to attention in the academic world, rather than being a topic of interest for just one writer. Despite these publications starting in

the 1960s, academics argue that the true start of ecocriticism lies somewhere in the 1980s and 90s. The studies mentioned above, they suggest, contributed more to the rise of the study of environmentalism and were separate from the study of ecocriticism (Mazel 3; Wehr 119). A key figure in the field of ecocriticism is Cheryll Glotfelty, under whose guidance the organization of a movement around the study of ecocriticism happened in 1992 (Balaev & Glotfelty 607). The Association for the Study of Literature and Environment (ASLE) was formed during a session of the Western Literature Association in Nevada in that year (Garrard 4; Wehr 120). After just a year, the association adopted its own journal, *Interdisciplinary* Studies in Literature and Environment (ISLE). This publication was started by Patrick Murphy and Cheryll Glotfelty (Balaev & Glotfelty 612). Soon after the inception of ASLE, the organization branched out to different countries, such as the UK and Japan, but also Taiwan and India (Garrard 4; Wehr 120). While ASLE now exists in many countries, there has yet to be an organization that unifies these into one bigger international organization, that could help in finding global solutions to environmental issues (Waage et al. 780).

While scholarship on ecocriticism was already rising up in the 1970s, this really became evident in the 1990s, with not only the formation of ASLE and the publication of ISLE, but the additional publication of over 200 book-length studies of ecocriticism (Glotfelty). The branch of ASLE in the UK and Ireland also began publication of its own journal, Green Letters, in 2000 (Marland 847). These publications initially focused mainly on the link between traditional forms of literature and nature, such as poetry and romantic writing as well as nature writing as a medium (Garrard 4; Glotfelty; Wehr 120). More recently, however, the field of ecocriticism has expanded to include not just forms of literature, but culture in a broader sense, with film, TV, art, and architecture among the fields now studied by ecocritics (Garrard 4; Glotfelty). For the current study, it is especially the link between ecocriticism and film that is of interest.

This link between ecocriticism and film is a relatively recent development, having begun to gain academic interest in the mid-1990s (Chu). The field has rapidly expanded and considers not only the more recent developments in cinematic history, but also looks at the early beginnings of what might be described as an environmental awareness in films, and everything in between (e.g. Ingram, Green Screen). The field is known under several names, such as "green film criticism,' 'eco-film criticism,' or 'eco-cinemacriticism'", and another common term is ecocinema studies (Chu), the term that will be used henceforth to refer to the field in this study. While the field naturally encompasses the textual analysis of film, this is

not all that it entails. The study of ecocinema includes the study of "the ecological footprint of film, environmental film festivals, and audience studies, as well as pedagogical practices in ecocinema." (Chu). The movement to these focal points started in the mid-2010s and moves the field out of the theoretical and into the practical, with studies such as the one by Norton and Leaman, that considers the results of a survey on the public opinion on climate change conducted among Brits on the eve of the release of *The Day After Tomorrow*, as well as a similar study by Leiserowitz.

Just as the field of ecocriticism is a multidisciplinary field, so too is ecocinema studies. Despite differences in their academic backgrounds, most researchers can agree on some main points regarding the perception of the world, one such agreement coming in the form of nonanthropocentrism, the belief that humanity is not at the center of the known universe (Chu). This is interesting when one looks at the films that are often discussed as being environmental films. These films often "portray nature and its defenders positively," and studies in ecocinema have, according to Ivakhiv, rarely focused on cinema and the film industry in general (1).

According to Chu, there are three main lines of inquiry in the field of ecocinema studies that have surfaced in recent years, that of ethics, that of aesthetics, and that of politics. The first, dubbed Eco-ethics, "seeks to present and promote more moral and positive relations between humans and their environment," an aim similar to those of environmentalism and conservationism. An example of a study in this field would be that of Estok on the perpetuation of ecophobia through the use of ecomedia (127). The second line of inquiry, Eco-aesthetics, considers the visual representation of the environment in film (Chu). This field considers what cinematic conventions are used in the film's production and editing (e.g. MacDonald), and how a certain film's conventions fit into different genres and movements within the medium of film (e.g. Ivakhiv). Lastly, Ecopolitics considers the complex relationship of humans and animals with their environment. This line of inquiry sees the discussion of politics of the environment as they are portrayed in films, with discussions such as ecoterrorism and biopolitics considered in relation to the domains of the human world, nature, and media technology (Chu).

Among the films considered by ecocinema studies researchers, documentary type nonfiction films are the most obvious choice (Chu). Since the start of the century, many of these documentary style films have come out, such as An Inconvenient Truth (2006), Before the Flood (2016), An Inconvenient Sequel: Truth to Power (2017), and 2040 (2019). Research

into documentary films takes various approaches. One such approach is to take historical and theoretical approaches to the subject material, as well as doing a close textual analysis. However, aside from the merits of these documentary films, there is also scholarship on their limitations in adequately representing nature and wildlife without taking an anthropocentric standpoint (Chu).

Other film genres that seem particularly adept at addressing issues of the non-human world include animation, science fiction, and horror (Chu). Animation lends itself to discussions of societal issues due to its ability to lend agency to otherwise inanimate objects. This plays into the suspension of belief that can be created in animation films more easily than in live-action films (Bishko 25). For a similar reason, the fantasy genres of science fiction and horror are more adept at showing the "unimaginable environmental threats" that await humanity (Chu). Especially the genre of science fiction is in a good position regarding the portrayal of natural disasters and what the world may look like in the future, due to the elements of speculation and theoretical science that come with the genre. Weik von Mossner deems science fiction to be "in a near-ideal position to explore perceived risks and anxieties regarding large-scale environmental change" (p. 42). The genre of horror, on the other hand, can "reflect the tensions between human and the nonhuman world triggered by environmental disruptions" (Chu). Despite the evidence pointing towards humans being the most destructive species on the planet, Alaimo discusses how in horror films, it is often nature that is demonized and portrayed as something to be feared (p. 279). Thus, unlike the first two genres where the conventions of the genre can aid in the presentation of a message of in favor of the environment, in the latter genre of horror, the roles are often reversed and the viewer is made to fear or even loathe nature. The genres of the films discussed thus can aid in forming an initial expectation of what the message of the film may be and whether the genre will assist or subvert a message of environmentalism in the particular film.

An Overview of the Recent Past

At present there is an increase in studies that focus on the environment due to a growing interest in climate change issues among not just scientists and world leaders, but among the general public. The studies of ecocriticism, environmentalism, and ecocinema have expanded significantly due to this boost in interest. As a result, these fields have become more visible in the academic world and in the world outside of academics, increasing the influence of the field (Zapf 1). After the rapid growth of the field ASLE now has ten affiliates across the globe and aside from ISLE and Green Letters, a number of other journals have popped up

dedicated solely to the field of ecocriticism and its studies: Ecozon@, The Journal of Ecocriticism, Indian Journal of Ecocriticism and Studies in Ecocriticism (Marland 859). Despite the growth of the field there are doubts whether the field is still true to its original ideas and missions. Due to the growth of the field and the interest surrounding it, some academics feel that it has become "enmeshed in institutional frameworks" and is no longer committed to the environment. By some, the effectiveness and value of the field is questioned (859). Others, however, do not feel this way, and instead feel excited about a future that is unknown. They believe that ecocriticism does not need to be rushed by the urgency that surrounds the issues of the environment, and that its contribution to the world will always be a gradual one (859). Regarding the topic of ecocriticism and the fact it often considers existing materials rather than offering quick fixes and direct solutions to the issues in its source materials, this idea of ecocriticism as promoting gradual change is more viable than seeing it as a more active field of study.

The gradual changes that ecocriticism has introduced to the field of humanities are noticeable when one considers the bigger picture. Since its inception, in just a few decades it has put 'environmentality' on the map, and introduced a new method of conducting research that has proven itself capable of responding to critical theory (Marland 860). When looking at the changes that have been wrought so far and the changes that still need to be made, it becomes clear that these would need to come in a gradual manner regardless of the field of study that concerns itself with them. As Kerridge states, "[the] main cultural task is to persuade society of the need for these changes, and to make them conceivable not only as forms of restraint but also forms of pleasure and fulfilment" ("Ecocriticism" 373). When changing the attitude of an entire society, one can not expect to do this overnight. Even if the change were something that could theoretically happen overnight, swaying the opinion of a large group of people in favor of a change that, especially if it concerns their mode of living, may encounter a lot of opposition is a practically impossible task. An example of this would be the continued protesting against rules imposed to limit the spread of Covid-19 (Flynn; "Hundreds demonstrate against Covid-19 measures in Amsterdam"), even though this change is for the good of all, it came on so suddenly and restricts people's freedom to such an extent that opposition naturally formed.

Aside from these changes that are still gradually being made by ecocriticism, the field of study has also taken on a new viewpoint in general. Marland describes four waves in the study of ecocriticism, where the third and fourth wave are simultaneous (855). A summary of the waves follows now. The first wave "focused on the representation in literature of the world beyond the text" and saw Ecocritics attempt to convey environmental messages as proficiently as possible (848). The second wave saw ecocriticism re-engaging with the critical theory that it initially pulled against (851). The third wave sees the dissipation of national and ethnic boundaries with regards to ecocriticism and forms a more cosmopolitan understanding of the issue of ecocriticism (854). Lastly, the simultaneous fourth wave consists of the emergent field of 'material ecocriticism' (855). Three key issues form the bulk of this movement. First, "there is a shared materiality between the human and non-human world", due to which all distinctions between the two become obsolete. Second, material ecocriticism has the idea that all shared matter between the two world has agency. And third and last are the ethical and political challenges that come into being due to the complexity of the former two issues (856).

Material ecocriticism, according to Slovic, first began making an appearance as an idea in 2002, before getting further interest in 2009, with the publishing of Alaimo's article "Trans-Corporeal Feminisms and the Ethical Space of Nature" (443). Materialism was up to that point already being explored in other fields of study, but had not quite caught on in ecocriticism yet. This "material turn" is described by Iovino and Oppermann as "the search for new conceptual models apt to theorize the connections between matter and agency on the one side, and the intertwining of bodies, natures, and meanings on the other side" (450). Everything consists of matter, over which agency is distributed. While some embodiments of matter may show less intentionality than other embodiments, the key is that all embodiments remain interconnected through their shared matter (451). Thus, the most recent development in the field of ecocriticism is the manner in which the world is built up theoretically. After having done away with anthropocentrism already, there is now a world where there is no longer a center, as everything is interconnected and intertwined into one big whole. This reflects the interdisciplinarity of the field, that in itself interconnects the theories and knowledge of "philosophy, science, criticism, history, poetry, fiction, and nonfiction" to create new combinations and understandings (Wehr 121).

The Current Study

As mentioned above, the study of ecocriticism is an inherently interdisciplinary one. For this study, that means several theories will be combined to form a new way of looking at the case studies. In the introduction to the current study, Ingram's "Rethinking Eco-Film Studies" is used to suggest a new possible approach of ecocriticism in film studies. The

suggestions in this article will make their return in the current study where it concerns the elements of the film that will be focused on. Recalling Ingram, in current studies on ecocriticism it is often either the message of the film that is focused on or the reception of it. Therefore, the current study will attempt not only to consider the film itself, but the reception as well. The reception, as stated, will be considered through the use of internet reviews by both the critics of established sources, such as The New York Times and The Washington Post, and through consideration of the reviews left by the ordinary audience on such websites as Google and Rotten Tomatoes. While it is not possible to consider all audience reviews and see everyone's standpoint on the films, the hope is that a small glimpse might be given into the reception of the film by not the "ideal spectator" but the "real spectator" ("Rethinking Eco-Film Studies").

Another issue raised in the introduction is the lack of academic studies that focus on multiple aspects of a work. As an example, there are studies that focus on the music in certain films (e.g. Bartsch; Ingram, Jukebox in the Garden), or music in relation to ecocriticism in the field of ecomusicology. There seems to be a lacuna, however, when it comes to studies that consider multiple aspects of a work in their analysis, such as combining ecocinema and ecomusicology to consider the aspect of music in films in an ecocritical sense. There may be studies that combine fields like this, but these are likely to be studies not on film, but rather on novels and other lengthy works of written media. There are also book-length studies where multiple aspects are considered, but in these studies it is often the case that each aspect is linked to a different case study. Therefore this study will strive to include several aspects of each case study to form a more complete ecocritical image of each film.

While the study concerns itself mainly with the message of the film in relation to the issue of climate change, and the manner in which the film is received by its audience, there are multiple aspects that are to be considered in relation to the film's message. Three aspects of the film will be considered in reviewing its message. The film's musical score, the auditory dimension of the film, will be considered in order to see whether the music of the film supports or rather subverts its message. The overt environmental message of the film and its politics will be considered in the textual dimension of the film. In this analysis, it is the dialogue and the worldbuilding that will be considered in relation to the message of the film. A question here would be whether the issue of climate change and the environment is mentioned explicitly and implicitly in the text of the film. Finally part of the message will be considered in terms of how the film portrays its world, the visual dimension of the film. In

this field, it is the landscape and worldbuilding of the film that is of interest, and the manner in which the climate is portrayed visually.

This study hopes add to the academic fields of ecocriticism and ecocinema by showing the possibility of focusing on more than one aspect of film in a comprehensive manner. This will be done by discussing the different aspects of the case studies not just in relation to each single film, but by comparing the portrayal of these aspects in the discussion of all three case studies at the end of this study. Subjecting the chosen films to a multifaceted course of study and then reflecting on their message and reception in a comparative discussion will provide a more complete picture of the place of the environment in films of the 2010s.

As the combination of ecocinema and ecomusicology studies seems to be new to the field of ecocriticism, this study will rely on the previous works that focus on either one or the other field to combine the knowledge of ecomusicology researchers and ecocinema researchers in a hopefully comprehensive manner. Since it has not been done before, and there is a limit to the size of this study, the researcher acknowledges that the combination of these two fields of study may not be exhaustive. All insights in both fields will not be able to be combined in this one study. However, if this study successfully analyzes films using both fields of study, it may show the scholars working in this academic field a new possibility for analyzing films ecocritically.

While this study hopes to improve upon the existing scholarship by introducing a combination of ecocinema and ecomusicology to the field of ecocriticism, there are certain drawbacks to this idea. One of these is the limitation of space. The study will attempt to be thorough in its discussion of the three case studies, but acknowledges the fact that the investigation of these three films could never be fully exhaustive within the limited amount of words available for this study.

Aside from the limitation of space due to the attempt to include a multitude of aspects of each case study, the inclusion of audience reviews also poses its issues. As stated before, it is impossible to consider each review, and instead these will have to be skimmed through to draw conclusions about them, which gives no guarantee that there will be no bias, involuntary or otherwise, in the selection process. Any information gathered from the perusal of audience reviews will therefore be seen more as an assumption about the audience than as a fact.

The audience interviews pose a problem in another manner. While millions if not billions of people have seen the films that make up the case studies, only a small percentage of them will have left written reviews online. The group of people that leave interviews may well be the group that concerns itself with the topic of the environment, while the larger percentage that did not leave a review may be wholly unaware of any form of environmental message in the films.

The drawbacks mentioned above, while concerning to the validity and reliability of this study, will hopefully hold back the research minimally. By addressing them before the discussion of the case studies, this study hopes to adequately acknowledge doubts that may have arisen in the minds of its reader on the viability of the study. Furthermore, the acknowledgement of the potential faults of the research method may lead to an increased awareness of the possible pitfalls of research and may aid in preventing these problems from having too great an influence on the progression of research.

Before considering the first case study, *The Lorax* (2012), some explanation will be given regarding the terms used in relation to the topic at hand. This study will use the term "ecocriticism" mainly where the message of the film is considered. While there are differences in the terms "ecocriticism" and "environmentalism" and the two fields of study they denote, for the purpose of this study these will be temporarily disregarded. Only if and when the message of the film shows a clear favor towards environmentalism, and presents an example of the social movement to protect the environment, will this be stated explicitly in the text. In all other cases, the term "ecocriticism" or "ecocritical" will be used instead to denote any interaction in the film that relates in a certain way to the environment.

Chapter Two: The Lorax (2012) – Climate Change for the Young Audience The first case study of this research paper is the children's animation film *The Lorax*. Released in 2012 by Universal Pictures, this film is an adaptation of the book of the same name by famous and beloved children's author 'Dr. Seuss', published in 1971. According to the Penguin Random House website, the book "teaches kids to speak up and stand up for those who can't" and shows that "just one small seed, or one small child, can make a difference" ("The Lorax by Dr. Seuss"). The book version of *The Lorax* follows a young boy as he finds out what happened to nature outside his small town. The Once-ler tells the story of how his greed and overproduction of 'Thneeds' caused the mass deforestation of Truffula trees, despite the warnings of the Lorax, who speaks for the trees. At the end of the story, the boy is given the very last Truffula seed to plant, with the message that "[unless] someone like you cares a whole awful lot, nothing is going to get better. It's not." (Geisel).

The short book was published just after the birth of the modern environmental movement in the United States, in 1970 (Dominey et al. 1196). After reading through many dry and academic materials on the environment and the dangers of climate change, 'Dr. Seuss', real name Theodor Geisel, decided to write a book that could explain the subject matter to children, in a transparent and fun way (1196). While the story is indeed accessible to children, Geisel is not afraid to let his personal opinion shine through the story as he "voices his fears about the detrimental effects of greed and pollution on the environment" ("Geisel, Theodor"). Geisel would later go on to admit that *The Lorax* was his own personal favorite, despite the book being initially unsuccessful. Being ahead of its decade meant that the book would not become popular until a decade later. Its influence was so great even, that a logging town in California, Laytonville, would try and have the book registered as a banned book out of fear of the effect it could have on the timber industry and people's opinion of it ("Geisel, Theodor"; Dominey et al. 1196). The discussion that began in Laytonville did not result in a ban of *The Lorax*, but rather created a media frenzy around the book and resulted in a national debate.

Today, the books Geisel wrote have been translated into over 30 languages worldwide ("Dr. Seuss"), and are appreciated by children and adults alike for its interesting formats, beautiful illustrations, and the morals that underly the stories. Aside from the interest that the books still receive from readers, the academic world still shows interest in Geisel's tales as well. Especially the Lorax is still "the subject of lively discourse" (Dominey et al. 1196), and continues to inspire academics to perform their own studies on the book, not only from an

ecocritical standpoint, but also from the standpoints of other fields of study. It is described as a foundational ecopolitical text (1196) and is seen as an introductory text that helps awaken children's environmental awareness ("Geisel, Theodor").

As a book with an inherently environmental message of protecting the environment and the natural resources it offers, it is no surprise that the adaptation shares this message. Despite the popularity of the Dr. Seuss books and the story of *The Lorax*, however, before the 2012 film, there was only one other televised adaptation of *The Lorax*, in 1972 (Woolery 126). This special followed the story of the book closely, and only small changes were made to the tale. The 2012 film changes the story more, adding a love interest, Audrey, as a motivator for the protagonist, Ted, and showing more of the world after the Once-ler's destruction of the forest of Truffula trees, as well as offering a happy ending to the story instead of honoring the book's open ending (*The Lorax*).

Before the film came out in 2012, the United Nations declared 2011 the "International Year of Forests", a celebration meant to show the importance of forests for the survival of people, and to create an awareness of the value of forests as a natural resource ("UN launches year-long celebration"). Considering the topic of deforestation in *The Lorax*, in both the book and film, the film came just at a time when forests were being appreciated more by the world. Whether this contributed to its success at the box office cannot be said for sure. Domestically, the film made over 214 million dollars, while internationally it made around 135 million dollars, combining to nearly 349 million dollars worldwide. At a budget of seventy million dollars, this means the film earned back almost five times its production cost ("The Lorax").

This apparent success at the box office may also be influenced by the cast involved in the production of *The Lorax*. Among others it stars Zac Efron in the role of Ted, Taylor Swift in the role of Audrey, Danny DeVito in the role of The Lorax, and Betty White as Ted's grandmother, Granny Norma ("The Lorax (2012)"). These are all big names in the film industry, which might influence a potential viewer's decision to go watch the film. Furthermore, the film is rated PG and geared mainly towards an audience of children, and especially Zac Efron and Taylor Swift would be well-known among a demographic of younger children and young adults, with their backgrounds as a lead character in the High School Musical franchise and as a famous pop music idol respectively.

The film's success in the box office and star-studded cast contribute to a wider spread of the message that is present in the film. As *The Lorax* is an adaptation of a book that was

already known to sport an environmental message, the message in the film is also clear. However, changes were made between the film and its source material, and these found their way into the message as well.

The Message of the Film

The message present in the book *The Lorax* is that deforestation poses dangers to the environment relating to the decrease in biodiversity, and pollution as a result of industrialization can turn fertile land into wastelands. The same message is shown in the film version of the book, but with some minor adjustments made to how the message is related to the audience. A main change is in the role the Once-ler plays in the film compared to his role in the book. In the book he is reduced to a pair of green gloves sticking out of rooms, whereas in the film, he is given a face (see Appendix A, fig. 1 and fig. 2). This was done, according to executive producer Christopher Meledandri, to not dehumanize the Once-ler, or turn him into a monster, but show him as being a normal person, just like the audience (cited in "The Lorax (2012)"). The Once-ler is further elaborated upon by showing his entire storyline in more detail than it was referred to in the book, and giving him several of his own songs. One of these songs, "How Bad Can I Be" (The Lorax 00:53:20-00:56:33), accompanies a segment of the film that shows the decline of the environment and this will be focused on here next.

"How Bad Can I Be"

This song is performed by the Once-ler and a chorus consisting of his family members, and comes after the halfway mark of the film. Just after the song comes a major plot point of the film, namely the chopping down of the very last of the Truffula trees that used to fill the whole valley. As *The Lorax* is filled with many songs, it is no surprise that the most important plot points are often accompanied by their very own musical number, as we will see later in the discussion of the song "Let it Grow" as well.

During the course of the song "How Bad Can I Be", the visuals of the valley go through a stark change. In just three minutes, the length of the song, the valley goes from being full of life to being a barren wasteland (see Appendix A, fig. 3). At the start of the song, as seen in the first image in fig. 3, the valley is vibrantly colored, and there is a soft focus on everything. A rainbow forms in the background and the sky is bright blue, with a few fluffy clouds. There are animals around and the imagery is overall a pastoral picture of natural beauty. This changes drastically in the next two images, that show a machine chopping down a row of the fluffy Truffula trees. These images are stylized and reduce everything to a side profile. Not only this, but instead of a color palette that is vibrant and made up of a whole

spectrum of colors, in this scene there are just two dominant colors, a dark purple for the ground, and a dark orange for the sky. The buildings and machinery are cast in shadow by the sky behind them instead of being defined as the trees were earlier in the valley. The way the light casts their shadows on the ground shows that metaphorically, the sun is setting on the valley. Industrialism is casting the valley into darkness. In the last image, the trees are gone from the ground, that now only shows the stumps of the trees littering the valley. The Thneed factory looms large over the surrounding ground, and the orange and purple of the previous images have gone even darker. The sky is now filled with dark smog as the factory spits out more polluting smoke. In the right side of the screen, behind the factory, the last rays of light are fading fast, the orange blending into the purple. The valley is close to being cast in eternal darkness as the Thneed factory blots out the light of the sun.

As the scenes show less nature and more of the industry in the valley, and the colors go from many different bright shades to a palette of just the complimentary orange and purple, the lyrics and sounds of the song change as well. In the chorus, the lyrics reference how the Once-ler's take-over of the valley is a "natural" process: "I'm just doing what comes naturally". The focus still lies on the natural world i the first verse of the song (*The Lorax* 00:54:14-00:54:38), as the Once-ler references nature again and the principle of Survival of the fittest (for the lyrics, see Appendix A, fig. 4). The combination of the lyrics and imagery suggest that he is the superior, or "fittest" species by default, as during this verse he is shown throwing the Lorax into a pot to prepare him for lunch.

Kassabian states that "[soundtrack] music may set specific moods and emphasize particular emotions suggested in the narrative, but first and foremost, it is a signifier of emotion itself" (40). This is visible in *The Lorax* as well in the various songs, but especially "How Bad Can I Be" plays with the emotions it references, and shows the changes of the landscape in its change in emotion as well. Because of the "communicative and emotional powers" that music holds (Allen qtd. in Gautier 126), analyzing the emotions of the music used in the film can show what message is being communicated to the audience. At the start of "How Bad Can I Be", there is a soft electronic beat combined with an electric guitar and the higher tones of a piano are audible in the background, and the music still sounds cheerful and upbeat and is harmonious. The characters move in sync with the music, marching down the street in what seems to be a joyful procession. This harmony and synchronicity give the viewer signals of cheerfulness and peace and can amplify a viewer's awareness of their own emotions (Bartsch 54) It is clear that the forest animals do not understand the gravity of the

situation yet as they follow the Once-ler and dance along with him before being swept away by the Once-ler family (00:53:50).

In the second verse, the focus shifts from the natural world onto the world of business. The Once-ler here explains the "principle in business" that holds that "the people with the money ... make this ever-loving world go round" (The Lorax 00:54:57-00:55:35). The rhetoric of this verse is parallel to the first verse that detailed the survival of the fittest, as the Once-ler says "Everybody out there, you take care of yours. And me? I'll take care. Of. Mine, mine, mine, mine, mine!" It is clear that the "people with the money" are deemed to be the fittest, as they rule the world according to the Once-ler. From the Once-ler's point of view this section of the song is meant to generate support for his cause. He is the self-made person living the "American Dream", and his words suggests that the listener can do so too by taking care only of their own interests. The ridiculousness of the situation is emphasized when he talks about expanding his assets, to the point where he is "biggering [his] corporate sign". The audience is encouraged to join in his fantasy when he calls for people to say "smogulous smoke" and "schloppity schlop", the words used by Dr. Seuss to describe the smog created by the factory and the chemical refuse that it releases into the surrounding waters. The output of this toxic waste is something the Once-ler is proud of, and he says is never going to stop. This reflects on real life as the continuous output of harmful greenhouse gases will not stop if someone does not stop the people producing it.

The last verse, or bridge of the song details the climb of power of the Once-ler further, but also reflects on an important aspect of consumer culture. "All the customers are buying" is the first thing that the Once-ler mentions before even mentioning his profits in "And the money is multiplying" (*The Lorax* 00:55:58). The principle that this relates to this that of supply and demand. If there were no demand for Thneeds, or any other product, supply would be forced to cut back. However, as the people continue to buy Thneeds, there is no reason to end the production of them. This small line hints at the power of the consumer to end overproduction and overconsumption, in a song that overall attempts to highlight how "natural" overconsumption is. An allusion to this is made earlier in the film as well, when Aloysius O'Hare, the main antagonist of the film, who produces fresh air for the inhabitants of Thneedville, is listening to a marketing pitch for bottled air to go. Part of the pitch sees the inventors explaining that if O'Hare Air produces more smog, people will want to buy more fresh air from the company, which will greatly increase sales, summarized by O'Hare as "the more smog in the sky, the more people will buy" (00:11:18-00:11:45).

In the last lines of the song, the Once-ler asks the question "Who cares if a few trees are dying" and says that "This is all so gratifying", and this also refers back to the nature of human consumption today, where it is immediate gratification that moves people to consume, rather than the consideration of long-term effects. In the first song in the film, this is also referred to, and Thneedville is dubbed "satisfaction-guaranteed-ville" (*The Lorax* 00:02:45). The consequences of buying products to attain immediate gratification start small, but as the process moves along, the effects become greater and greater until they are irreversible.

As the song moves along, the intensity of the electric sounds of the guitar increase as the voices of the Once-ler and his chorus become louder as well. The sound no longer comes through clear, but is distorted and modified. The piano fades away more and more until it is replaced by a selection of wind instruments that deliver bursts of low notes (The Lorax 00:55:58-00:56:32). The "ominous array of sounds" used in this sequence signal a sense of impending danger and doom (Bazelon qtd. in Kassabian 23). The sounds and visuals become darker and more erratic, the music sounds violent and angry and there is a sharp contrast in the colors. Everything about the end of the song contradicts the beginning and industrial sounds of clanging metal are heard in the background. The figure of the Once-ler looms in the screen and the emotions being called on are negative (Bartsch). From an ecocritical perspective it is important to note that while the emotions that are called on in the beginning of the sequence, the one that relates to nature, are positive, in the latter part it is a spectrum of negative emotions that is called upon. These emotions relate to industrialization and show that the audience is intended to feel negatively towards this subject, promoting a message that while the natural environment is good, the idea of industry is bad.

"Let it Grow"

The second segment of the film we will discuss comes at the very end, and sees Ted attempt to convince the city of Thneedville that they should try to plant the Truffula seed the Once-ler gave him in order to hopefully restore the natural beauty of the environment and get natural fresh air again. (The Lorax 01:12:46-01:20:44). In his argument against the trees, O'Hare tries his best to manipulate public opinion by frightening the people with those things that Thneedville, the world they know, is not. Trees, according to him, are "filthy! Spewing [their] sticky, nasty sap, all over the place! They bring poisonous ants, and stinging bees. ... They make leaves ... Then these leaves they just fall. They just fall wherever they want." (01:13:06-01:13:34). These are arguments that mainly concern the inconvenience of trees. This refers back to the instant gratification that runs the consumer market, where you can

spend money in order to take away all possible inconveniences. Where people are used to a sterile cleanliness of a world coated in plastic and other materials that can be manipulated and controlled by man, trees would bring elements into the world that cannot be controlled or predicted. O'Hare attempts to have people see trees as dangerous, and reminds people of their weakness, saying "Think about the kids."

In this scene, where O'Hare is turning the crowd against Ted and his helpers, the music in the background, a piece called "At the Park" (Powell), is performed with a tremolo on the string instruments, which is commonly used to signal suspense (Brown 141). On top of this, the string instruments perform a "falling/rising figure" with a "dramatic, upward minor" (141), a theme that Brown labels lugubrious. In this case, it is the anti-tree monologue performed by O'Hare that is associated with this theme, signaling to the audience that this monologue is a threat, and not something that should be listened to. The music then continuous to increase the suspense as it gets faster and more instruments join the orchestra. The climax comes when Ted knocks down a portion of the wall surrounding Thneedville and then the music shifts entirely, signaled by the striking of a gong that fades out (*The Lorax* 01:14:56).

After the wall falls, the sound of vocalizing sopranos is heard (*The Lorax* 01:14:57), the human voice here functioning in a quasi-musical manner to create a more sorrowful, harrowing tone (Brown 40). As the voices sound, the camera moves backward to reveal the desolate world outside of Thneedville and it seems that for the first time the realization dawns on the people of Thneedville that the world is not as perfect as it is inside of town. Just as what occurs when Ted sees outside Thneedville for the first time, a sequence that features a soprano vocalization as well (*The Lorax* 00:12:43), the veil is lifted and people realize they have been living in a lie. The music here is much slower than before, and represents the sadness that the audience is supposed to resonate with and emulate (Bartsch 53). The camera movement underscores this feeling in the slow movements it makes across the crowd and when showing the wide shot of Thneedville and the valley.

The contrast between the sterile world of Thneedville and the reality of destruction and desolation of the valley is strengthened by the visual contrast that exists between the two (see Appendix A, fig. 5). On the left, there is Thneedville, with its vibrant, bright colors, in unusual, playful shapes that are mostly rounded and soft in nature. On the right, there is the valley, which is ruled by darkness. The only forms sticking out of the rolling hills are the short stumps of the Truffula trees, squared off and placed haphazardly across the terrain. In

the background, the jagged lines of mountains are visible, a sharp contrast with the bubblelike wall around Thneedville. As with O'Hare's argument, that relied on the comfortable order of Thneedville, the visuals here represent chaos and order. Which is which, however, is debatable. While one could say that the world of Thneedville is the one that is neat and orderly and the outside is jagged and unpredictable, but in another way, the world of Threedville is chaotic and loud with its shapes and bright colors, while the valley is calm and natural.

Once the people of Thneedville have seen the outside world, Ted still has to convince them of his cause so that he may plant his tree in the middle of the town square. O'Hare tries his best to avoid this, and orders his delivery man Cy to tell the people of Thneedville what he thinks about trees. This is when "Let it Grow" begins, a song dedicated to the Truffula seed and why it should be planted (*The Lorax* 01:16:09-01:19:18) (for the lyrics, see Appendix A, fig. 6). The message in this song is about the unification of the people of Thneedville in the pursuit of a single goal, which is shown in several ways.

First off, the song is sung by numerous performers from the crowd, starting with Cy, who represents the role of the average worker in the context, saying he's "just the O'Hare delivery guy" (01:16:14). Next there are Dan and Rose with their son Wesley, they represent the faction of parents, and voice their concerns about the health of their child, and by extension all children, which motivates them to support the move to save the environment. The third individual singer is Marie, aged three, representative for the children, whose argument reflects a child's curiosity: "I would really like to see a tree" (01:16:57), and represents the pure intentions of children. Last is Grammy Norma, Ted's grandmother, speaking for the voice of the older generation, who still remember the way things were and speak with a certain nostalgia for the past.

Visually, the crowd is seen moving closer together during the progression of the song, and the people all dance together, moving in unison as they sing the chorus of the song. As the camera sweeps over Thneedville, all over town people are shown coming together, such as a snowboarder and a beachgoer who embrace each other next to the artificial mountain, on the artificial beach (*The Lorax* 01:18:17).

The song ends on the line "It's a brand new dawn" (*The Lorax* 01:19:09), which is drawn out as a small Truffula seed is seen in time lapse fashion growing into a small tree, while grass sprouts around it. The music fades out and instead, the sounds of nature, that were gone so long from Thneedville, return in the form of birds chirping and whistling. This is the first instance after the destruction of the natural order that natural sounds are heard, as the previous "nature" sounds were created by machines, such as the sounds of the cat camera that observes Ted (01:03:33). The color of the soil in this scene gradually changes color, from a cold brown with blue undertones, to a lighter brown with red undertones. As the camera zooms out from the small Truffula sapling, it reveals that this is another sapling, growing outside the Once-ler's house along with several other saplings. Grass has begun growing on the soil as well, and the air is bright blue once more, with wispy white clouds (see Appendix A, fig. 7). Light and sounds have returned to the valley, and even the house of the Once-ler has been restored to its former glory, painted white now to symbolize purity and the life that has come back to the valley.

The last line of the song refers back to the very first song of the film, "Thneedville" (00:02:04), that has "In Threedville, it's a brand new dawn" as its opening line. In that song, however, the mood of the people is still one of ignorance and denial. Instead of caring about the environment, the people sing "In Thneedville, we don't want to know, where the smog and trash and chemicals go" (00:02:50), which refers to their idea that ignorance is bliss. As long as they ignore the damage they are doing, they can pretend that there is nothing wrong. This is why once the wall drops, there is such an initial shock, and O'Hare attempts to persuade people to ignore what they saw because their life of before was perfect. In the song "Thneedville", there is also a line that claims Thneedville is perfect as it is, calling it "got-allthat-we-need-ville" (*The Lorax* 00:04:00). This line is referred to as well in "Let it Grow", which repeats the line "It is just one tiny seed, But it's all we really need" in the chorus. Both these allusions to the first song help demonstrate how much the attitude of the people of Thneedville has changed, from an "ignorance is bliss" mood, to a form of environmental awareness and hope for a future that sees nature return.

The Reception of the Film

Seeing as how *The Lorax* came from source material that had an environmental message already, the question whether this was picked up on in reviews is not one we need to ask. However, it is still interesting to consider its reception by critics and by the general audience in order to see if there are differences of opinion on whether the film did a good job adapting its source material, and whether it stayed true to its message.

Articles have been written on the reception of *The Lorax* and its context, and these highlight the issue of marketing surrounding the film (Moore, Landscape and Environment 31; Nasaw & Dailey; Sutton). Universal Pictures had "nearly 70 promotional partners involved in the film" (Rome), of which the most controversial one was Mazda. This deal involved the production of commercials that saw the Lorax promote a Mazda SUV with "skyactiv technology", something that makes it more fuel efficient, as having the "certified Truffula Tree seal of approval" (Mazda). This move especially was criticized since selecting a fully electric car would be the better choice for the environment than going with a car that still runs partially on fossil fuels. This choice was defended by Universal's president of partnerships and licensing, Stephanie Sperber, who said that the Mazda CX-5 is "a really good choice for consumers to make who may not have the luxury or the money to buy electric or buy hybrid. It's a way to take the better environmental choice to everyone." (qtd. in Rome). However, the inclusion of so many product deals showed that "Universal Pictures answers to economic imperatives instead of the ecological motif of their own film" (Caraway & Caraway 693).

The average rating given to the film by critics, sourced on *Rotten Tomatoes*, is 53%, taken from 156 reviews ("Dr Seuss' The Lorax"). In some of these reviews, the brand deals are also mentioned and the film studio is criticized for its hypocrisy (Morris; Sachs, "The Lorax"; Whitty). The summary of the critics' reviews on Rotten Tomatoes states "Dr. Seuss' The Lorax is cute and funny enough but the moral simplicity of the book gets lost with the zany Hollywood production values." ("Dr Seuss' The Lorax"). Critics mention that the art style looks "haribo-hued" (Time Out), "rubbery and pre-made", and that it is clear that the film "eschews [Seuss'] unique style in favor of less risky, more generic characters. It looks like something you've seen before." (Whitty). The animation feels "middling" (Whitty), and one review even goes as far as calling it "a fantastically boring, soulless animation that could have been written by a computer programme" (Bradshaw, "The Lorax"). Critics further find that the story has lost its original depth not just through the backward marketing surrounding the film, but through the additional characters and storylines in the film. The addition of Ted's romance plotline, to get a tree to impress Audrey, is criticized for taking the meaning out of the story (Taylor), and for feeling "perfunctory" (Bradshaw, "The Lorax"). The further addition of "car chases, pratfalls, wacky grandmas and pint-sized villains" is criticized by one source as clearly having been done to keep the attention of the young audience (Time Out), while another source calls the villain "simply a bore" (Whitty).

From the "freshness" rating of 53% on *Rotten Tomatoes* and a score of 5.84/10 it is clear that critics are divided between those who are enamored by the style of the adaptation and those who are infuriated and annoyed by the film. One critic summarizes the more positive end of the spectrum well: "[the producers'] deviations from this book don't stray terribly far from its spirit. Despite some schmaltz and pandering, this is a still a nifty feat of protest whose activism now comes mostly from songs." (Morris). Another critic provides a curt summary of the negative end of the spectrum of responses, saying: "this computeranimated feature turns the Dr. Seuss classic about corporate greed into a multimillion-dollar toy commercial." (Sachs, "The Lorax").

The audience, according to *Rotten Tomatoes*, gives the film a 63% rating, with an average score of 3.64/5 over a total of 156,606 ratings ("Dr Seuss' The Lorax"). A Google search for the film shows that *The Lorax* has an average audience rating of 4.3/5 over 352 ratings, and 88% of Google Users liked the film. In the section of audience reviews on Rotten *Tomatoes*, short one-liner reviews abound. However, there are some reviews that prove to be more insightful than others, and some that show a viewer did not get the message ("Dr Seuss' The Lorax Reviews")¹.

One reviewer, "Nick M" (review dated April 21, 2012) writes "This would've been good if the writing wasnt just one giant flashback and it didn't keep pushing the whole environment theme. It was cute, but overall, mediocre.", which shows the message went over the head of this viewer entirely. In a similar way, reviewer "Chris-kun A" misinterpreted the message of the film in his review (dated March 12, 2012), saying "I loved the meaning/ message of the film: Even though we make tragic mistakes in our lives, it doesn't mean we can't change them or its never too late fix our mistakes."

Other reviewers are annoyed by the "preachy" environmental message of the film and how persistent it is, such as "Christian H" whose review (dated April 20, 2012) states "It tries too hard to deliver its "green" message, and has thoroughly shoved it down your throat by the end of the film.". Another reviewer, "anders p" (review dated April 20, 2012), catches on to the trend of the professional critics, saying how they only disliked the romance plot of the film, but in their case for its embarrassingly cliché nature. Reviewer "Manny C" (review dated April 19, 2012) does see the romance plot in the same way as the professionals did, and

¹ All audience reviews in this section have been taken from the Rotten Tomatoes review section of audience reviews at: "Dr Seuss' The Lorax Reviews- All Audience." Rotten Tomatoes, www.rottentomatoes.com/m/the lorax 2012/reviews?type=user. Accessed 16 Aug. 2020.

says it sidetracks the original story and its message. "Erin C" (review dated April 15, 2012) also touches onto the controversy surrounding the film and writes "the animation is great, but the production of the movie and its message are a bit hypocritical." One reviewer finds that the 2008 film Wall-E relays the same message, but "did so masterfully without sounding preachy" ("Jason T" dated March 12, 2012).

Some audience reviews compare the film to the original novel, where opinions range from "the movie didn't follow the book that well" ("Bob D" dated March 14, 2012), "it wasn't close to the book" ("Bill R" dated March 14, 2012), and "The art behind Seuss's story is lost in this movie and I was highly disappointed" ("Jack W" dated March 12, 2012), to "The movie stays true to the story thought they add in one major subplot" ("David E" dated March 13, 2012) and "I did not find the original book lost in the glossy hollywood production" ("Amanda S" dated March 12, 2012). Overall, it appears that while select members of the audience go into the environmental message of the film and its resemblance to the source material, most reviewers only leave short reviews to indicate whether their kids did or did not like it. This seems to indicate that while there is some attention given to the environmental aspect of the film, for the most part, the only important variable to the audience is whether the film was "likeable" or not.

Next we will consider the 2014 film *Interstellar*, by director Christopher Nolan. A film with a decidedly bleaker tone than *The Lorax*, rated PG-13, and with a score consisting of purely instrumental rather than vocal songs.

Chapter Three: *Interstellar* (2014) – The Solution Lies Beyond the Unknown This study's second case study, *Interstellar*, is a two hour and forty-four minute long exploration of a possible future in which humanity is forced to leave Earth in order to survive. The film has been long in the making as a passion product of Lynda Obst and Dr. Kip S. Thorne (Fernandez). In an article from 2007, the initial production process around the film is explained. Dr. Thorne, a professor of theoretical physics, and Obst, an "astronomy enthusiast" were having a brainstorm session when the idea hit them of a scenario where "the most exotic events in the universe suddenly [became] accessible to humans", a premise that was interesting enough for Steven Spielberg to consider directing their film (Obst qtd. in Fernandez). This premise is directly referred to in the film and labelled Murphy's Law, which states that anything that can happen will happen, something that lead Cooper says "sounded just fine" when he and his wife named their daughter after it (*Interstellar* 00:06:11).

The possibilities of this scenario are virtually endless, which provided a challenge for writer Jonah Nolan, who, speaking on the subject, said "I'm going to immerse myself as much as my feeble little mind can wrap itself around some of these concepts and the narrative will emerge" (qtd. in Fernandez). The screenwriter found his inspiration in other apocalyptic Hollywood sci-fi narratives, such as James Cameron's Avatar, and Wall-E (Jensen), both of which see humanity forced to leave Earth for reasons of pollution and climate change. This influence made the story of *Interstellar* go from an exploration of space and the possibilities beyond the borders of our galaxy, to one about the survival of humanity, and escaping a nearing mass extinction event caused by an "ecoapocalypse" (Jensen). His motivations for a story about rescuing the planet, he says, came from the many conversations he held with Dr. Thorne and Obst, where "the thing that jumped out was how precious life is in the first place" (Nolan qtd. in Jensen).

When Spielberg's company DreamWorks moved to Disney in 2009, Interstellar needed a new director to helm the production. Jonah Nolan recommended his older brother for the position, since he was interested in the screenplay after hearing Jonah talk about it, but it was not until 2012 that Christopher Nolan officially joined the team working on Interstellar (Jensen). One of the first things Christopher Nolan told his younger sibling when he joined the project was that he was going to rewrite parts of his script, making changes such as adding more nuance in the depiction of the human character, but adding the highs and lows of selfishness and selflessness as well, and changing Cooper's child from a son to a daughter (Jensen). This move was motivated by his own experience with fatherhood, for him "the

whole movie is about what it means to be a dad" (qtd. in Jensen). During the process of the production, which was kept under wraps for most of the time, it was codenamed Flora's Letter. When Jessica Chastain, the actress who plays an adult Murph in the film, found out about Christopher Nolan's daughter Flora, she realized why the film was codenamed this, "Interstellar is a letter to his daughter." (qtd. in Jensen).

The idea of a film being a message to or about a younger generation seems to be common in the tradition of films on the threat climate change poses. The Lorax of course is a very clear example of this, but other films play with this theme too. Happy Feet, Over the Hedge, and Home are prime examples of this trend, being films that are marketed mainly to children and that discuss environmental issues in a manner understandable to them. However, films such as Mad Max: Fury Road, and Noah fit under this trend as well, as in both films, the protection of the next generation, and ensuring their survival is an important theme. Another poignant example of this trend is the film After Earth, a story about survival on a future version of earth, which features real life father and son Will and Jayden Smith in the roles of the father and his son who he guides through the hostile planet.

The message of the film according to the director, is thus about the bond between a parent and their child, and the meaning of said bond (Jensen). Aside from this, the film is full of science and possibilities and carries an additional meaning that goes beyond the bond between a father and a child alone, as it explores humanity's possibilities on either a new planet, or the viability of going into space on a large spaceship with the survivors that remain on Earth. The film's science is something that Nolan researched well, and is why Dr. Thorne remained an active member of production (Galloway). Dr. Thorne consulted Nolan on the issues of the science of the film, and reportedly answered the producers questions about anything from the existence of worm holes, to the possibility of travel beyond the speed of light (Galloway). This results in the science of the film seeming far more plausible than that of some other films. While this increases the suspension of disbelief the film creates, in some scenes, such as the fifth-dimensional tesseract scene near the end of the film (Interstellar 02:22:22), or in the explanations of the one-way traffic of communication with Earth (01:18:00), the science seems flawed, or at least too confusing to grasp (Hibberd; O'Connell). Interstellar, however, could not work well without the implausibility of these scenes, which Perkowitz explains is because "many films would fail because some plots simply can't work unless science is extended in unlikely or impossible directions" (198).

While the meaning of parenthood may be the message at the forefront of the film, it is undeniable that the environment and the planet's dwindling resources play a big role in the film as well. From an ecocritical standpoint, the message of the film shows clear reference to nature and the nature of life on planet Earth. This ecocritical message will be explored further in reference to the film's audio, visuals, and dialogue.

The Message of the Film

In the first few minutes of the film, the changes to Earth's inhabitability are explained, and the viewer gets a sense of the kind of dangers that the population of Earth has to face. A blight has come and is annihilating one plant species at a time, leaving the current population with corn as their sole sustenance (Interstellar 00:28:40). The changes are reflected on in short documentary-style video fragments that are littered throughout the film, which have in fact been taken from a 2012 documentary by Ken Burns on the Dust Bowl (De Bruyn). One of these fragments especially reflects on the degradation of Earth's natural resources. In this fragment, and old woman reflects on the earth's changes, "You didn't expect this dirt that was giving you this food... To turn on you like that and destroy you" (00:17:03), spoken as though the earth became sentient and purposefully tried annihilating life.

The belief that the earth belongs to humanity is strong throughout the first half hour of the film, humanity is "driven by the unshakeable faith that the Earth is ours" (00:29:08), but it is not long before the reality sets in that humanity will not be able to survive on the planet, it can no longer be saved. Professor Brand explains to Cooper that "we're not meant to save the world, we're meant to leave it" (00:29:54). This sets up the mission of the film, that sees Cooper and a team of three others set off in a spacecraft, called the Endurance, to explore a different galaxy, accessible through a wormhole near Saturn (00:31:53).

The set-up of the film shows the vulnerability of the human race, and resonates eerily with the types of natural destruction that humanity has already faced in the past, such as the potato blights in Ireland and the Dust Bowl in rural America, both events that are referenced in the film as well (Interstellar 00:28:50). The Dust Bowl was an event that inspired Christopher Nolan especially, and he reflects on it saying "I was always fascinated with the idea of presenting what seems like a science fiction doomsday scenario on this sort of big scale that's actually less than [what] really happened in America." (qtd. in Galloway). Using a scenario that has occurred in real life before helps create the sense that the events in the film would be very possible in real life and inspires a sense of awe for nature.

The bleak situation is further strengthened through the images of the landscape that are shown on Earth, showing either corn or just dry grass as far as the eye can see, with a film of dust covering everything, making the colors seem faded (see Appendix B, fig. 8). The reflection of the Dust Bowl is not unique to *Interstellar*. Moore refers to similar dust storms in Wall-E: "[the] massive dust storms that thunder through with regularity are a reminder of the unsustainable agricultural practices, drought, and environmental degradation that set off the Dust Bowl predicament in the 1930s." (Landscape and the Environment 48). Mad Max: Fury Road shows similar dust storms ravaging the plains. In each film, these storms and the abundance of dust "[provide] a constant condemnation of humans' over-consumption" (48). Similar themes of scarcity and pollution of the air can be seen as well in *Idiocracy*, *IO* and Mortal Engines, which all explore issues of crop growth and finding sustenance for humanity.

The ecocritical message one might take out of this is that humanity does not show enough appreciation for the planet that sustains its life. In the film, this is reflected on by Cooper and Amelia as they are flying away from Earth. Cooper mentions that "It's a perfect planet and we are not gonna find another one like her" (Interstellar 00:50:47), which foreshadows the path that the explorations are going to take in the next sequence of the film. The sequence that sees the crew leave Earth, their perfect planet, interestingly does not feature much sound. All that can be heard is the sound of the booster rockets, and the short commentary in between (00:42:17-00:43:22). The lack of musical sound, however, is a signal for the emotion of the sequence in itself. As Brown explains, "it is the music/silence dialectic itself that tends to reflect on some of the film's narrative-based polarities" (192). In this case, the silence is used not only to signal that the crew is in the vacuum of space, but to show their literal separation from the lives they are abandoning on Earth, the distance they are putting between themselves and the blue planet symbolized not only by lack of sound but by the space between them. This silence returns later when the ship is further away from Earth, and Earth can be seen a solitary ball of blue light in the deep darkness of the vacuum around it (see Appendix B, fig. 9). Bartsch explains how in videos, the imagery of an object on its own "uses innate elicitors of sadness like the apparent loneliness ... in the vast and empty landscape, and the dark and cold atmosphere" (53). Leaving Earth, leaving the environment that humanity evolved in, is a sad affair, and would be just as sad and lonely if it were to happen in real life.

Throughout the film, the idea of Earth, or nature, as a sentient being that is purposely harming humanity, is discussed several times. One of the first times is mentioned above, the

mention in the short documentary-style clip. However, the main characters also involve themselves in the conversation. Amelia Brand talks with Cooper as they are speeding away from Earth, he asks her whether she thinks nature can be evil, to which she replies "No. Formidable. Frightening. But... no, not evil. ... What-Is a lion evil because it rips a gazelle to shreds?" (Interstellar 00:52:00). The formidable and frightening aspect of nature was something the director wanted to explore in his work, "to play with scale and pit man against monolithic nature. Dust storms. Tidal waves." (Jensen).

The tidal waves referred to feature in the middle of the film, when the crew arrives on Laura Miller's planet only to discover it is a mass of water with waves as high as mountains constantly rolling over its surface. As the first wave nears the ship, the music builds in speed and intensity, "[the] increased sense of speed signifies increased tension, increased action, increased danger" (Kassabian 83-84). This music is drowned out when the wave hits the ship (Interstellar 01:11:55), and instead it's the sound of the rushing water that takes over as the camera zooms out on an exterior wide shot to see the small ship carried up into the sky, interspersed with interior shots of Amelia and Cooper being thrown around the shuttle as it rocks in the water. The diegetic sounds of the rushing and beating of the water against the ship here takes over the role of the music, which in a way intensifies the experience of the audience, as scenes such as these are often paired with musical climaxes. As Kassabian explains about another scene, "Since this sequence would traditionally be heavily scored, the absence of music makes it seem more graphic than it actually is." (73). Using the sounds of the environment instead of nondiegetic sounds for this scene brings the music back to its origins in the sounds of nature (Toop). The danger of nature is clearly showcased in this sequence, and is commented on sarcastically by Cooper, who says about the water "The stuff of life, huh?" (01:13:49).

The overwhelming and awe-inspiring force of nature is represented again when the remainder of the team arrives on Mann's planet, a frozen wasteland reminiscent of the world in Snowpiercer and The Day After Tomorrow, but lacking in infrastructure (Interstellar 01:35:17). Not only is this world freezing cold, the air is so full of ammonia that breathing it would kill a human in moments. On this world it is not the environment that showcases its deadly force, but it is rather human nature that reveals itself from its darkest side. Mann lied about his planet's viability to sustain human life, and attempts to maroon the crew of the Endurance in order to go back home to Earth (02:01:56). Here the crew loses their second member, as well as part of their ship, leaving the ship low on fuel and barely able to move to the last planet that showed promise, that of Wolf Edmunds. The freezing nature of Mann's planet betrays the coldness of Mann's heart and actions. Considering his name, "Mann", the direct parallel to humanity, mankind, is not far off. This scene showcases mankind's worst side, and shows that the quest for survival, when done for selfish reasons, can in fact generate worse results and even lead to death. Nature does not actively function in Mann's demise, it is his own selfishness and stubbornness that leads him to open the airlock prematurely, an act that kills him because of the depressurization due to contact with the vacuum of space (02:07:23). Nature does not have to act in order for man to destroy itself, the mere absence of anything is enough to kill Mann, and enough to kill mankind.

The force of nature and the ease with which it dwarfs any kind of power held by humankind is showcased visually at several points in the film (see Appendix B, fig. 10). The difference in scale that Nolan described above, pitting mankind against monolithic nature, shows the nature of humanity's relationship with the environment and nature, but also reflects on it ironically. Nature is far more powerful than any force of humankind, far greater in size than anything humanity could ever create. However it is the smaller humanity that is capable of destructing the natural order and destroying the balance of the environment, in an ironic twist of David and Goliath, it is humanity's selfishness and overconsumption that can fell the giant that is the environment.

The sound that accompanies many of the nature scenes is either music that strongly considers the emotional reaction of the audience, consists of the diegetic sounds of the environment itself, or sound is left out entirely in favor of complete silence. The silence comes especially in exterior shot scenes in space, where it may either be to produce an extra effect of leaving out the music to focus on the shot and the awe visible on the character's faces, or, as in the scene of departure from Earth, silence is used to focus on the polarities and the divide between the characters and the earth (Brown). When the sounds of the environment are used, such as with the scene on Miller's planet, this is used in a similar way as the silent parts of the film, and increases the focus on the events occurring without distracting from them with music (Kassabian). The effect is used especially in scenes that would traditionally be scored with dramatic music, and therefore stands out more. There are also scenes that do have more traditional music and sound in them, which balances out the untraditional scenes of silence and diegetic sound. One such scene plays out when the Endurance is passing by Saturn. This moment is accompanied by a solo piano, playing a slow and melancholy tune, reflecting on the loneliness of the scene (*Interstellar* 00:55:08).

Most scenes of nature and humanity, especially the ones in space, resonate deeply with the grim mood throughout most of the film, which is reflected by their music or the lack thereof. There is an underlying sense of the realization, coming too late, of the luck that humanity has had with their home planet. In this sense, the ecocritical message of the film could be an increasing appreciation for planet Earth and the resources it provides humanity with. This message is strengthened by showing two other planets that could possibly have sustained life as long as something cataclysmic would have happened on them, Miller's and Mann's planet. Compared to Earth, Miller's planet has too much water, and it is too volatile. Mann's planet on the other hand, is too cold, and the air, much like the air back on Interstellar's Earth, is poisonous. The events of the film, and dialogue between characters, make it very clear that there is no other planet just like Earth out there for humanity, and even Earth is losing its inhabitability due to the blights wrecking the food supply, thriving on the nitrogen in the air and reducing the oxygen content of the air. As Professor Brand says, "the last people to starve will be the first to suffocate" (Interstellar 00:29:30).

The theme of poisonous air is used in other films as well, such as IO, which sees humanity retreat to higher regions in order to be in pockets of breathable air, or After Earth, which requires the main characters to use a special coating on their lungs in order to filter enough oxygen from the air. In IO, though, while most of humanity leaves the planet, the main character stays behind and discovers that she has somehow adapted her body to be able to breathe the poisonous air. In *Interstellar*, although Cooper also suggests that humanity will adapt, the timeframe proves too short and humanity is forced to leave. The threat of poisonous air is not a new theme for apocalyptic and dystopian films, neither is it solely used in American productions. Nausicaä of the Valley of the Wind, directed by Hayao Miyazaki, came out in 1984 in Japan and features a jungle full of poisonous spores which make the air toxic.

During the quest for a new planet for humanity, the struggle back on Earth is shown in various scenes, although it receives only limited coverage compared to the space exploration. Due to the time difference between the timeline of the space explorers and the timeline on Earth, there are large gaps in the information that is presented. The life of the people on Earth is partly relayed through messages, to the crew of the Endurance. What is evident is how the air quality decreases further and further, damaging the lungs of the people left on Earth, which winds up killing Cooper's grandson Jesse (Interstellar 01:20:18). During the messages in which Tom tells Cooper about his grandson's death, *Interstellar's* main theme is played in the

background on an organ. The theme gradually grows louder, and there is a "swell in the lower registers of the organ" (Brown 81), signaling an oncoming event of gloom, until it is abruptly cut off as the messages from Tom end with him letting his father go. For Tom this mimics the emotional distancing from his father, which happened just as gradually as the build in the music, but happened abruptly for his father. Cooper is suddenly cut off from his son and grandchildren, and in a way, from his connection with Earth.

A later scene shows an exodus from the fields where the Cooper farm is, and Murph tries to evacuate her brother and his family too, since their health is quickly deteriorating and the situation is critical (Interstellar 01:44:46-02:32:34). Tom throughout this sequence is adamant on staying with the farm, as he still believes that everything will be alright, forcing Murph to lure him away from the farm just so she can save his wife and child. After she then receives the data from their father, however, it seems that Tom has no more issue with the plan and the evacuation. The ecocritical side of the scene shows how science prevails over nature's destruction, and Murph manages to save part of the earth's population and helps send them into space on large habitats reminiscent of that in *Elysium*.

The habitats that are built are reflected on by Cooper when he arrives at Cooper station, named after his daughter. He says "I don't care much for this pretending we're back where we started. I wanna know where we are. Where we're going." (Interstellar 02:39:31). With a vision set to the future the, the film makes its final ecocritical point as a suggestion that we should live while looking to the future, and not by looking back into the past and comparing ourselves with that. The colors of the new colony contrast sharply with those of the earlier imagery of Earth, however, which Podgajna also reflects upon: "In contrast to Earth's ecological blight depicted in the opening frame through the bleak imagery, the emergent utopian space portrayed in the film's closure resonates with vivacious green colors of ripening fields, implying restored ecological balance and harmony." (54).

The Reception of the Film

As Interstellar has been out for six years, and was seven years in the making, a large amount of academic articles have been written on it. Most of these, however, focus on the theoretical physics and the other sciences applied in the film rather than doing an ecocritical reading of the film. One such article reflects on the science and the explanations given in the film for its own events in a slightly agitated manner, saying that "this may arguably be the film's main flaw, not that it leaves us with profound questions, but rather that in trying to address its own questions, what was intended as profound often feels like a plot hole."

(Ferguson). Articles that do consider the film in an ecocritical manner are harder to find. The ones that are available do show a certain consistency in their commentary on the film. Both De Bruyn and Liong argue that the film is in a way too anthropocentric. For De Bruyn this is because "the movie disconnects human behavior and environmental collapse", and in parts of it, Earth is even considered expendable. Liong's issue with the film stems from idea that humanity is all that it needs to save itself, which suggests an immediate inequality between humans who cannot save themselves as being somehow inferior to those who can. His suggestion for a solution to this problem sees a fundamental change made to the savior figure of the film, as he suggests humanity should not rely "on a "super" human who can escape from the black hole to gather useful data for us in the nick of time" but "a reconceptualization of human subjectivity in relation to other living organisms and the environment that has been nurturing us", a move he believes can make the film more inspiring than a tale of individual heroism (Liong 5).

On Rotten Tomatoes the film receives a rating of 72% and a score of 7.07/10 on average, sourced from 360 reviews, which makes the film "certified fresh" ("Interstellar"). The summary that is taken from the reviews of the critics says the following: "Interstellar represents more of the thrilling, thought-provoking, and visually resplendent filmmaking moviegoers have come to expect from writer-director Christopher Nolan, even if its intellectual reach somewhat exceeds its grasp." ("Interstellar"). This summary suggests that the primary focus of the reviews by official critics lies in the realm of science as well, and focuses on comparing the work to other works by Christopher Nolan. In order to consider a fair amount of different reviews out of the 360 total critic reviews, ten have been chosen out of the list of "top critics" on the Rotten Tomatoes website, to see what they consider the best critics say about the film and whether there are any that reflect, even just briefly, on the ecocritical messages in the film.

In six out of the ten reviews, the issue of the climate that is discussed in the film is mentioned, albeit in a short manner that mostly just relates the role that this issue takes in the film (Berardinelli; Bradshaw, "Interstellar"; Goodykoontz; Hoad; Orr, "Interstellar"; Sachs, "Interstellar"). In only one out of these six, the issue is given a little more thought than just the initial mention, and the issue is elaborated on further through an explanation of the imagery and environment of the film in relation to traditions of sci-fi films using the same imagery (Hoad). Taking these ten as an example then, it is clear that the environmental aspect

of the film is by most critics seen merely as a backdrop for the film and not something that deserves their further time and consideration.

The issue of the science of the film, as suggested from the general summary of the reviews, is discussed in most reviews, where the opinions are divided. There are those who believe the film's science is too complicated and makes the story too convoluted to leave it accessible to the general public (Andrews; Bradshaw, "Interstellar"; Graham, "Interstellar"; Reinstein; Travers, "Interstellar"). Other reviews do not mind the scientific aspects of the story as much, but rather focus more on the storytelling and the flaws in this, such as that the story lacks a unifying theme (Sachs, "Interstellar"), or that the credibility of some events is too farfetched, such as the black hole being somehow connected to Murph's bedroom through the bulk-beings' tesseract (Orr, "Interstellar"). Berardinelli and Goodykoontz both find the science to be believable speculation and find that it adds to the story rather than distracting from it, and lastly Hoad considers the environmental setting and context more than the science.

The scientific aspects of the film and the storytelling around it are thus of primary concern to the official critics reviewing the film, while the environment has only a minor role in these reviews. In order to see what the general public thought of *Interstellar*, another ten or so reviews will be perused in the audience reviews section on *Rotten Tomatoes*. But first the numbers. The 175,631 members of the audience who voted on Interstellar on Rotten Tomatoes gave the film an average "freshness" rating of 85% and a score of 4.15/5 ("Interstellar"), while a quick Google search shows an average rating of 4.9/5 over 4255 reviews, and says 95% of Google Users liked the film. This appreciation is evident in the box office success of the film as well. Interstellar had a budget of \$165M and made back \$710,525,276, of which 26.5% was made on the domestic market while the other 73.5% was made with worldwide ticket sales, bringing the profit to around \$545.5M.

Just as was the case with *The Lorax*, most of the reviews left by the audience are short and do not offer much insight in what the viewer thought of the film aside from a short "loved it" or "hated it". However, as also was the case with *The Lorax*, there are longer reviews that are more nuanced available as well ("Interstellar Reviews")². In these reviews, the emphasis is

² All audience reviews in this section have been taken from the *Rotten Tomatoes* review section of audience reviews at: "Interstellar Reviews- All Audience." Rotten Tomatoes,

www.rottentomatoes.com/m/interstellar 2014/reviews?type=user. Accessed 22 Aug. 2020.

mostly laid on the narrative structure of the film and the visuals and audio of the film. Reviewers such as "Leigh J" (review dated 7 Nov. 2014) comment that "The visuals are astounding and general Sci-Fi vibe is great.", and "Trevor R" leaves a long review (dated 8 Nov. 2014) praising the filmography and the intertextuality of the film, but just as in the official critics' reviews, the plot is disliked or at least seen as flawed by some reviewers, who say there is too much talking ("Caleb J" dated 7 Nov. 2014), there are too many loopholes ("Ryan R" dated 7 Nov. 2014), and that it is too drawn out ("Jeff C" dated 7 Nov. 2014). Furthermore, reviews by the audience also reflect on the science in the film. Some are positive and praise the accuracy and the manner in which the film explores its ideas ("Andrew G"; "Danielle B", both dated 7 Nov. 2014), while others complain the science is too difficult to understand and makes the film harder to watch ("Mary Kathryn P" dated 8 Nov. 2014; "Megan G"; "Shawn C", both dated 7 Nov. 2014).

Out of the ten chosen reviews, only one review reflects on the status of the environment as shown in *Interstellar*, and even then it is only considered very briefly. "Danielle B" says the film "shows the horrifying reality of what is likely to happen to the Earth" and "should be used to inspire our next generation." This shows clearly that this viewer picked up on the ecocritical message in the film. However, considering the brevity of most reviews and the large quantity of them, it is hard to tell whether this one reviewer out of the ten on a total group of over 175,000 is representative for the rest of the reviewers not having noticed an ecocritical message. Thus this study does not make any definitive claims on the amount of people from the audience who noticed the underlying ecocritical messages and symbolism of *Interstellar*. It is likely, however, that the majority of the audience would have overlooked the ecocritical message due to the distraction of advanced theoretical physics and the emotional plotline of the film.

After *Interstellar*, it is now time to consider the most recent case study, *Avengers*: Infinity War. Whereas in Interstellar the theme of the environment is still apparent despite Nolan's claims of he message of parenthood, in *Infinity War*, the presence of the environment is even more limited.

Chapter Four: Avengers: Infinity War (2018) – Blockbusters and the Climate Just like The Lorax, Avengers: Infinity War is also an adaptation of preexisting work, in this case the comics by Marvel. While going into the full history of the heroes that make up the team of the Avengers and when each was first published be would be a sufficient topic for a study in itself, the main thing is that the group of heroes known as "the Avengers" was first grouped together in a comic published in 1963 (Martin & Sanderson). This first publishing date comes far before the rise of ecocriticism and concern for the environment in America, suggesting that the source material most likely does not feature much environmentalist thought. Martin and Sanderson cite the success of the heroes of DC Comics' "Justice League of America" (JLA) as the main motivator for Marvel to come out with their own team of their strongest heroes.

Rather than going with a team of unambiguous heroes, as the JLA, the Avengers consisted of heroes with their own troubled pasts and demons to overcome, as many of them once started out on the dark side (Martin & Sanderson). In the comics, the makeup of the team varies over the years, and a large cast of characters exist in the universe of the Marvel comics. In the series of Marvel Cinematic Universe (MCU) films, this is much the same, and each film appears to add additional heroes to the cast, expanding the team of the Avengers further to eventually copy the cast of characters from the comics. In *Infinity War*, the team is almost at its largest, only missing a few key characters such as Captain Marvel.

The MCU functions on a timeline of four phases, each phase consisting of several films that explore the building of the collective universe of heroes. In the first phase, spanning from 2008 to 2012, each core member of the Avengers is introduced to the audience, these being Nick Fury, the head of S.H.I.E.L.D, Iron Man, Hulk, James Rhodes, Black Widow, Thor, Captain America, and Hawkeye. On top of this, the group faces their first major conflict together. The second phase, going roughly from 2013 to 2015, sees each member of the Avengers deal with the consequences of their first team-up, and introduces the additional hero team "the Guardians of the Galaxy", comprised of Star-Lord, Drax, Mantis, Rocket, Groot, and Gamora, as well as introducing the Ant-Man, Scarlett Witch, Vision, Falcon and The Winter Solder. In the third phase, running from 2016 to 2019, the Avengers have a falling out due to new laws for superheroes before being forced to unite their powers to defeat the threat of Thanos, and along the way new heroes are again introduced, this time including Captain Marvel, Black Panther, The Wasp, Spider-Man, and Doctor Strange. The fourth phase of the

MCU would have kicked off on May 1 with the origin story of Black Widow, but this was pushed back due to the COVID-19 pandemic (Jaworski).

Infinity War comes in the third phase of the MCU, and finally introduces Thanos to the big screen, after he was hinted at previously in 2012's *The Avengers*. This villain is one of the last survivors of the planet Titan, which was mostly destroyed due to overpopulation and the depletion of resources. His plan is to prevent this from happening anywhere else in the universe by annihilating half of all life in the universe. In order to do this, he needs to collect the six infinity stones that represent each of the central powers that control the universe, the Space, Reality, Power, Soul, Mind, and Time stone (Infinity War). Preventing Thanos from collecting these stones in his infinity gauntlet forms the main conflict of the film, which shows the efforts of the Avengers, who are dispersed throughout the universe. The two and a half hour long film ends with a great battle between Avengers and Thanos' forces held simultaneously in Wakanda and among the ruins of the planet Titan.

The balance of life and the restoration of the environment are Thanos' motivators in the film, but for the Avengers, the main motivation is the survival of humanity and other life forms in the universe, making each group have their own motivation of conservation. This is not elaborated on much in the film, apart from Thanos' monologues on the topic of the environment and the Avengers' attempts to stop his mass genocide. *Infinity War* itself thus does not have a strong relation with the environment in its plot, and with the film's main genres being action, adventure, and sci-fi in the context of a superhero film, there is likely not much room for explicit ecocritical messages in the film.

The Message of the Film

In considering the plotline of *Infinity War*, the focus on action and adventure over the issues with the climate make it difficult to find ecocritical messages in the film. However, it is not impossible to read between the lines and see a more implicit ecocritical message form. Reading the film in such a way, there are two possible narratives to consider. One sees Thanos as the threat to the environment, and sees the Avengers as the heroes destined to rescue the universe and the life in it from the great extermination planned by the titan. The other narrative is one where Thanos's standpoint is considered. In this narrative he is not trying to destroy the universe, but he rather acts as an extremist environmentalist and is trying to save the universe's environment by a mass extinction event, to restore balance to life and make it so that resources are available in plenty to the remaining half of the universe's inhabitants. As there are not many ecocritical cues in the film, both narratives will be

considered here in order to explore the different messages that then may be taken from the film.³

Thanos as a Threat

In both the scenes featuring Thanos and Thanos' wrath and in scenes that feature the Avengers and their fighting power, nature plays a big role. Not only are fights almost exclusively outside, but parts of the environment are used for the fights, as weapons or as defense strategies, they do not just function as the background of the scene. Nature, however, does not seem to pick a side itself. Both groups actively use the elements and the environment to their advantage in their fights, with Groot attacking with his trunks, while Thanos using the earth as a restraint, and Iron Man blasts fire from his suit. Both groups also possess a weapon forged in Nidavellir, with the aid of a dying star. It is as though nature has no preference over the one or the other group.

Looking at the battle from the perspective of Thanos as the threat, there is a difference between the environment associated with each of the sides. The Avengers are associated with the natural beauty of nature, fighting first in a park in New York, and then also in the beautiful country of Wakanda, which has a gorgeous natural environment and is full of life. Wakanda is a hyperintelligent state and the natural environment seems to be balanced well with the built environment (see Appendix C, fig. 11).

As the camera pans around the statue of a panther to show us the first shot of Wakanda, a drumbeat is already audible in the audio, which is quickly joined by chanting and trumpets blaring in a regal manner, their notes lifting higher and sounding akin to a fanfare (Avengers: Infinity War 00:58:34). The soundscape here is similar to the introductory scenes of other films, and "the theme is beefed up with parallel triads (a harmonic coloration one hears often in Puccini) which, along with the instrumentation and the pace, draw the listener into an overall aura of pomp and excitement" (Brown 99). During this introductory shot, Wakanda is shown in all its natural beauty, reinforcing that nature and the excellence of it is something to be excited about. On top of treating the Wakandan environment with reverence, the score also acknowledges and celebrates the African roots of Wakanda, with the African tribal drums and chanting in the background, although it is not entirely clear whether this is

³ This chapter will, due to the small amount of explicit ecocritical clues in the film, be highly speculative, and does not necessarily reflect the author's personal standpoint on the issues discussed.

done as a film score trope or in a genuine acknowledgement of the majesty of the geological location (Kaye).

While this majestic, beautiful land of nature is what the Avengers are associated with, Thanos is associated with ruined lands, such as his home planet Titan, which looks like a post-apocalyptic wasteland similar to what is found in the deserts of Blade Runner 2049 (see Appendix C, fig. 12). Titan gets a few introductory notes of music played under its title screen, and unsurprisingly these are low, ominous trumpet tones, predicting the events about to transpire on the planet. (Avengers: Infinity War 01:18:42). Other gloomy locations associated with Thanos and the path of destruction he leaves behind, are the frozen forge of Nidavellir (01:14:21) and the Asgardian ship he destroys at the beginning of the film, that the Guardians stumble upon (00:29:07), both scenes that are scored with ominous music.

During the battle in Wakanda, Thanos' forces are destroying their surroundings, first by landing their ships in the jungle outside Wakanda's forcefield, which knocks down trees and starts a massive fire, and later by sending in their threshers, large wheels which rip open the earth (Avengers: Infinity War 01:54:13). The Avengers, however, make use of their surroundings by taking cover in them and shielding themselves from attacks among the trenches dug in the earth by the threshers. This seems to indicate them having a more symbiotic relationship with the earth.

In another scene the influence of nature can be described as aiding the Avengers. This happens when Iron Man, Spider-Man, and Dr. Strange are on Ebony Maw's ship, one of the "Children of Thanos". They are trying to work together to defeat the alien when Spider-Man suggests applying a tactic he has seen in the film Aliens: blasting open the hull of the ship to create a powerful suction to the outside, where Ebony Maw dies (Avengers: Infinity War 01:02:12). It is the vacuum of space here that kills him, much like what killed Mann in Interstellar.

The strongest connection that the Avengers appear to have with nature comes in the form of Groot and Thor. While Groot is a sentient tree, making him part of nature and giving him powers that manipulate nature, Thor is the god of thunder. This gives him control of lightning, one of nature's most powerful and unpredictable forces. He does not need to wield a weapon to access these powers either, showing that his body is effectively a conduit for one of nature's strongest forces. His power in the film is only rivalled by none other than Thanos himself, which pits the two against one another almost automatically. Additionally, Thor

seems to suggest that he would be capable of donning the infinity gauntlet when he says out of the Avengers he alone can wield a weapon forged in Nidavellir, as he tells the others "You simply lack the strength to wield them. Your bodies would crumble as your minds collapsed into madness." (Avengers: Infinity War 00:34:54). The infinity gauntlet was also crafted by Eitri in the forge of Nidavellir, making it quite possible that Thor can use the weapon as well. This makes Thor not only the current strongest Avenger (as Captain Marvel has not appeared yet), but additionally seems to make him a champion of nature that can fight the good fight. Interpreting things this way, it almost seems as though nature selected two champions to see which would be able to save the universe the best, the one with the darker, or the one with the good intentions.

Thanos as a Savior

The other manner of looking at the events of the film, then, is by considering things from Thanos' perspective, and playing devil's advocate to Titan's supposed "madman". His methods, although unethical and extremist, are by his own words supposed to aid the universe by restoring balance to it. He explains his motivations by relaying the story of his own old planet to the Avengers that fight him on Titan. Titan, he says, "was like most planets. Too many mouths, not enough to go around. And when we faced extinction, I offered a solution." (Avengers: Infinity War 01:47:05). As he shares this story, behind him, the Reality stone morphs the ruins of Titan back into the old state of the planet, back when it still flourished. The planet used to look much like Earth, with a blue sky and green bushes and trees around. From the levitating buildings behind him, it is also implied that Titan's society was much more advanced than Earth's society. This begs the question whether this is meant as commentary on the current state of Earth and its future as we are slowly moving towards a similar destiny, of overpopulation leading to there being too few resources for all (in fact, this is already the case in some areas in the world, where as a result of scarcity, the cost of simple amenities such as water is rising exponentially). Thanos then explains the plan he had, which was to kill of half of the population, defending it by saying it would be "random, dispassionate, fair to rich and poor alike." This would reduce the strain on the planet's natural resources, allowing for the remaining half of the population to thrive once more.

While Titan declared him a madman for coming up with his unethical solution to overpopulation, he managed to employ the idea on other planets in the universe, as explained by Gamora: "he only ever had one goal. To bring balance to the universe, by wiping out half of all life. He used to kill people planet by planet, massacre by massacre. Including my own." (Avenger: Infinity War 00:30:57). The massacre of her planet's people is later shown in the film (00:42:25), and Thanos reflects on it as well, revealing that despite the gruesome murders of half the planet's inhabitants, the population is now absolutely thriving after being on "the brink of collapse" (01:06:30). This revelation shows that despite the execution of his plan being unethical and clearly not preferable, it did help the planets recover from their crises, and restored the balance at least for their ecosystems.

The power Thanos wields in the film is also a confusing issue. While the Avengers eventually kill him in Avengers: Endgame, in Infinity War he is the only character capable of wielding the six infinity stones at the same time, where even just one stone is often too much for a mere human, as shown in Guardians of the Galaxy, where it takes the whole team of Guardians to wield the power of one stone. The stones are a creation of nature, having come out of the Big Bang (Avengers: Infinity War 00:13:24). The fact that Thanos can wield them fairly easily with the infinity gauntlet that Eitri forged him, suggests that he is a strong enough creature that nature's greatest forces chose him as a suitable vessel of their combined power. While he did collect most of the infinity stones through stealing and murder, if nature would have willed him to be weaker, he would not have been able to wield them to the extent he does in *Infinity War*. This clearly strengthens his own belief in his mission.

Much like Thor's Stormbreaker gives him control over the Bifrost, and the ability to summon the interdimensional rainbow bridge at will, Thanos' infinity gauntlet powers manifest themselves in the colors of the rainbow too. The rainbow is often seen as a sign of peace and hope, making it curious that both the main villain and one of the main heroes in Infinity War wield their powers with the symbolism of the rainbow. However, where Thanos' power is forbidden and he has to be stopped, Thor's excessive strength and power is not questioned, despite the character making rash decisions based on grief and anger, some of which exacerbate the problem further, a trait that shows that the ambiguity of heroism is still at the core of Marvel's productions (Martin & Sanderson).

The genocide of half of the known universe is not something that is excusable, and it is difficult to defend a character whose purpose is to annihilate half of all life, but Thanos seems quite capable of considering the issue with a clear mind, and his motivation, however misguided, is not coming from bad intentions. This is exemplified further by his wish to use the infinity gauntlet to take half of all life instead of manually killing half of the universe. Using the snap, he says "They would all cease to exist. I call that mercy." (Avengers: Infinity War 01:47:45). Going with Thanos' plan, the suggestion is that there is a pain free manner of ridding the universe of its problems of overpopulation, without needing to directly kill anyone. The plan would perhaps already seem less inhumane by the mere addition of one clause: that the remainder of the life in the universe would have no recollection of the other half, and no pain or grief regarding them. In this way, while it is still cruel to tear half the universe away from their lives, they would not feel anything, their loved ones would not remember them existing, and the balance of the universe would still be restored.

The ending of the film seems to suggest that Thanos' actions will go unpunished, that he has fulfilled his destiny of saving the universe and can now enjoy his retirement in peace in an idyllic spot in nature (see Appendix C, fig. 14). He referenced earlier that once he is done he will "watch the sun rise on a grateful universe" (Avengers: Infinity War 01:47:56). His home at the end of the film is surrounded by natural beauty, and his view is quite breathtaking. As he slowly makes his way to his seat, wounded from using the full infinity gauntlet, a slow, melancholy tune is played in the minor key on a string quartet. The music, seems to carry both a sense of anguish and of regret, which Thanos' face mimics. It is not until the very final moments of the film that a shadow of a smile passes over his face.

Depending on whether one considers the Avengers the heroes of the film, or considers Thanos the hero of the film, the ecocritical messages change. If the Avengers are the heroes, then the messages are about living in balance with nature and conserving life. If Thanos is the hero, or savior of the universe, the message is about the dire measures that would have to be taken to restore balance to the universe, which may brandish the one who takes them a villain, although their intentions were not evil.

The Reception of the Film

Infinity War is the highest grossing film out of the three case studies, and also the most expensive one. With an estimated budget between \$316M and \$400M, it was over twice as expensive as *Interstellar*, and over four and a half to almost six times as expensive as *The* Lorax. The budget of the film is not surprising considering Infinity War has an impressive cast full of Hollywood, including Chris Evans, Scarlett Johansson, Robert Downey Jr., Tom Holland, Chris Hemsworth, Zoe Saldana, Elizabeth Olson, and Chadwick Boseman, to name just a few ("Avengers: Infinity War (2018)"). While a budget of nearly a half billion dollars is already quite impressive, this still does not compare to the profits of the film. Domestically the film made around a third of its total profit, at \$678,815,482, and worldwide the film made another \$1,369,544,272, which brings the total profit up to \$2,048,359,754. Reducing the

estimated cost of the film, this is still over one and a half billion dollars earned. This dwarfs the amounts of the previous case studies.

Not only did *Infinity War* earn more at the box office, it was also given the highest ratings by both critics and the audience on *Rotten Tomatoes*. Critics gave it a "freshness" rating of 85% over a total of 469 reviews, with an average score of 7.61/10, making it another "certified fresh" film. The summary given here for the critics' reviews reads: "Avengers: Infinity War ably juggles a dizzying array of MCU heroes in the fight against their gravest threat yet, and the result is a thrilling, emotionally resonant blockbuster that (mostly) realizes its gargantuan ambitions." ("Avengers: Infinity War"). Due to the plotline that the MCU follows, it is highly unlikely that any critics focused on the ecocritical implications of the film. Nonetheless, this study will still consider several reviews by both critics and audience reviewers to see what these do focus on.

Before getting into critic reviews, it is useful to note that academic articles have also been written on the film, although not that many seem to be available as of yet. Two of the articles this study found concern themselves with main villain Thanos, and how his motivations fit in with a psychological reading (Muzaki), and how his humanitarian extermination fits in with a philosophical reading (Faktorovich). A third piece found concerns a dissertation written in 2019 that focuses on the soundscape of Avengers: Infinity War in relation to *The Avengers* and *Avengers: Endgame* (Walker). This tentatively shows that there is some diversity regarding the fields that concern themselves with the film, and that Thanos is a primary object of study. This same focus on Thanos is visible in the critic reviews as well.

Many of the critics that are considered by this study agree that the impressive cast of heroes is too much for the film to handle, and they do not get enough screen time or exposition (Lane; Macdonald; Rozsa; Sachs, "Avengers"; Travers, "Avengers"). The character of Thanos, however, critics agree is handled beautifully in the film, giving credibility to the origins of the character's motivation and even making him seem understandable in his motivations (Chang; Daniell; Graham, "Avengers"; Howell; Orr, "Avengers"; Travers, "Avengers"). Most of these reviews agree that the plot of the film gets convoluted, and that it is hard to follow the plot without any prior knowledge of the MCU, making it a necessity to watch the almost twenty preceding films (Daniell; Macdonald; Rozsa; Sachs, "Avengers"). Only one critic seems to believe that there is no real need to watch all the previous films, saying "you don't have to have viewed the other 18 MCU movies to get the gist of what's happening here. Remember to just keep following Thanos and those pesky

Infinity Stones." (Howell). Out of the ten reviews considered here, two do respond to the environmental theme of the film and comment on Thanos' environmentalist motivations. One review compares him to Thomas Robert Malthus in his extremist plans to end the climate issue by decimating half of all life. That critic also credits the film for adding an environmental dimension to his plan instead of sticking with the comic book version of it, which saw Thanos motivation be "to earn a date with the female embodiment of Death" (Orr, "Avengers"). The other review considers Thanos' motivations for the destruction and mentions the end of his home planet due to overpopulation, citing the character's "tragic dimension" and how Thanos "damn near steals the movie." (Travers, "Avengers"). Thanos is thus a main concern for the critics, while it is also nearly unanimous that with a cast of nearly thirty A-listers, the film does not give due time to each character and leaves little room for the exposition of the good guys.

Audience reviews on Rotten Tomatoes rate the film at 91%, with an average score of 4.48/5 over 58,545 ratings total ("Avengers: Infinity War"). The relatively low number of reviews compared to the other two case studies likely has to do with the duration that the film has been out. Whereas *The Lorax* and *Interstellar* have been out for eight and six years respectively, *Infinity War* has only been out for just over two years after its release in April 2018 ("Avengers: Infinity War (2018)"). A Google search finds a score of 4.7/5 over 1555 reviews, while 94% of Google Users liked the film. Again, the abundance of one-line or even one-word reviews is clear, and again there are longer reviews mixed in as well, and it is those reviews that we will focus on.4

Most of the longer reviews seem to be predominantly positive about the film, with only minor complaints about it, whereas the negative reviews are condensed into shorter oneline reviews that seem to support their points very little. The nine longer reviews chosen to represent the audience's opinion are all more positive than negative as well. Interestingly, the audience seems to disagree with critics on whether the characters are given ample screen time

⁴ All audience reviews in this section have again been taken from the *Rotten Tomatoes* review section of audience reviews at: "Avengers: Infinity War Reviews- All Audience." Rotten Tomatoes, www.rottentomatoes.com/m/avengers infinity war/reviews?type=user. Accessed 23 Aug. 2020. Additionally, all reviews used in this section were dated 27 April 2018, and will not be given individual in-text dates such as in previous sections. This date was chosen to represent reviews that had not been influenced by other reviewers too much, giving a clearer picture of the first response of the audience.

or not. "Jessica O" says that "for how many big characters are in the movie I thought it was very well written and directed to include most of them pretty well", and an anonymous reviewer agrees that "all the characters are given ample screen time and its is[sic] a credit to the writers and directors that somehow it all works". "John G" too thinks that "the directors cleverly gave all the Avengers their own time to shine without having everyone fighting on screen in the same battle together", and "Brian J" too credits the directors for the "the way [they] managed to give each character enough screen time and dialog and make it seamless and organic". The audience agrees with the critics in their evaluation of Thanos, and several reviews cite his character arc as being the more developed, more prevalent one ("Alonso N"; "Brian J"; "JE M"; "Robert M"; "Tony C"). The anonymous reviewer even goes so far as saying that Thanos "is given a real backstory that almost makes you emphasize with him at certain points."

The necessity to see all other films in the MCU first is not mentioned either, though "Alonso N" does mention "How can a geek not love what the MCU has done to bring this all togheter[sic] the way they did?", and other reviewers also reference the ten year wait from the start of the MCU being worth it ("Alex C"; "Jessica O"; "Robert M"; "Tony C"). These audience reviews suggest that the audience for Avengers: Infinity War mostly consists of people who are acquainted with the MCU and are longtime fans of it, which the critics are less likely to be.

While this study thought it would be unlikely that any critics considered the environmental issue that Thanos deals with in the film, two "official" critics did mention this issue. However, in audience reviews this issue did not come up, outside some very brief mentions of Thanos' reasoning for his plan being well incorporated into the film.

This chapter thus ends the considerations of the case studies, and these will now be discussed together in order to see what unites them and how they fit in the narrative of Hollywood's attention to the environment in its productions.

Discussion

After now having considered each of the case studies in their own chapter it is time to consider them more in relation to each other and in relation to other films of the 2000s and the 2010s in order to see how they place themselves in the broader context of the latter decade.

The Lorax, that came out in 2012, has the most evident ecocritical messages embedded in it, also due to its source material having been an unambiguously environmentalist book. In its message of conservation of natural resources it is similar in tone to *Happy Feet* and bears resemblance to Over the Hedge as well. In Happy Feet, the theme of conservation is similar to that found in *The Lorax*. In *Over the Hedge*, the near-destruction of an animal population due to the introduction of humans and human foods is similar to what happens in *The Lorax* when the Once-ler pacifies the forest animals by giving them marshmallows as a replacement of the Truffula fruits they were accustomed to eating. Both these films came out in 2006, six years before The Lorax, in the same year the documentary An Inconvenient Truth came out to alert people of the threat to the climate. There do not seem to have been many changes to the portrayal of the environment in animation films then, if these are considered.

As shown before, the inclusion of environmental themes in animation films is not a purely American tradition, nor is it very new, as shown by the aforementioned Nausicaä of the Valley of the Wind, a film from 1984. Both the Lorax and Nausicaä films have in common that there is one character who attempts to convince all others of the beauty of nature, and the harmlessness of it. In *The Lorax* this is a double role as in the earlier timeline it is the Lorax, while in the later timeline it is Ted. In *Nausicaä*, it is the titular Nausicaä who attempts to convince the characters around her that the insects in the toxic jungle are harmless and they need not attack them.

Nausicaä of the Valley of the Wind is not the only Studio Ghibli film to tackle the issue of the environment even before the 2000s. 1994s Pom Poko and 1997s Princess Mononoke both reflect on the environment as well. In Pom Poko, the threat is the reduction of the habitat of the native tanuki⁵ due to suburbanization, a similar threat as that faced by the forest animals in *The Lorax*. *Princess Mononoke* sees this storyline as well, except in the form of an iron smeltery taking up more and more space in nature.

What all these films have in common is that the solution to the environmental problem is mostly found inside the habitat of the creatures that are threatened by the environmental

⁵ Tanuki are a subspecies of the Asian raccoon dog also known as the Japanese raccoon dog.

destruction. The only film where this is not the case is in *Pom Poko*, where the tanuki are forced to leave their habitat and transform to live with humans.

This idea of survival being possible without leaving the natural habitat is abandoned when Interstellar comes around in 2014. Films that feature similar scenes of mass exodus or refer to them are After Earth, Elysium, IO, and Avatar, which came out in 2013, 2013, 2019, and 2009 respectively. The trend here is that the earth and is incapable of sustaining the life on it. In After Earth, the condition of the earth has already led to a mass exodus from the planet many generations ago. In IO, the last departure of a space vessel to take humans off the planet is approaching fast. In *Elysium* and *Avatar*, however, only a select group of people has left the earth, leaving others behind to die in the dirt of Earth. In *Elysium*, it is the rich who have left Earth, while in Avatar, it is mostly scientists and the army who have abandoned Earth in favor of the colony of Pandora, where they intend to find cheap resources.

On a smaller scale, the idea of an exodus due to the changing conditions of the climate or environment is visible in 2012 (2009), Noah (2014), and The City of Ember (2008) too. In the first two films, the climate is changing so rapidly that humans have to leave for safer places immediately, similar to the evacuations in *The Day After Tomorrow* (2004). In *The* City of Ember, however, the premise is that humanity has already drawn back far into the earth's core in order to escape the pollution at the surface. Now that the facilities in the city are beginning to deteriorate and the massive insects in the earth are beginning to form a threat, however, the population will have to evacuate the city to move back to the surface, which had been part of the plans since the very beginning, before these were forgotten.

The habitat in these films is so desperately uninhabitable that leaving is the only option. In 2018's Avengers: Infinity War, it is a different desperate measure that is considered to reverse climate change and overpopulation, namely Thanos' idea for the annihilation of half of all life. A recent film that employs similarly drastic measures to keep overpopulation under control is *Ender's Game* (2013), in which parents are only allowed two children max, and can apply to request allowing them a third child, if they think that will somehow significantly benefit society. In *The Maze Runner* (2014), the solution to an uninhabitable planet is being investigated through an operation that sees children imprisoned in order to test their hardiness and to see whether they perhaps possess the genes and mindset to adapt to the harsh life on Earth. In both Avengers: Infinity War and Ender's Game, the threat of annihilation comes from an alien species as well. Another society that is threatened by alien species is the one in *Home* (2015), which sees another species colonize Earth while they

themselves are on the run from a species of volatile aliens (seemingly) trying to annihilate them. by training a group of children to see if perhaps they possess a gene anomaly that

The solutions to the environmental threats that the societies face in the various movies seem to be getting progressively more extreme as the threats also change, from having to drastically change the way we live, to changing where we live, to fighting for survival from something trying to annihilate our whole existence. This is not all that changes over the course of time however, as the later films have in common that the theme of the environment begins getting more hidden.

In earlier films, the ones mentioned with *The Lorax*, the theme is explicit and the ecocritical message is very much brought to the fore, leaving no question that these films are about the environment. In the second wave of films, the ones surrounding *Interstellar*, the environment is a primary motivator, but survival takes on other forms as well. In the last wave of films, around Avengers: Infinity War, it is not so much the environment that is a concern as the idea of extinction due to other outside forces. While the environment and scarcity are still among the concerns facing the worlds in these films, it is often an alien force or other species that is the main threat (for the larger part of *The Maze Runner*, it is also another species that threatens life in the valley the most). This can be seen as a shift in the collective attitude towards the environment and the threats it poses. By masking the true meaning of the film behind a battle between humanity and another force instead of outright pitting humanity against the destructive force of a dying climate, the ecocritical implications of the film can still shine through, but in a less "lecturing" manner than some people perceived it to be in *The* Lorax.

While the case study films are each from different genres, parallels between these films and the other films that came out around the same time seem to indicate that the changes to these films did in fact occur in more films around the same time. However, without investigating a larger specimen of films, it is difficult to draw conclusions on what could be happenstance.

In comparing *The Lorax* with *Interstellar* and *Avengers: Infinity War*, another difference is evident. In *The Lorax*, there is no real sacrifice involved in the saving of nature. Partially, this will be the case because it is a children's movie and the source material did not appear to include a sacrifice either, the only price paid for the knowledge given by the Onceler, were "fifteen cents, a nail, and the shell of a great-great-great-grandfather snail" (Geisel). In *Interstellar*, the cost of humanity's survival is much higher. Cooper and the other astronauts have to leave Earth, possibly never to see it again, which causes Cooper to miss out on the lives of his children. During the missions, two of the four astronauts lose their lives, and one of the robots has to abandon the crew as well. If one includes the Lazarus missions, another twelve astronauts lose their lives. It is ultimately Cooper's sacrifice of going into Gargantua to get the data they need that gives humanity what it needs for survival, but fifteen humans and a robot had to lose their lives for that information, not counting the humans who died on Earth while waiting for salvation. In *Infinity War*, not much can be said yet about the cost of the operation to save humanity, as this does not happen until Avengers: Endgame. If one looks at the sacrifice Thanos makes to restore balance to the universe, however, it is a sacrifice of half of all life that pays for this rescue mission.

While these sacrifices directly compared seem like they get progressively bigger as time progresses, it is important to keep in mind that each film also discusses the issue of the environment on a much larger scale. In *The Lorax*, it is just about Thneedville and the valley of the Truffula trees. In *Interstellar*, this is scaled up to be the entirety of Earth that needs rescuing. In Avengers: Infinity War, the scale changes again to be the entire known universe. With each increase in the size of what needs saving, there is an increase in the size of what needs to be sacrificed. There is no saving possible without a sacrifice. While the loss of life and limb may not be directly applicable to real life, this does provide an ecocritical lesson. Whereas we may expect to be able to salvage the environment without losing anything in the process, this is simply not possible. Something will have to be given up on, whether this is a luxury such as flying to vacations, or a piece of land to give nature more space, humanity cannot go on living as it has and expect anything to change.

Another thing that the case study films have in common is that in each case their ratings given by the audience are much higher than those given by the critics of newspapers and review websites. This proves the distance that exists between critics and the audience of "real" viewers. The analysis of reviews shows, however, that select members of the audience do pick up on the same things that the professional reviewers pick up on, albeit in less elaborate fashion. In each film, there were at least a few people who recognized or acknowledged the ecocritical message, both in the audience and in the pool of professional critics. While this indicates that there will be recognition if an ecocritical message is slipped into a film, the majority of the audience review shows that the main thing that is remembered about a movie is whether it was good or bad, and not what message to take from it. If one

takes the amount of longer reviews as an indication of which people picked up on the message to such an extent that they remember it and wish to discuss their viewing, the truth is that only a very small percentage of the audience actually receives the message consciously and sees the film as more than entertainment, even in *The Lorax*. This suggests that Hollywood films are far from an optimal means of influencing society and initiating change, although the small group of people that are changed after watching a film might be enough to make the world just a bit better.

Conclusion

At the start of this study, the main question was posited how Hollywood films in the 2010s portray the issues surrounding the environment and how characters are portrayed in relation to nature and the environment. This question was further subdivided into categories pertaining to the message of the film and how this is shown in the film, and the reception of the film among critics and the general audience. The discussion above shows that depending on the genre and the year of release, the issues with the environment are either portrayed overtly and whatever message is in the film is inserted in a manner in which it is hard to miss, or the issues with the environment are hidden within metaphors or other battles, and the message is embedded deeper in the film, easier to overlook.

The message in each film, while varying in terms of the inherent evil or inherent good of humanity, shows that in some way, survival is possible, and the tone of the films is mostly positive, with the exception of *Infinity War*. With that film, however, one must take into account that there is a second part to it, Avengers: Endgame, in which the universe is saved after all, with a much smaller sacrifice to be paid than half of all life. Taking this into account, the tone of the films is decidedly hopeful.

In terms of the reception it is clear that while critics notice more about the film and are more elaborate in explaining their views, the general audience is not far behind in terms of noticing things, and there is certainly a percentage of the audience that leaves reviews that note all the points that professionals notice as well. In terms of the ecocritical message, however, this seems to be picked up less easily by the general audience. The ratings of films are higher when considering the audience reviews, either because of the higher number of votes, or there is a distance between critics and audience in terms of their likes and dislikes.

Overall, Hollywood puts out its films on the environment in the 2010s with an air of hope and the films are received well. Whether this hope is misguided is as of yet unknown.

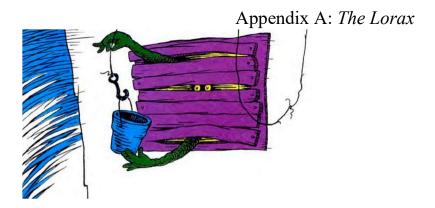


Fig. 1 The most that is seen of the Once-ler in the book. From: Geisel, Theodor S. The Lorax, by Dr. Seuss. Random House, 1971.

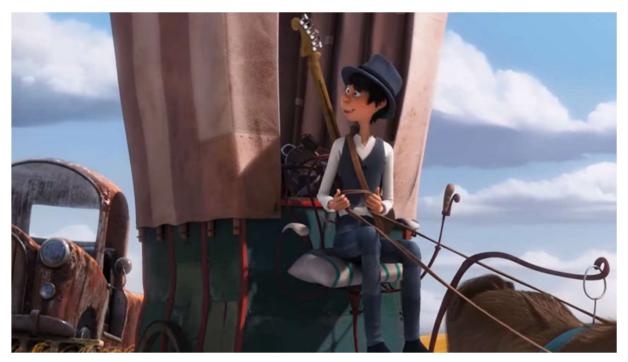


Fig. 2 The Once-ler is shown fully during the narrative detailing his discovery of the valley of the Truffula trees and his subsequent destruction of the valley. From: *The Lorax*. Directed by Chris Renaud, Universal Pictures, 2012.





Fig. 3 The evolution from the luscious green natural valley of the Truffula trees to a dark, industrialized wasteland. From: The Lorax. Directed by Chris Renaud, Universal Pictures, 2012.

[ONCE-LER]

How ba-a-a-d can I be? I'm just doing what comes naturally--How ba-a-ad can I be? I'm just following my destiny

How ba-a-a-ad can I be? I'm just doing what comes naturally

How ba-a-ad can I be?

How bad can I possibly be?

[ONCE-LER & (Chorus)]

Well, there's a principle of nature (principle of nature)

That almost every creature knows

Called survival of the fittest (survival of the fittest)

And check it, this is how it goes:

The animal that [wins] gotta scratch, and fight, and claw, and bite, and punch!

And the animal that doesn't, well the animal that doesn't

Winds up someone else's lu-lu-lu-lu-lunch (munch, munch, munch, munch, munch)

I'm just sayin'!

How ba-a-a-ad can I be? I'm just doing what comes naturally--

How ba-a-a-ad can I be? I'm just following my destiny

How ba-a-a-ad can I be? I'm just doing what comes naturally

How ba-a-a-ad can I be?

How bad can I possibly be?

There's a principle in business (principle in business)

That everybody knows is sound

It says the people with the money (people with the money)

Make this ever-loving world go 'round;

So I'm biggering my company, I'm biggering my factory, I'm biggering my corporate sign!

Everybody out there, you take care of yours

And me? I'll take care. Of

Mine, mine, mine, mine! (Shake that bottom line!)

Let me hear you say 'smogulous smoke'! (smogulous smoke!)

Schloppity schlop! (schloppity schlop!)

Complain all you want, it's never ever, ever, ever gonna stop--

Come on how bad can I possibly be?

How ba-a-a-ad can I be? I'm just building the economy

How ba-a-a-ad can I be? Just look at me pettin' this puppy!

How ba-a-a-ad can I be? A portion of proceeds goes to charity.

How ba-a-a-ad can I be? How bad can I possibly be? Let's see:

(How ba-a-a-ad can I be?) All the customers are buying!

(How ba-a-a-ad can I be?) And the money's multiplying!

(How ba-a-a-ad can I be?) And the PR people are lying!

(How ba-a-a can I be?) And the lawyers are denying!

(How ba-a-a-ad can I be?) Who cares if a few trees are dying?

(How ba-a-a-ad can I be?) This is all so gratifying!

How bad...

How bad can this possibly be!?

Fig. 4 Lyrics to the song "How Bad Can I Be" by Ed Helms and Kool Kojak, with correction.

From: "How Bad Can I Be." Genius, genius.com/Ed-helms-how-bad-can-i-be-lyrics.

Accessed 13 Aug. 2020.



Fig. 5 The contrast between Thneedville on the left and the desolate valley on the right and surrounding the wall. From: *The Lorax*. Directed by Chris Renaud, Universal Pictures, 2012.

Cy, O' Hare Delivery (You don't know him): You don't know me But my name's Cy I'm just the O'Hare Delivery Guy But it seems like trees might be worth a try So I say let it grow

Dan:

My name is Dan

Rose:

And my name's Rose

Dan and Rose:

Our son Wesley kind of glows And that's not good, so we suppose We should let it grow!

Ted's Mom: Let it grow Let it grow

Crowd:

You can't reap what you don't sow Plant a seed inside the earth Just one way to know its worth Let's celebrate the world's rebirth

We say let it grow!

Marie:

My name's Marie And I am three! I would really like to see a tree! La la la la la la la la la li I say let it grow

Grammy Norma:

I'm Grammy Norma I'm old, and I've got gray hair But I remember when trees were everywhere And no one had to pay for air So I say let it grow!

Crowd:

Let it grow Let it grow Like it did so long ago! It is just one tiny seed But it's all we really need It's time to change the life we lead Time to let it grow!

O'Hare:

My name's O'Hare I'm one of you I live here in Thneedville too The things you say just might be true It could be time to start anew And maybe change my point of view... Naw! I say let it die! Let it die Let it die Let it shrivel up and... Come on! Who's with me? Huh?

Marie: Nobody

Singing Delivery Man: You greedy dirtbag!

Crowd:

Let it grow Let it grow Let the love inside you show Plant a seed inside the earth Just one way to know its worth Let's celebrate the world's rebirth We say let it grow!

Let it grow Let it grow You can't reap what you don't sow It is just one tiny seed But it's all we really need It's time to banish all your greed Imagine Threedville flowered and treed! Let this be our solemn creed! We say let it grow (In Thneedville) We say let it grow (It's a brand new dawn) We say let it grow (In Thneedville) We say let it grow It's a brand new dawn

Fig. 6 Lyrics to the song "Let it Grow", produced by John Powell and Tricky Stewart. From: "Let it Grow." Genius, genius.com/The-lorax-singers-let-it-grow-lyrics. Accessed 16 Aug 2020.



Fig. 7 The Truffula saplings growing outside the house of the Once-ler in the valley. From: The Lorax. Directed by Chris Renaud, Universal Pictures, 2012.

Appendix B: Interstellar





Fig. 8 The landscape in *Interstellar* is bleak and monotonous, all colors muted by the dust in the air. From: Interstellar. Directed by Christopher Nolan, Warner Bros. Pictures, 2014.

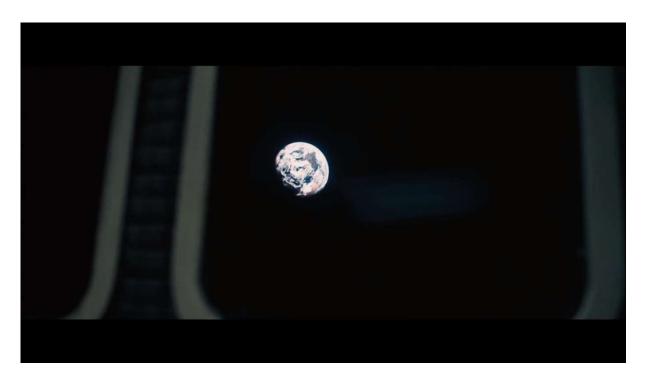


Fig. 9 Earth as seen from the space ship, a solitary beacon of light in the darkness. From: Interstellar. Directed by Christopher Nolan, Warner Bros. Pictures, 2014.





Fig. 10 The small shape of man against the massive power of nature. First picture: the Endurance as a small speck of white visible against Saturn. Second picture: the smaller ranger ship in a wave on Miller's planet. Third picture: the scale of the Endurance compared to the black hole Gargantua. From: Interstellar. Directed by Christopher Nolan, Warner Bros. Pictures, 2014.

Appendix C: Avengers: Infinity War

Fig. 11 Wakanda's infrastructure stands nestled in a luscious green valley. From: Avengers: Infinity War. Directed by Joe Russo and Anthony Russo, Marvel Studios, 2018.



Fig. 12 The ruins of Titan, similar to the valleys of Blade Runner 2049, right down to the orange hue and the dust. From: Avengers: Infinity War. Directed by Joe Russo and Anthony Russo, Marvel Studios, 2018.



Fig. 13 Thanos, equipped with the Reality stone, shows his home planet Titan as it once was, before it was destroyed because of overpopulation and dwindling resources. From: Avengers: Infinity War. Directed by Joe Russo and Anthony Russo, Marvel Studios, 2018.



Fig. 14 Thanos' retirement on the slope of a green mountain, overlooking a luscious valley under a blue sky, while the sun rises. From: Avengers: Infinity War. Directed by Joe Russo and Anthony Russo, Marvel Studios, 2018.

Works Cited

- Alaimo, Stacy. "Discomforting Creatures: Monstrous Natures in Recent Films." Beyond Nature Writing: Expanding the Boundaries of Ecocriticism, edited by Karla Armbruster and Kathleen R. Wallace, University Press of Virginia, 2001, pp. 279– 296.
- Alter, Charlotte et al. "Time 2019 Person of the Year: Greta Thunberg." TIME, time.com/person-of-the-year-2019-greta-thunberg/. Accessed 24 Aug. 2020.
- Andersen, Robin, and Jonathan Alan Gray. Battleground: the Media. Greenwood Press, 2008.
- Andrews, Nigel. "Interstellar film review." Financial Times, 6 Nov. 2014, www.ft.com/content/630b57e6-65a8-11e4-a454-00144feabdc0?ftcamp=published links%2Frss%2Flife-arts filmtelevision%2Ffeed%2F%2Fproduct. Accessed 21 Aug. 2020.
- Avengers: Infinity War. Directed by Joe Russo and Anthony Russo, Marvel Studios, 2018.
- "Avengers: Infinity War (2018)." IMDB, Amazon, www.imdb.com/title/tt4154756/?ref =nv sr srsg 0. Accessed 22 Aug. 2020.
- "Avengers: Infinity War." Rotten Tomatoes, www.rottentomatoes.com/m/avengers infinity war. Accessed 22 Aug. 2020.
- "Avengers: Infinity War Reviews- All Audience." Rotten Tomatoes, www.rottentomatoes.com/m/avengers infinity war/reviews?type=user. Accessed 23 Aug. 2020.
- Balaey, Michelle, and Cheryll Glotfelty. "The Formation of a Field: Ecocriticism in America—An Interview with Cheryll Glotfelty." *PMLA*, vol. 127, no. 3, 2012, pp. 607-616.
- Balmford, Andrew, et al. "Hollywood, Climate Change, and the Public." Science, vol. 305, no. 5691, 2004, p. 1713.
- Bartsch, Anne. "Meta-Emotion: How Films and Music Videos Communicate Emotions About Emotions." *Projections*, vol. 2, no. 1, 2008, pp. 45-59.
- Berardinelli, James. "Interstellar (United States/United Kingdom, 2014)." Reelviews, 4 Nov. 2014, www.reelviews.net/reelviews/interstellar. Accessed 21 Aug. 2020.

- Bishko, Leslie. "The Uses and Abuses of Cartoon Style in Animation." Animation Studies, vol. 2, 2007, pp. 24-35.
- Bradshaw, Peter. "Interstellar review: Nolan's biggest spectacle and biggest disappointment." The Guardian, 5 Nov. 2014, www.theguardian.com/film/2014/nov/05/interstellar-review-christopher-nolanmatthew-mcconaughey. Accessed 21 Aug. 2020.
- ---. "The Lorax review." The Guardian, 26 July 2012, www.theguardian.com/film/2012/jul/26/dr-seuss-the-lorax-review. Accessed 18 August 2020.
- Brereton, Pat. Hollywood Utopia: Ecology in Contemporary American Cinema. Intellect Books, 2005. EBSCOhost.
- Brown, Royal S. Overtones and Undertones: Reading Film Music. E-book, University of California Press, 1994, hdl-handle-net.ru.idm.oclc.org/2027/heb.08124.
- Buell, Lawrence. "The Emergence of Environmental Criticism." The Future of Environmental Criticism, by Buell, Blackwell Publishing, 2005, pp. 1-28.
- Caraway, Kylie, and Brett R. Caraway. "Representing Ecological Crises in Children's Media: An Analysis of The Lorax and Wall-E." Environmental Communication, vol. 14, no. 5, 2020, pp. 686-697. DOI: 10.1080/17524032.2019.1710226.
- Carson, Rachel. Silent Spring. 1962. Houghton Mifflin Harcourt, 2002. PDF.
- Chang, Justin. "Review: "Avengers: Infinity War": A Rousing Marvel Mash-up, or a Truly Epic Tease?" Los Angeles Times, 24 Apr. 2018, www.latimes.com/entertainment/movies/la-et-mn-avengers-infinity-war-review-20180424-story.html. Accessed 23 Aug. 2020.
- Chu, Kiu-wai. "Ecocinema." Oxford Bibliographies Cinema and Media Studies. Oxford University Press, 2017.
- Clark, Timothy. The Cambridge Introduction to Literature and the Environment. Cambridge University Press, 2011. EBSCOhost.
- Corbett, Charles J., and Richard P. Turco. "Film and Television Industry." Southern California Environmental Report Card, 2006, pp. 5-11, 40.

- Daniell, Mark. "Avengers: Infinity War review: Marvel's ambitious crossover a total knockout." Toronto Sun, 25 Apr. 2018, torontosun.com/entertainment/movies/avengers-infinity-war-review-marvelsambitious-crossover-a-total-knockout. Accessed 23 Aug. 2020.
- De Bruyn, Ben. "Why Look at Dust Storms? Cosmic Subjects, Vibrant Matter and Interstellar's Climate Change." Collateral: Online Journal for Cross-Cultural Close Reading, Cluster 1, 2016. www.collateral-journal.com/index.php?cluster=1.
- Dominey, Nathaniel J. et al. "Dr Seuss and the real Lorax." *Nature Ecology and Evolution*, vol. 2, 2018, pp. 1196-1198. DOI: 10.1038/s41559-018-0628-x.
- "Dr. Seuss." Penguin Random House, www.penguinrandomhouse.com/authors/2000585/drseuss/. Accessed 10 Aug. 2020.
- "Dr Seuss' The Lorax." Rotten Tomatoes, www.rottentomatoes.com/m/the lorax 2012. Accessed 16 Aug. 2020.
- "Dr Seuss' The Lorax Reviews- All Audience." *Rotten Tomatoes*, www.rottentomatoes.com/m/the lorax 2012/reviews?type=user. Accessed 16 Aug. 2020.
- Estok, Simon C. "Ecomedia and Ecophobia." *Neohelicon*, vol. 43, 2016, pp. 127-145. DOI: 10.1007/s11059-016-0335-z.
- Ferguson, Christopher J. "Interstellar Dreams Big." *PsycCRITIQUES*, vol. 16, no. 4, 2015, article 10. DOI: 10.1037/a0038758.
- Fernandez, Jay A. "Writer with Real Stars in His Eyes." The Los Angeles Times, 28 Mar. 2007, www.latimes.com/archives/la-xpm-2007-mar-28-et-scriptland28-story.html. Accessed 18 Aug. 2020.
- Flynn, Meagan. "Chanting 'lock her up,' Michigan protesters waving Trump flags mass against Gov. Gretchen Whitmer's coronavirus restrictions." The Washington Post, 16 Apr. 2020, www.washingtonpost.com/nation/2020/04/16/michigan-whitmerconservatives-protest/. Accessed 31 July 2020.
- Galloway, Stephen. "Interstellar's' Christopher Nolan, Stars Gather to Reveal Secrets of the Year's Most Mysterious Film." *The Hollywood Reporter*, 22 Oct. 2014, (archived)

- web.archive.org/web/20171107124756/http://www.hollywoodreporter.com/news/inter stellars-christopher-nolan-stars-gather-742727. Accessed 18 Aug. 2020.
- Garrard, Greg. Ecocriticism. Taylor & Francis [CAM], 2004. EBSCOhost.
- Gautier, Ana María Ochoa. "Acoustic multinaturalism, the value of nature, and the nature of Music in Ecomusicology." Boundary 2, vol. 43, no. 1, 2016, pp. 107-141.
- "Geisel, Theodor (Dr. Seuss)." American Environmental Leaders, Grey House Publishing, 3rd edition, 2018. Credo Reference.
- Geisel, Theodor S. *The Lorax, by Dr. Seuss.* Random House, 1971.
- Glotfelty, Cheryll. "Ecocriticism." Encyclopedia of American Studies, edited by Simon J. Bronner, Johns Hopkins University Press, 2018. eas-ref.press.jhu.edu/view?aid=77.
- Goodykoontz, Bill. "Review: Mind-bending theories fill gorgeous 'Interstellar'." USA Today Network, 3 Nov. 2014, eu.azcentral.com/story/entertainment/movies/2014/11/03/review-mind-bendingtheories-fill-gorgeous-interstellar/18424005/. Accessed 21 Aug. 2020.
- Graham, Adam. "Interstellar goes to infinity and way beyond reason." The Detroit News, 5 Nov. 2014, eu.detroitnews.com/story/entertainment/movies/2014/11/04/interstellarinfinity-beyond-reason/18488285/. Accessed 21 Aug. 2020.
- ---. "Review: Overkill drags down bloated 'Avengers: Infinity War'." The Detroit News, 25 Apr. 2018, eu.detroitnews.com/story/entertainment/movies/2018/04/24/adam-grahamdetroit-news-movie-review-overkill-avengers-infinity-war/34215443/. Accessed 23 Aug. 2020.
- Hegglund, Jon. "Patrick Keiller's Ambient Narratives: Screen Ecologies of the Built Environment." Interdisciplinary Studies in Literature and Environment, vol. 20, no. 2, 2013, pp. 274-295. JSTOR, DOI:10.1093/isle/ist026.
- Hibberd, James. "15 maddening 'Interstellar' plot holes." Entertainment Weekly, 8 Nov. 2014, ew.com/article/2014/11/08/interstellar-plot-holes/. Accessed 19 August 2020.
- Hoad, Phil. "Good ol' future boys: Interstellar and sci-fi's obsession with Americana." The Guardian, 4 Nov. 2014,

- www.theguardian.com/film/filmblog/2014/nov/04/interstellar-sci-fi-americana-moviesymbolism. Accessed 15 Aug. 2020.
- Howell, Peter. "Avengers: Infinity War satisfies thanks to many good heroes and one great villain." The Star, 24 Apr. 2018, www.thestar.com/entertainment/movies/review/2018/04/24/avengers-infinity-warsatisfies-thanks-to-many-good-heroes-and-one-great-villain.html. Accessed 23 Aug. 2020.
- "Hundreds demonstrate against Covid-19 measures in Amsterdam." DutchNews.nl, 5 July 2020, www.dutchnews.nl/news/2020/07/hundreds-demonstrate-against-covid-19measures-in-amsterdam/. Accessed 31 July 2020.
- Interstellar. Directed by Christopher Nolan, Warner Bros. Pictures, 2014.
- "Interstellar (2014)." Box Office Mojo. IMDB Pro, www.boxofficemojo.com/title/tt0816692/?ref =bo se r 1. Accessed 20 Aug. 2020.
- "Interstellar." Rotten Tomatoes, www.rottentomatoes.com/m/interstellar 2014. Accessed 22 Aug. 2020.
- "Interstellar Reviews- All Audience." Rotten Tomatoes, www.rottentomatoes.com/m/interstellar 2014/reviews?type=user. Accessed 22 Aug. 2020.
- Ingram, David. Green Screen: Environmentalism and Hollywood Cinema. University of Exeter Press, 2000.
- ---. Jukebox in the Garden: Ecocriticism and American Popular Music Since 1960. Brill Rodopi, 2010. EBSCOhost.
- ---. "Rethinking Eco-Film Studies." The Oxford Handbook of Ecocriticism, edited by Greg Garrard, Oxford University Press, March 3, 2014. Oxford Handbooks Online.
- Iovino, Serenella, and Serpil Oppermann. "Theorizing Material Ecocriticism: A Diptych." ISLE: Interdisciplinary Studies in Literature and Environment, vol. 19, no. 3, 2012, pp. 448–475.

- Ivakhiv, Adrian. "Green Film Criticism and its Futures." Interdisciplinary Studies in Literature and Environment, vol. 15, no. 2, 2008, pp. 1-28. JSTOR, www.jstor.org/stable/44086718.
- Jaworski, Michelle. "Breaking down each phase of the Marvel Cinematic Universe." Daily Dot, 18 Aug. 2020, www.dailydot.com/parsec/marvel-phases-mcu-timeline/. Accessed 23 Aug. 2020.
- Jensen, Jeff. "Inside 'Interstellar,' Christopher Nolan's Emotional Space Odyssey." Entertainment Weekly, 16 Oct. 2014, (archived) web.archive.org/web/20141017144424/http://insidemovies.ew.com/2014/10/16/interst ellar-christopher-nolan-anne-hathaway/. Accessed 19 Aug. 2020.
- Kaplan, E. Ann. Climate Trauma: Foreseeing The Future in Dystopian Film and Fiction. Rutgers University Press, 2015.
- Kassabian, Anahid. Hearing Film: Tracking Identifications in Contemporary Hollywood Film Music. Routledge, 2001.
- Kaye, Andrew L. ""The film score and the African musical experience: some comments on a work in progress." Trans. Revista Transcultural de Música, no. 11, 2007. ISSN:1697-0101.
- Kerridge, Richard. "Ecocritical Approaches to Literary Form and Genre: Urgency, Depth, Provisionality, Temporality." The Oxford Handbook of Ecocriticism, edited by Greg Garrard, Oxford University Press, December 16, 2013. Oxford Handbooks Online.
- ---. "Ecocriticism." Year's Work in Critical and Cultural Theory, vol. 22, no. 1, 2014, pp. 373-399.
- Kluwick, Ursula. "Talking About Climate Change: The Ecological Crisis and Narrative Form." The Oxford Handbook of Ecocriticism, edited by Greg Garrard, Oxford University Press, March 3, 2014. Oxford Handbooks Online.
- Lane, Anthony. ""Avengers: Infinity War" and "Let the Sunshine In"." The New Yorker, 26 Apr. 2018, www.newyorker.com/magazine/2018/05/07/avengers-infinity-war-and-letthe-sunshine-in. Accessed 23 Aug. 2020.

- Leiserowitz, Anthony A. "Before and After The Day After Tomorrow: A U.S. Study of Climate Change Risk Perception." Environment: Science and Policy for Sustainable Development, vol. 46, no. 9, 2004, pp. 22-39.
- Lemmer, Erika. "Ecocriticism." JLS/TLW, vol. 23, no. 3, 2007, pp. 223-227. DOI: 10.1080/02564710701568097.
- Liong, Mario. (2017). "The humanist Interstellar (2014) and its discontent." Cultural Studies@Lingnan, 57. Retrieved from http://commons.ln.edu.hk/mcsln/vol57/iss1/4/.
- Macdonald, Moira. "Avengers: Infinity War' has its thrills but feels overstuffed." Seattle Times, 24 Apr. 2018, www.seattletimes.com/entertainment/movies/avengers-infinitywar-has-thrilling-battles-and-moments-that-click-but-feels-a-bitoverstuffed/?utm source=RSS&utm medium=Referral&utm campaign=RSS movies . Accessed 23 Aug. 2020.
- MacDonald, Scott. "Toward an Eco-Cinema." Interdisciplinary Studies in Literature and *Environment*, vol. 11, no. 2, 2004, pp. 107–132.
- Manzo, Kate. "The Usefulness of Climate Change Films." Geoforum, vol. 84, 2017, pp. 88-94.
- Mazda. "Liberty Mazda presents: the 2012 Mazda and the Lorax!" Youtube, uploaded by cherylasm, 29 Feb. 2012, www.youtube.com/watch?v=7DHTSg1k7UY.
- Mazel, David, editor. A century of early ecocriticism. University of Georgia Press, 2001.
- Marland, Pippa. "Ecocriticism." *Literature Compass*, vol. 10, no. 11, 2013, pp. 846–68, DOI:10.1111/lic3.12105.
- Martin, Michael A., and Peter Sanderson. "The Avengers." Encyclopedia Britannica, 25 April 2019, www.britannica.com/topic/the-Avengers-superhero-team. Accessed 22 Aug. 2020.
- McCarthy, Jeffrey Mathes. "Beyond Romantic Nature: Ecocriticism's New Shades of Green." Journal of Environmental Studies and Sciences, vol. 2, no. 3, 2012, pp. 278-284.
- McDonagh, Pierre, and Pat Brereton. "Screening Not Greening: An Ecological Reading of the Greatest Business Movies." Journal of Macromarketing, vol. 30, no. 2, 2010, pp. 133– 146.

- McFarland, Sarah E. "Dancing Penguins and a Pretentious Raccoon: Animated Animals and 21st Century Environmentalism." *Animals and Agency: An Interdisciplinary* Exploration, edited by Hediger, Ryan, and Sarah E. McFarland, Brill, 2009. EBSCOhost.
- Moore, Ellen Elizabeth. "Green Screen or Smokescreen? Hollywood's Messages about Nature and the Environment." Environmental Communication, vol. 10, no. 5, 2016, pp. 539-555. Taylor & Francis Online, DOI:10.1080/17524032.2015.1014391.
- ---. Landscape and the Environment in Hollywood Film: The Green Machine. E-book, Palgrave Macmillan, 2017, DOI 10.1007/978-3-319-56411-1.
- Morris, Wesley. "The Lorax: 'Lorax' true to Seuss rhyme and reason." The Boston Globe, 2 March 2012, archive.boston.com/ae/movies/articles/2012/03/02/a cartoon musical with rhyme an d reason/. Accessed 17 Aug. 2020.
- Murray, Robin L., and Joseph K. Heumann. *Ecology and Popular Film: Cinema on the Edge*. SUNY Press, 2009. EBSCOhost.
- ---. That's All Folks?: Ecocritical Readings of American Animated Features. University of Nebraska Press, 2011. JSTOR, www.jstor.org/stable/j.ctt1df4gsn.
- Nasaw, Daniel, and Kate Dailey. "Five Interpretations of The Lorax." BBC News, 3 March 2012, www.bbc.com/news/magazine-17224775. Accessed 16 August 2020.
- Norton, Andrew, and John Leaman. The Day After Tomorrow: Public Opinion on Climate Change. MORI Social Research Institute, 2004.
- O'Connell, Sean. "Why Interstellar's Ending Doesn't Mean What You Think It Means." Cinema Blend, www.cinemablend.com/new/Why-Interstellar-Ending-Doesn-t-Mean-What-You-Think-It-Means-68115.html. Accessed 19 August 2020.
- Orr, Christopher. "Avengers: Infinity War is an Extraordinary Juggling Act." The Atlantic, 26 Apr. 2018, www.theatlantic.com/entertainment/archive/2018/04/avengers-infinitywar-marvel-review/558983/. Accessed 23 Aug. 2020.
- ---. "Interstellar: A Preposterous Epic." The Atlantic, 7 Nov. 2014, www.theatlantic.com/entertainment/archive/2014/11/interstellar-a-preposterousepic/382478/. Accessed 21 Aug. 2020.

- Palmer, Louis H. III. "Articulating the Cyborg: An Impure Model for Environmental Revolution." The Greening Of Literary Scholarship: Literature, Theory, and The Environment, edited by Steven Rosendale, University Of Iowa Press, 2002, pp. 165-177.
- Perkowitz, Sidney. Hollywood Science: Movies, Science, and the End of the World. Columbia University Press, 2010. EBSCOhost.
- Powell, John. "The Lorax [Soundtrack] 12 At The Park [HD]." Youtube, uploaded by MrFrancoisLeScore, 15 March 2012, www.youtube.com/watch?v=iredhIQKbC0&list=PL07388A6E4CC94A30&index=12.
- Reeve, Christopher. "Christopher Reeve at the Oscars." Youtube, uploaded by Oscars, 1 July 2009, https://www.youtube.com/watch?v=ffSy3-PJ5QI.
- Reinstein, Mara. "Interstellar Review: Matthew McConaughey's "Gripping" Film Is "a Standout," Oscar Winner Lacks Chemistry With Anne Hathaway." US Weekly, 5 Nov. 2014, www.usmagazine.com/entertainment/news/interstellar-review-matthewmcconaugheys-gripping-film-stands-out-2014511/. Accessed 21 Aug. 2020.
- Rome, Emily. "The Lorax' targeted for its green credentials." Los Angeles Times, 1 March 2012, www.latimes.com/entertainment/la-xpm-2012-mar-01-la-et-lorax-20120301story.html. Accessed 10 Aug. 2020.
- Rosteck, Thomas, and Thomas S. Frentz. "Myth and multiple readings in environmental rhetoric: The case of An Inconvenient Truth." Quarterly Journal of Speech, vol. 95, no. 1, 2009, pp. 1-19. Taylor & Francis Online. DOI: 10.1080/00335630802621086.
- Rozsa, Matthew. ""Avengers: Infinity War": Not just a mediocre, muddled mess but possibly a dangerous precedent." Salon, 27 Apr. 2018, www.salon.com/2018/04/27/the-avengers-infinity-war-not-just-a-mediocre-muddledmess-but-possibly-a-dangerous-precedent/. Accessed 23 Aug. 2020.
- Rueckert, William. "Into and Out of the Void: Two Essays." The Iowa Review, vol. 9, no. 1, 1978, pp. 62-86. DOI: 10.17077/0021-065X.2334.
- Rust, Stephen. "Ecocinema and the Wildlife Film." The Cambridge Companion to Literature and the Environment, edited by Louise Westling, Cambridge University Press, 2013, pp. 226–240. Cambridge Core.

- Sachs, Ben. "Avengers: Infinity War." Chicago Reader, 11 Mar. 2020, www.chicagoreader.com/chicago/avengers-infinity-war/Film?oid=43195362. Accessed 23 Aug. 2020.
- ---. "Matthew McConaughey goes nowhere fast in *Interstellar*." Chicago Reader, 5 Nov. 2014, www.chicagoreader.com/chicago/interstellar-christopher-nolan-jonathan-nolanmatthew-mcconaughey-anne-hathaway/Content?oid=15546954. Accessed 21 Aug. 2020.
- ---. "The Lorax 3D." Chicago Reader, 2 March 2012, www.chicagoreader.com/chicago/thelorax-3d/Film?oid=5540034. Accessed 16 Aug. 2020.
- Salvador, Michael, and Todd Norton. "The Flood Myth in the Age of Global Climate Change." *Environmental Communication*, vol. 5, no. 1, 2011, pp. 45-61. DOI: 10.1080/17524032.2010.544749
- Slovic, Scott. "EDITOR'S NOTE." Interdisciplinary Studies in Literature and Environment, vol. 19, no. 3, 2012, pp. 443–444. *JSTOR*.
- Starosielski, Nicole. "'Movements that are Drawn': A History of Environmental Animation from The Lorax to FernGully to Avatar." The International Communication Gazette, vol. 73, no. 1-2, 2011, pp. 145-163. SAGE, DOI: 10.1177/1748048510386746.
- Sutton, Laurel. "Why the Lorax/Mazda Ads are so Insulting." Fast Company, 14 March 2012, www.fastcompany.com/1823255/why-lorax-mazda-ads-are-so-insulting. Accessed 17 Aug. 2020.
- Taylor, Drew. "Review: 'The Lorax' Is Cute But Weighed Down By Its Faithfulness To The Source Material." IndieWire, 29 Feb. 2012, www.indiewire.com/2012/02/review-thelorax-is-cute-but-weighed-down-by-its-faithfulness-to-the-source-material-253640/. Accessed 16 Aug. 2020.
- "The Lorax by Dr. Seuss." Penguin Random House, www.penguinrandomhouse.com/books/43157/the-lorax-by-dr-seuss/. Accessed 10 Aug. 2020.
- "The Lorax." Box Office Mojo. IMDB Pro, www.boxofficemojo.com/release/rl2858518017/?ref =bo rs table 2. Accessed 10 Aug. 2020.

- "The Lorax (2012)" IMDB. Amazon, www.imdb.com/title/tt1482459/fullcredits/?ref =tt ov st sm. Accessed 10 Aug. 2020.
- *The Lorax*. Directed by Chris Renaud, Universal Pictures, 2012.
- Time Out. "Dr Seuss' The Lorax." Time Out, 24 July 2012, www.timeout.com/en_gb/film/drseuss-the-lorax. Accessed 16 Aug. 2020.
- Travers, Peter. "Avengers: Infinity War' Review: All-Star Marvel Team-Up Is Superhero Pile-Up." Rolling Stone, 24 Apr. 2018, www.rollingstone.com/movies/moviereviews/avengers-infinity-war-review-all-star-marvel-team-up-is-superhero-pile-up-628954/. Accessed 23 Aug. 2020.
- ---. "Interstellar: The white knight rises: Christopher Nolan's space odyssey boldly blends the cosmic and the intimate." Rolling Stone, 5 Nov. 2014, www.rollingstone.com/movies/movie-reviews/interstellar-93954/. Accessed 21 Aug. 2020.
- Trexler, Adam. "Mediating Climate Change: Ecocriticism, Science Studies, and The Hungry Tide." The Oxford Handbook of Ecocriticism, edited by Greg Garrard, Oxford University Press, March 3, 2014. Oxford Handbooks Online.
- Trexler, Adam, and Adaline Johns-Putra. "Climate change in literature and literary criticism." WIREs Climate Change, vol. 2, 2011, pp. 185-200. DOI: 10.1002/wcc.105
- Toop, David. "Environmental music." Grove Music Online, Oxford University Press, 2001.
- "UN launches year-long celebration of vital role of world's forests." *United Nations*: Department of Economic and Social Affairs: Forests, 2 Feb. 2011, www.un.org/esa/forests/climate-change/2011/02/un-launches-year-long-celebrationof-vital-role-of-worlds-forests/index.html.
- Waage, Fred, et al. "Ecocriticism's Past and Future." PMLA, vol. 128, no. 3, 2013, pp. 778-781. JSTOR.
- Wehr, Kevin, editor. Green Culture: An A-to-Z Guide. SAGE Publications, Inc, 2011. EBSCOhost.

- Weik von Mossner, Alexa. "Afraid of the Dark and Light: Visceralizing Ecocide in The Road and Hell." Ecozon@, vol. 3, no. 2, 2012, pp. 42-56.
- Whitty, Stephen. "The Lorax' review: Somebody call a doctor." Inside Jersey-NJ.com, 2 March 2012, www.nj.com/entertainment/movies/2012/03/the lorax review dr seuss.html. Accessed 17 Aug. 2020.
- Wolfe, Dylan. "The Ecological Jeremiad, the American Myth, and the Vivid Force of Color in Dr. Seuss's *The Lorax*." *Environmental Communication*, vol. 2, no. 1, 2008, pp. 3-24. Taylor & Francis Online, DOI: 10.1080/17524030801936707.
- Woolery, George W. Animated TV Specials: The Complete Directory of the first Twenty-five Years, 1962-1987. Scarecrow Press, 1989, pp. 126-127. Internet Archive, archive.org/details/animatedtvspecia0000wool/page/126/mode/2up.
- Woolley, Agnes. "'There's a Storm Coming!": Reading the Threat of Climate Change in Jeff Nichols's Take Shelter." Interdisciplinary Studies in Literature and Environment, vol. 21, no. 1, 2014, pp. 174-191. JSTOR, DOI:10.1093/isle/isu036.
- Zapf, Hubert, editor. Handbook of Ecocriticism and Cultural Ecology. Vol. 2, Walter de Gruyter, 2016.