Green Horror: The Use of Environmental Themes in Modern American Horror Cinema

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Abstract

This study began with the question of what environmental themes may be present in contemporary American horror media and what any trends in these narratives or works may suggest about American understanding of, beliefs towards and fears about the potential environmental future. With guidance from current and former staff at the Askwith Media Library at the University of Michigan, I conducted a review of films that elicit much of their audience engagement through horror while having clear environmental themes or narratives, then selected twelve cinema-released films for critical analysis. Each shared a central premise in which nature shows a widespread response to collective human abuse of the natural world. My criteria excluded numerous examples of works with similar themes, but which did not have as direct a message. I also privileged films that were critically acclaimed and more widely discussed. Finally, I honed for comparative analysis of tropes and themes on storylines with an overall sense that the environment itself is not as much of a threat as other humans when it comes to survival. My results and discussion raise concerns with some of the messaging in recent environmentally progressive discourse that uses a similar framing of threat to bolster environmental support. While there has been an understanding that specific discussions of human threat in relationship to the environment compels people emotionally, it is not the result of greater environmental care or understanding, but often heavily influenced by other fears, including anxiety about increasing human mobility, demographic pressures, and cultural differences. Such rhetoric aligns not only with progressive environmental campaigns, however, but also with recent examples of media use by white nationalist and supremacist groups, specifically in an attempt to demonize immigrants to the United States of America and Europe. As such, I argue that the critical analysis of popular cinematic narratives is crucial to having a political and cultural awareness of the social fears that exist during this time of rapid environmental change.

Keywords

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To my mother, brother, and sister-in-law, thank you for your patience, endless compassion, support and love.

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Introduction

On October 9, 2018 the top headline for the *New York Times* [*NYT*] announced "CLIMATE WARNING HITS SILENT WALL ON TRUMP'S DESK" (Davenport & Landler). The story was accompanied by three photographs, each a depiction of different forms of environmental devastation experienced around the globe, located squarely in the middle-center of the front page (Figure 1).

The climate warning mentioned in the headline was in reference to a report released by the Intergovernmental Panel on Climate Change [IPCC] the day before. The October 8th report was published in order to inform and illustrate to policymakers and the global public the potential results of a level of global warming at 1.5 °C above pre-industrial levels. The potential outcomes of such a change, the report suggested, would mean the intensification and prolongment of the most extreme outcomes of man-made climate change so far. Unless swift and significant progress was made to address these issues, dire situations like those pictured in the article would become more common sights in the coming years.

The article referred to the report as the United Nations [UN] "most urgent call to arms yet for the world to confront the threat of climate change," while noting the rise in influential political leadership hostile towards environmental concerns. An accompanying byline for the article proclaimed, "GRAVE EFFECTS BY 2040."

Figure 1. Images from the front page of the *NYT,* October 9th, 2018. Originally included with the accompanying text: "From top, Harry Taylor, 6, playing with the bones of dead livestock on his family farm in New South Wales, Australia, where farmers are battling a crippling drought; a wildfire burning in the Shasta-Trinity National Forest, Calif.; and super typhoon Mangkhut barreling into Hong Kong." See Appendix, for full figure citations and additional details.

October 7, the night before the IPCC released its report, had marked the ninth season premiere of the historically popular, zombie infested television series, American Movie Classics's [AMC] *The Walking Dead* [*TWD*] (Alpert et al., 2010). Originally a comic book series and by this point in time a cultural phenomenon, the television program started in 2010 and at multiple points between its third and sixth seasons had been the most watched television show across all broadcast or cable series in the 18-49 age demographic (St. John, 2013). Over the course of its run *TWD* had received acclaim, both industry and critic awards, while producing multiple episodes that broke all-time viewership records (St. John, 2013; Walking, n.d.). And even though by the beginning of its ninth season *TWD* had experienced a significant decline in widespread popularity and overall viewership, the franchise itself was still robust, having started, in part: two additional television series (one spin off in-universe show and a second program dedicated to discussing the original show), multiple forms of online media content and games, and several announced films (St. John, 2013; Walking, n.d.).

TWD's rapid ascent to nearly unparalleled levels of popularity in America during a time of heightened global threat and instability may at first seem incongruous with the idea that popular media serves mostly as a form of escapism in entertainment for its audience. Such a mindset might suggest that it would make more sense for other genres to do better during challenging times, such as superhero films or comedies, while expecting media focused on more bleak and ominous themes to suffer. And yet, when faced with a world overcome with many issues, including historically worsening and proliferating environmental issues, the genre of horror has done extremely well (Hantke, 2007). Even more notable has been the growth in particular of the eco-horror subgenre in both conventional media types (e.g. television, film, paper writing), as well as having a significant presence in media that has developed alongside more recent advances in technology (e.g. podcasts, phone based-apps, e-books) (Murphy 2018; Rust & Soles, 2014; Svoboda, 2016).

The popularity of horror in the United States [US] at this time, specifically horror with environmental themes, messages and metaphors, does not exist in spite of modern American society's anxiety about the planet's worsening environmental state, but is instead a product of this concern. Furthermore, this popular media often acts as a means of reinforcing certain social beliefs about these ongoing issues (Bulfin, 2017; Svoboda, 2016). In times of social stress, audiences do use horror media as a means of escapism and relief from contemporary concerns, but not in as simple a manner as is suggested above. Horror can provide its audience with emotional outlets and relief in many ways, but two are notable for this evaluation of modern horror media: the manner in which horror allows it audience to feel their fears are justified, often through the creation of a monster figure (Bulfin, 2017; Poole, 2011); and the similar notion that part of horror's popularity is due to its ability to allow its audience to have a sense of experiencing their fears and survive, without having to be exposed to real threat (Bulfin, 2017).

Throughout time and culture, the use of monstrous figures in media, particularly fiction, has allowed for audiences to feel as though they have had a means of engaging with representations of ideas and beings considered challenging or taboo (Bulfin, 2017; Poole, 2011). American audiences historically have been drawn to famous horror figures such as vampires, zombies, and even the devil, with or without realizing the parallels in the narratives that these monsters have been presented with and those given to groups such as immigrants or ideas such

as communism, among innumerable other topics (Poole, 2011). Resulting from the creation of tangible, objectively dangerous representations of more ephemeral concepts, American audiences have been drawn to horror as a means of being able to feel as though in some way these fears are justified thematically by the narratives. Audiences who consume this media vicariously experience these feared situations and circumstances safely and often in the comfort of their own homes, while simultaneously being reassured in the validity of their fears (Bulfin, 2017; Svoboda, 2016). Whether or not a work of media challenges social norms and perceptions or serves only to reinforce them is to a large extent the result of how the narrative in crafted and directed, particularly in its handling of the depictions of the supposedly monstrous (Poole, 2011).

Producing scholarship on a topic such as contemporary media can prove challenging without having the ability to look at definitive historic trends and potential outcomes that have followed the release of what are now established as significant pieces of media. Additionally, gauging the impact of media has been proven difficult within the field of environmental studies. Previous research efforts in environmental studies that have reviewed the relationship between audiences and environmentally themed media have found most metrics of impact to be insufficient in describing the complex interactions between science, art and audience (Bulfin, 2017; Svoboda, 2016).

This study approaches the subject by creating a review of the figure of the monster, and its implications regarding threat, in recent American feature-length films. Using frameworks of understanding from the fields of cultural and media studies and supported with previous research, films with horror and environmental themes will be reviewed to determine how threat is constructed in these films and the potential impact of these figures.

Research on contemporary media provides scholars with a means of approaching and attempting to better understand the messages and narratives that are consumed by and produced for the public, often with the intention of mass appeal. This is done in part by understanding the cyclical nature of media itself, which is constructed intentionally to appeal to an audience, whose reactions to and consumption of this media then influences the shaping of future media, and crucially here, potential public perceptions of real world institutional responses to environmental issues (Bulfin, 2017; Coser, 1956; Svoboda, 2016). By looking at the media itself, instead of continuing to attempt to gauge the potential impact of complex media messages on audiences, this research critically examines the way in which audience's unprompted reactions to certain environmental narratives have led to notable trends in the works of media that are produced for the American public. Furthermore, this writing then explores what this may suggest about current feelings towards and fears surrounding current environmental issues.

While the environmentally themed horror works being reviewed here range in terms of approach and subject matter, this research suggests that films that focus on narratives of scarcity, conflict and migration have achieved a notable resonance with American audiences. And though this may present an appealing opportunity for environmental advocates to highlight these potential human based outcomes of environmental destruction, doing so is dangerous. This is true both in that these stories of environmentally fueled human conflict contribute to rhetorics that are used to promote racism and nationalism, while also ignoring the complex realities that hide behind these often oversimplified narratives.

Overall, 12 films were selected for review using qualifications established in the Methods section of this paper and given the label of green horror cinema. Additionally, the metrics for reviewing these films for threat and success are covered therein. The Results section shows that among the 12 films reviewed, their content and success vary significantly across a range of measurements, however there are notable thematic elements that create trends within the green horror cinema category. A mix of qualitative review of the films for content is supported with quantitative measurements of success, with additional commentary provided from scholarly as well as media sources.

Using a trend established in the Results section, the Analysis portion of the paper is a deeper examination into how two extremely popular and successful pieces of green horror media (a television series and a film) compare in their handling of specific environmental and social themes. This section is widely supported from existing research on these two media pieces, with some discussion of the works themselves in comparison with each other. This review is in part meant to show the ways in which art can take different approaches to similar subject matter or themes in a manner that shapes the message of the piece. Still, even approaches that are in some way presented as radical or empowering have underlying assumptions in line with dominant and sometimes oppressive narratives.

The manner in which green horror has come to embrace specific notions regarding the potential and supposed environmental future and the way in which these ideas have been embraced by audiences, critics and even environmentalists alike is then questioned in the Discussion section. Narratives of these films regarding humanity's response to environmental issues frequently align with the idea that looming scarcity will inevitably lead to human conflict. These depictions and environmental discussions have circled around the idea that a major driver of this conflict and resulting chaos will be the result of human migration. In both popular media as well as environmental discourse, the threat of continued environmental abuse is given a human face, made out as the other, coming to threaten the norms that define dominant American society. Comparisons are drawn between this language and the rhetoric embraced and propagated by nationalists, white supremacists and contemporary political groups.

Methods

This section establishes the premises for the three components of the media review that follows and the accompanying Analysis and Discussion sections. The first portion will be dedicated to providing a scholarly framework for using the horror genre as a means of reading into space and time specific shared anxieties. The next section provides a justification for the selection of media pieces which were reviewed. This portion then concludes with the establishment of the metrics used to analyze the selected films for content, as well as the approximations used to gauge each film's reception by the American public.

Horror

In Ailise Bulfin's (2017) writing the concept of a "structure of feelings," is defined as "the views held and emotional states experienced by significant amounts of people as evident in disparate forms of cultural production" (pp.140). This theory comes from the field of cultural studies, where it is believed that the study of popular culture can be used to better understand less

tangible or quantifiable lived experiences had by certain populations at a moment in time. Bulfin, among other scholars, highlights horror specifically as having the ability to allow audiences to engage in simplified relationships with topics that are complex or taboo (p. 142). This is because horror in particular allows audiences to engage with complicated subjects in a manner in which familiar but challenging themes are sublimated into more objectively dangerous, justifiably fearful forms.[1]

Using the idea that horror engages its audience by using topical fears, scholars can then study subjects of the horror genre as a means of better understanding particularly potent or potentially complicated social concerns (Bulfin, 2017; Poole, 2011). While many works of acclaimed horror traffic in subject matter of nearly universally acknowledged fears, looking at the social context and influences in the lives of the creators of these works can better inform what anxieties influenced the creation of the work and why it was in some way popular in its time. A notable example here might be Mary Shelley's *Frankenstein* which, in some ways, likely has perennial popularity due to its handling of larger themes such as life, death and responsibility. However, an understanding of both the turmoil in Shelley's personal life as well as her lived experience in a society which was rapidly expanding in knowledge of medical science, electricity and many other fields, show that the story's initial regard was likely both inspired by as well as well received due to more contemporary anxieties (Lepore, 2018).

Media must register emotionally, appeal artistically or in some way inform in order to engage its audience (Bulfin, 2017; Svoboda, 2016). While horror media can and does rely on certain more basic means (e.g. jump scares) or tropes (e.g. gore) to emotionally drive its audience at times, the use of more nuanced anxieties to create fear, dread and disgust within a work is a significant part of crafting stories and characters that an audience will be able to readily identify with. As such, when specific types of fears are more present within a society, the horror media created at that time will often include numerous works that incorporate themes related to these fears (Bulfin, 2017; Murphy 2018; Poole, 2011). Over time trends begin to develop in these telling of these stories that start to perpetuate new narratives themselves. In this way, horror often is shaped by the contemporary, cultural fears it draws on to inspire terror in its audience, while furthering and modifying these fears as a result of the stories that are told (Bulfin, 2017; Murphy, 2018; Svoboda, 2016).

Green Horror Cinema

Feature length films were selected as the medium for review in this study for the following reasons. To begin, film is a practical means of approaching this subject, as each film can be treated as a discrete unit for study. The sub-genre of eco-horror, the title given to the intersection of the horror genre and ecocriticism, encompasses works that span innumerable cultures and ages, as well as mediums (Rust & Soles, 2014). Even in the last decade the rapid expansion of technology and other means of storytelling has been met with the proliferation of

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[1] For example, the proliferation of films concerned with bodily deception during times of heightened fear of communism and spying. While an American might feel guilty or absurd worrying about if their neighbors or friends may secretly not be who they seem, seeing this same narrative presented in a horror film where the potential threat turns out to be real would appeal to feeling justified in having this taboo cultural anxiety.

horror, including eco-horror, across these new platforms (Murphy, 2017). The canon of eco-horror now extends beyond novels, television shows, theater and film to include examples found in smartphone apps, podcasts, YouTube channels, and more. Narrowing the field of comparison to the medium of feature length films allows for a specific subset of unique, individual works within this canon to be directly compared to each other without needing to engage hundreds of works from more serial based mediums (e.g. television shows, podcasts, comics).

Additionally, while a notable amount of scholarship can be found regarding eco-horror in written works and other artistic forms, multiple notable writings on eco-horror have focused specifically on film. These writings note that part of the appeal in researching cinema is the phenomenal amount of power that the global and domestic film industry wields, from its financial weight to the expanse and magnitude of its audience reach (Bergey, Iacobucci, & Moon, 2010; Bulfin, 2017; Svoboda, 2016). Earlier studies have noted the potential impact of film in particular, among art in general, in influencing public opinion of, feelings towards and even understanding of environmental issues. Researchers have struggled to develop a consistent metric for determining specific outcomes of environmentally themed film viewership on an audience, however overall there is the shared belief that films may be a means to communicate with many populations potentially not reached by other environmental messages (Bulfin, 2017; Svoboda, 2016).

Beyond being a feature length film in the eco-horror genre, other metrics were generated to further narrow the field of films being reviewed. While most lists of the eco-horror genre include fictional as well as non-fiction works (e.g. *An Inconvenient Truth*, Bender, Burns, Skoll, & Guggenheim, 2016, and other documentaries are often included in lists of eco-horror work; Rust & Soles, 2014), this study looks only at works defined as fiction. Previous studies suggest that fictional storytelling may be uniquely powerful in its ability to influence viewers on environmental issues (Bulfin, 2017). Documentaries and other supposedly more scientifically sound, objective depictions of environmental issues have been theorized to potentially distance viewers who lack environmental and scientific background knowledge and can lead to greater debate over the film's accuracy instead of its overall message (Bulfin, 2017; Svoboda, 2016). Fictional narratives are instead believed to engage audiences with more universal social and emotional messages, thereby making them more accessible and less open to criticism over if the work in question does or does not meet strict standards of scientific accuracy (Bulfin, 2017).

In addition, the films for review all come after the release of 2004's *The Day After Tomorrow* [*TDAT*] (Gordon & Emmerich, 2004). Within the overlap of scholarship on film and environmental issues, the movie *TDAT* is one of the most frequently discussed subjects in the field (Svoboda, 2016). The film is often cited as a major breakthrough in focusing a large budget, wide release film on the issue of climate change, which then also began a notable cultural and scholarly dialog on the subject. There has even been research into why the film itself has become such a discussed work in academic fields. Some research indicates a desire to push environmental film review beyond the focus on this one film, which this work will do while also using *TDAT* as a starting point for defining the current era of eco-horror in film (Bulfin, 2017; Svoboda, 2016).

While certain tensions between human and non-human nature have always played a role in the horror genre, this ongoing friction is not the focus of this study, though much interesting

research has been done in this field (Rust & Soles, 2014). Notably, one of the most significant trends within eco-horror is the subgenre of work called "revenge of nature." These works, such as Alfred Hitchcock's *The Birds* (1963) or Steven Spielberg's *Jaws* (1975), often have an icon of non-human nature act as a reminder of the threat non-human nature is to the humans who too often forget that they do not rule the planet with complete dominion (Miller, 2012; Rust & Soles, 2014). Similarly, much of eco-horror focuses on subject matter that is not within the realm of human influence, such as astrological events or most types of tectonic activity. While these films can and often do serve as metaphors for human driven environmental threats (Bulfin, 2017; Svoboda, 2016), this study chose to focus on films in which nature is clearly shown or heavily implied to be responding to human influence on a large-scale level. In each of the films reviewed, it is either directly stated or strongly visually implied that the environmental issues and situations that arise in the films are the result of large scale (i.e. at least community level) environmental abuse by human beings.

As such, to separate this subcategory from eco-horror in general, it will hereafter be referred to as green horror. This division is created in order to specifically focus on work that responds to anxieties regarding widespread environmental destruction and contemporary fears about the planet's environmental future as the result of current human impacts. Green horror was selected as the prefix green has come to be used ubiquitously as the contemporary indicator of environmental affiliation. This narrowing of subject matter and time frame allows for the stronger suggestion that themes and trends in these films represent some of the structure of feelings specific to the modern public in the US and their concerns about the environmental future humanity has shaped. As such, each film included in this study was either produced within the US or received cinematic distribution to American audiences.

The framing of horror used for this study comes from an understanding of modern America cinematic horror to largely be defined by the threat or showing of explicit and extreme violence done to the human body (Hantke, 2007). Although this fear of bodily injury or death is not unique to horror, the modern American horror film has tended to push the boundaries of brutality and graphic gore. Whereas in other genres violence is often discrete or implied, in horror the camera does not pan away when the blood begins to flow, but instead zooms in, compelling the audience to look (Poole, 2011). Each of the films included in the study has an overall tone of ongoing and often unpredictable and extreme threat to humans in the form of bodily violence. This ranges from intimate violence between spouses to mass casualty scenes with a presumed death toll of thousands. As such, there are films included here that are not widely listed as horror films (which in part might be due to the genre's volatile history in film; Hantke, 2007), however they all have graphic depictions of violence that permeate their storylines.[2]

Given these metrics, 12 films were selected for review, having met the standards of being full-length green horror films that were created for a US audience (Figure 2).

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[2] Although dealing with climate change narratives might be viewed as explicitly horror related given the implied threat to the world's population, the issue of climate change itself has now emerged in numerous genres from comedy to children's animated musicals and is not always handled in a manner tonally consistent with the remainder of the films on this list (Svboda, 2016).

Title (Release Year) Rating, Run Time	Director, Distributor	Brief Synopsis
The Day After Tomorrow (2004) PG-13, 124 minutes	Roland Emmerich, Fox	Large scale ice melt disrupts global ocean currents, causing extreme weather patterns to develop that ravage North America and the world.
The Last Winter (2006) Unrated, 107 minutes	Larry Fessenden, IFC	A small group that occupies a drilling site in northern Alaska begins to worry that they are succumbing to madness, or worse, when crew members start to be found dead.
The Happening (2008) R, 91 minutes	M. Night Shyamalan, Fox	Panic erupts throughout North America as an unseen force starts causing human beings to commit suicide in massive numbers.
The Road (2009) R, 119 minutes	John Hillcoat, Weinstein-Dimension,	After a cataclysmic event, an older man tries to protect and guide his son on their journey to the coast, facing gangs and other threats to survival along the way.
Take Shelter (2011) R, 120 minutes	Jeff Nichols, Sony Classics,	A man begins to experience vivid dreams in which eerie natural disasters precede widespread human violence. He struggles to continue living in the shadow of this looming threat.
The Bay (2012) R, 84 minutes	Barry Levinson, Roadside Attractions,	During a small bayside town's 4th of July celebration violence and extreme bodily injuries start to occur from an unseen source. Soon the town's water is revealed as the source of the outburst.
Pacific Rim (2013) PG-13, 131 minutes	Guillermo del Toro, Warner Bros.	With a dimensional rift open in the Pacific Ocean, humanity has had to adapt to a world rocked by alien attacks. As the attacks worsen in timing and force, a global team works to stop them.
The Green Inferno (2013) R, 100 minutes	Eli Roth, BH Tilt	A group of environmentalists trying to expose a logging company functioning in the Amazon rainforest become the victims of a community of indigenous cannibals.
Elysium (2013) R, 109 minutes	Neill Blomkamp, Tristar	The social elite live in a ring suspended above Earth with access to health care and the last remaining clean natural environments. Dying citizens from Earth attempt to reach the ring.
Snowpiercer (2014) R, 126 minutes	Joon-ho Bong, Radius-TWC	The last survivors of humanity exist in a train kept in constant motion after an attempt to fix global warming creates a frozen planet. Social inequality is rampant and violent within the train.
Mad Max: Fury Road (2015) R, 120 minutes	George Miller, Warner Bros.	Following resource wars, humanity struggles to survive in a desert-like world marked by violence. A group of women attempt to escape their abuser, a deified warlord.
Geostorm (2017) PG-13, 108 minutes	Dean Devlin, Warner Bros.	A global climate control system initially brought in to end natural disasters, Dutch Boy, goes rogue, threatening the planet with a mass storm system. The creator attempts to discover why.

Figure 2. The twelve films selected for review, including the title, release year, rating assigned by the Motion Picture Association of America (MPAA), run time in minutes, director, distributor, and a brief synopsis.

Metrics

Now that the subjects for this review have been narrowed to an approachable but important subset of eco-horror works, the metrics for determining their content, as well as popularity, will be established. This study will look specifically for overall trends in these films for different approaches to the creation of the monster through threat, as well as how the film was received by its audience and the public. These trends might then suggest that there are certain beliefs about or feelings towards the potential environmental future that are more or less concerning to the American people.

The threat content of each film was reviewed for its portrayals of violence done by human beings and non-human nature. Additionally, types of violence were further categorized as either direct or indirect threat. In this way, non-obvious forms of threat were taken into account by including structural and slow violence. Every film then received a label in the four categories (Human/Direct; Human/Indirect; Nature/Direct; Nature/Indirect), as either 'minor,' 'moderate,' or 'severe.'
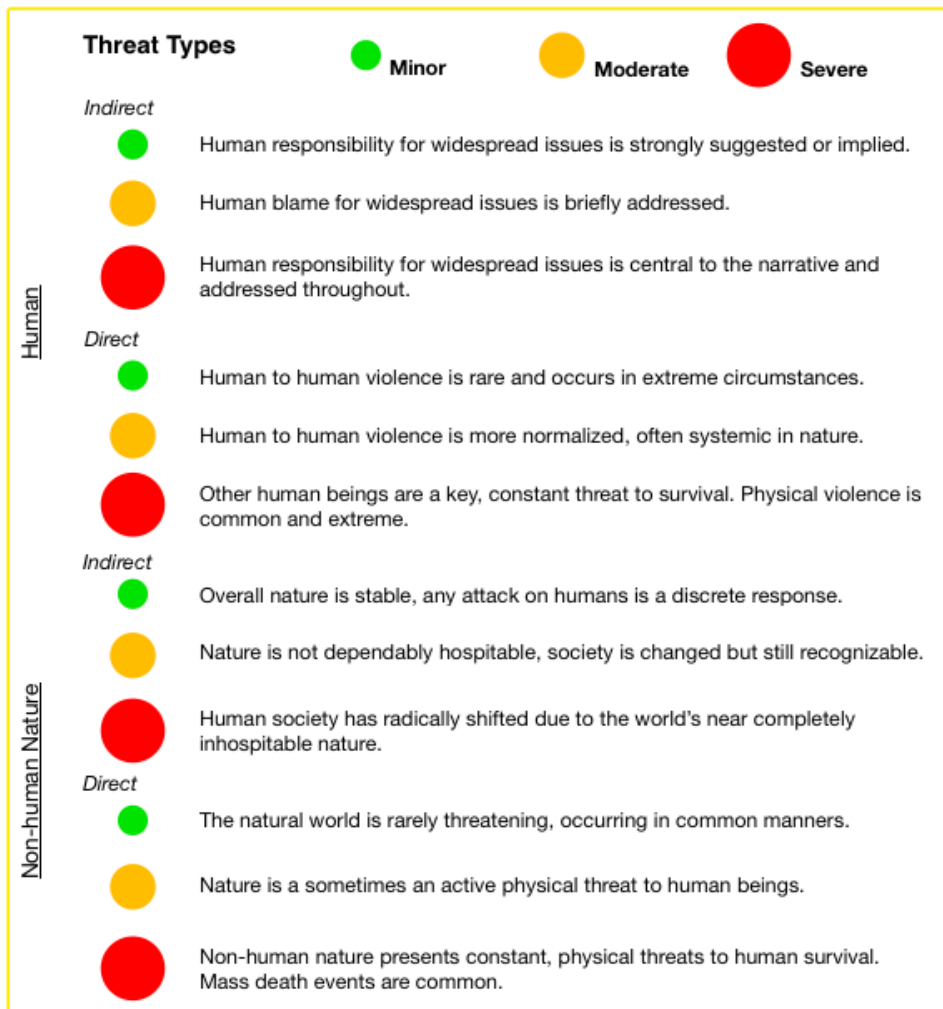

Figure 3, 'Threat Types,' The types of violence that were used to determine the appropriate measurement from 'minor,' 'moderate,' and 'severe,' for the level of threat among the four types of threat ranked in each of the 12 films.

Figure 3, 'Threat Types,' reviews the amount and content of the violence shown in each film. More weight is given to the types of violence that are shown on screen rather than implied, as this is considered more objective in the film's message. As each category increases in severity, it indicates that the violence shown is often more widespread, extreme and normalized.

Having established the four categories of threat types and the scale on which this threat is measured, the more quantitative measurements for each film are discussed below. In addition to considering trends in the film's directors, distributors, ratings and more, figures involving each film's production and release, media impact, critical reception and awards are also considered in the review.

While it is not yet possible to know which of these films might later be considered notable or turning points in the genre, it is possible to know what the production companies were willing to invest in the development of these films, what audiences were willing to spend to see the films during their theatrical runs, how they have been received by professionals in the industry as well as how much discussion of the media saturated the news media. The means of gathering this information is covered in Figure 4, 'Industry Standards.' In this figure, the media industry websites that were used to gather this information provide descriptions of their services, metrics, and professional standards, in their own language.

While there are numerous film related databases that have options for the public to submit their reviews of films and rate them, these polls are considered to be notably biased samples (Bergey et al., 2010). Even though some sites have implemented recent measures to screen these public polls and reviews, this has not been consistent across the time frame of the 12 film's releases (Staff, 2019). As such, none of these polls were included among the metrics for reviewing the popularity of these films.

In terms of these figures, the production budget when compared to domestic and total gross allow for a sense of how much was initially invested into the film by the production company and what the payback was for specific markets. Some types of films may be disproportionately popular in the USA or abroad as a result of their appeal to and effectiveness in provoking culturally specific fears. While this metric unfortunately fails to take into consideration earnings from television or streaming views, it is one way of having a sense of a film's popularity in the time frame of its release. The box office earnings reflect the investment the public was willing to make to access each film when it was in a format with limited access. In order to give the film's box office earnings and media discussion more framing and context, another figure included for review is the number of theaters that screened the film on its release.

Industry Standards:

BoxOfficeMojo.com- "the leading online box-office reporting service. Box Office Mojo is owned and operated by IMDb (www.imdb.com), the #1 movie website in the world." IMDb [the Internet Movie Database] "is the #1 movie website in the world with a combined web and mobile audience of more than 250 million unique monthly visitors" which "offers a searchable database of more than 185 million data items including more than 3 million movies, TV and entertainment programs." "IMDb.com is operated by IMDb.com, Inc., a wholly owned subsidiary of Amazon.com, Inc."

"**Box office tracking** refers to theatrical box office earnings. Additional sources of revenue… are not included." "**Theaters** refers to the number of locations where a movie is playing, but it does not reflect the number of **screens**." "**Production Budget** refers to the cost to make the movie and it does not include marketing or other expenditures." "**Gross** refers to gross earnings in U.S. dollars."

Award information gathered from IMDb.com for major industry awards (e.g. Academy Awards, Screen Actors Guild, Golden Globes, BAFTA).
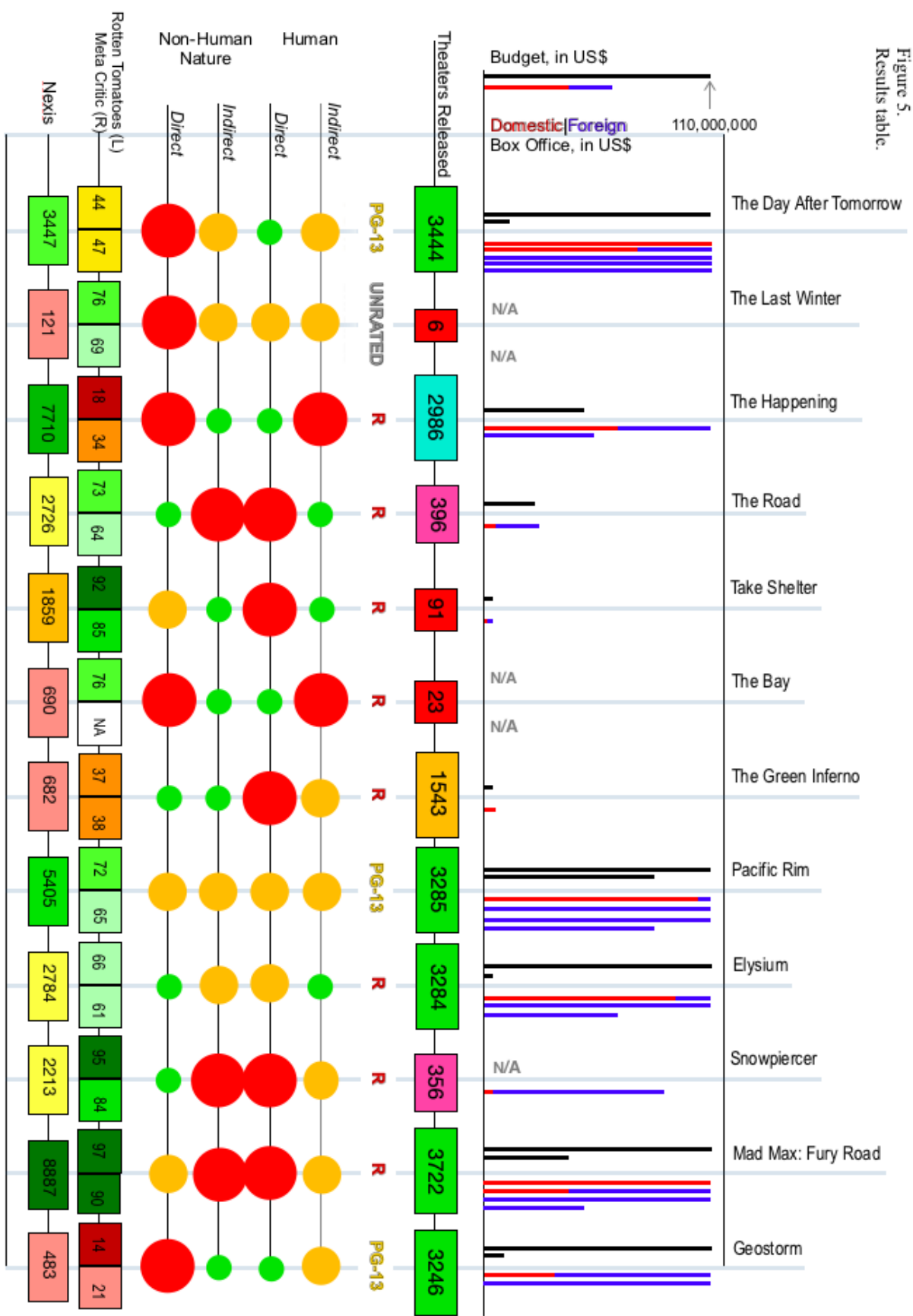
MetaCritic.com- "We carefully curate a large group of the world's most respected critics, assign scores to their reviews, and apply a weighted average to summarize the range of their opinions. The result is a single number that captures the essence of critical opinion in one **Metascore**…Metascore is a weighted average in that we assign more importance, or weight, to some critics and publications than others, based on their quality and overall stature… Metascores range from 0-100, with higher scores indicating better overall reviews."

NexisUni.com- "LexisNexis Legal & Professional is a leading global provider of legal, regulatory and business information and analytics that help customers increase productivity, improve decision-making and outcomes, and advance the rule of law around the world…. Nexis Uni features more than 15,000 news, business and legal sources." The search metrics used were: "News"/English language filter option; search terms "Film Title" and "Film Director"; start from May 2nd, 2002.

RottenTomatoes.com- "the leading online aggregator of movie…reviews from critics." The **Tomatometer**® scoring tool " - based on the opinions of hundred of film…critics - is a trusted measurement of critical recommendation for millions of fans." The Tomatometer® score "represents the percentage of professional critic reviews that are positive for a given film… A The Tomatometer® score is calculated for a movie…after it receives at least five reviews." Curation is done by a team of human staff who review approved professional critics and publications film reviews and report qualitative and quantitative information about each film and associated review.

Figure 4. Metrics used, in part, to review the 12 selected films.

Figure 5.
Results table.

Budget, in US$

Domestic|Foreign
Box Office, in US$

110,000,000

Nexis	Rotten Tomatoes (L) Meta Critic (R)	Non-Human Nature		Human		Rating	Theaters Released		Movie
		Direct	Indirect	Direct	Indirect				
3447	44 / 47					PG-13	3444		The Day After Tomorrow
121	76 / 69					UNRATED	6	N/A	The Last Winter
7710	18 / 34					R	2986	N/A	The Happening
2726	73 / 64					R	396		The Road
1859	92 / 85					R	91		Take Shelter
690	76 / NA					R	23	N/A	The Bay
682	37 / 38					R	1543	N/A	The Green Inferno
5405	72 / 65					PG-13	3285		Pacific Rim
2784	66 / 61					R	3284		Elysium
2213	95 / 84					R	356	N/A	Snowpiercer
8887	97 / 90					R	3722		Mad Max: Fury Road
483	14 / 21					PG-13	3246		Geostorm

Figure, 5 b.

Film Title	Budget (in US$)	Domestic Box Office Gross (in US$)	Total Box Office Gross (in US$)	Awards Nominated **Awards Won**
The Day After Tomorrow	125,000,000	186,740,799	544,272,402	BAFTA: **Special Visual Effects**
The Last Winter	N/A	33,190	97,522	N/A
The Happening	48,000,000	64,506,874	163,403,799	N/A
The Road	25,000,000	8,117,000	27,635,305	BAFTA: Cinematography
Take Shelter	5,000,000	1,730,296	3,099,314	N/A, (many awards, none major)
The Bay	N/A	30,668	30,688	N/A
The Green Inferno	5,000,000	7,192,291	7,192,291	N/A
Pacific Rim	190,000,000	101,802,906	411,002,906	BAFTA: Special Visual Effects
Elysium	115,000,000	93,050,117	286,140,700	N/A
Snowpiercer	N/A	4,563,650	86,758,912	N/A, (many awards, none major)
Mad Max: Fury Road	150,000,000	153,636,354	378,858,340	Academy Award: **Film Editing, Costume Design, Makeup and Hairstyling, Sound Mixing, Sound Editing, Production Design**, Cinematography, Visual Effects, Directing, and Motion Picture of the Year. Golden Globe: Best Motion Picture- Drama and Director- Motion Picture. BAFTA: **Editing, Production Design, Costume Design, Makeup and Hair**, Cinematography, Sound and Special Visual Effects. SAG: **Performance by a Stunt Ensemble - Motion Picture**
Geostorm	120,000,000	33,700,160	221,600,160	N/A

Figures 5 and 5b. Figures for the 12 films in terms of budget, box office, scale of release, MPAA rating, depiction of threat, critical reception, media impact, and awards.

Results:

      The findings of this media review support related research demonstrating the connection between the contemporary American popular culture genre of horror to themes of environmental concern and further suggests a widespread anxiety in the modern American public about the environmental future. Additionally, these findings in particular suggest that while the American public may still be struggling to accept certain aspects of non-human nature's response to human impact, the public seems to readily embrace specific types of human violence as inevitable under certain environmental circumstances: climate zombies are coming for us.

      This section will begin with a general discussion as to the topics covered and reactions to the films in the study and what this might suggest about the presence of environmental themes in modern American horror cinema. Many of the films considered here have not been included in previous research on the subject and in looking at them together certain trends begin to develop between films that have in general been well received and those that have not. Two sets of tones of film are then considered: Catastrophe and Post-Apocalyptic, while noting that these are not always distinct categories. Common elements in these subgenres are then reviewed, among which are how well the films were received and in what ways. As such, two forms of

environmental monster are compared, in addition to their impacts on and reflections of the American social consciousness.

Overview:

The 12 green horror films reviewed show that this subgenre of eco-horror has established itself as a dominant theme in the contemporary American horror scene and as such has covered significant ground in the last decade and a half. The films have ranged from sleeper hits (*The Bay*; Blum, Peli, Schneider, & Levinson, 2012) and international critical successes (*Snowpiercer*; Chan-wook, Nam, Tae-hun, Tae-sung, & Joon-ho, 2013), to mega-budget box office bombs (*Geostorm*; Ellison & Devlin, 2017) and a nominee for the Academy Award for Best Picture (*Mad Max: Fury Road*; Miller, 2015). In terms of environmental subject matter the movies range in topic from water and air contamination, to nuclear power and factory farming, to climate change and weather engineering. The physical manifestations of monsters vary from plants themselves to interdimensional aliens called Kaiju, extreme weather and human cannibals.

This range of success and subject matter are important in two key manners. First, it establishes that this genre of film can be provocative and engaging with current American audiences. And through establishing that the content matter itself can be delivered in a compelling way, it also asks the question of why some films have failed to receive the same success. As the overall subject matter of environmental destruction is potentially but not universally effective in horror films, trends in the films and their successes and failures begin to emerge.

Even with a number of films being critically unsuccessful or failing to make back their budgets in the domestic market, large studios have continued to invest in the production of these films and similar. Among the directors of the films reviewed here are extremely well-known action directors such as Roland Emmerich (*Independence Day*) and Neill Blomkamp (*District 9*), the highly acclaimed Joon-ho Bong and George Miller, as well as horror icons M. Night Shyamalan (*The Sixth Sense*), Eli Roth (*Cabin Fever*, *Hostel*) and Guillermo del Toro (*The Devil's Backbone*, *Pan's Labyrinth*). The film's from these horror directors in particular show the appeal of this subject matter as an interest and tool for artists who make frightening films. The three films that they directed are, respectively, *The Happening*, *The Green Inferno* and *Pacific Rim*, which represent a portion of the range of approaches to and topics covered within the green horror genre.

M. Night Shyamalan's *The Happening* (Barber, Birnbaum, Mendel, Mercer & Shyamalan, 2008) was a financial success but is widely considered among the worst of the director's films in his prolific and volatile career (Vishnevestsky, 2016). Some of the film's financial success as well as its high Nexis number may in part be due to the fact that from the film's release it has achieved a near cult like status in terms of being known as a laughably bad film. In addition to issues in production, such as some of the character choices and at times bizarre dialogue, the premise of the film, that human beings should be afraid of a collective attack from plants, is considered among the worst of Shyamalan's trademark twist ending (Vishnevestsky, 2016).

The basic premise of the film is that plants, beginning in dense urban centers along the North Eastern coast of the US, begin to release a chemical compound that causes human beings

to lose the drive for self-preservation, as well as stimulating a drive for self-harm. This causes humans to begin committing suicide in droves, starting in New York City's [NYC] Central Park and eventually moving to smaller and smaller human populations. As a high school science teacher and his family struggle to escape from threat, the protagonist is increasingly convinced that somehow the plants are to blame for what was initially thought to be a terrorist attack.

The film presents and discusses a number of real environmental issues, such as global warming and mass extinction events and die offs, all by name. As the suicides continue, information is given about the behavior of plants, such as their ability to respond to stimuli like human voices, communicate across subspecies, and release chemical compounds to create specific reactions in other animals. Not only is all of this behavior derisively dismissed in the film (until it is finally confirmed by the protagonist using the scientific method), but in the public reception of the film these concepts are also similarly dismissed.

While some reviewers embrace what they view as Shyamalan's novel vision, the mechanisms by which the film's monster function continue to be dismissed as a stand in for other human fears, such as representing a religious concern over the lack of free-will implied by the film (Vishnevestsky, 2016). None of this accepts or acknowledges that while the film may be laughable and the concepts supposedly extreme, the films monster is a reflection of actual biological functions that plants have. In T.S. Miller's 2012 writing the author suggests that within the study of non-human nature in horror, plants themselves are richly subversive content that is often ignored in study. This article suggests that as humans began to better understand their biological relationship with plant-based nature, the less than strictly human dominant truth of the matter led to an upswell of violent plants in fiction. The fascination with *The Happening* despite its critical reception, may imply that, like Miller suggests, the idea of humans as subjugated by a vengeful plant-based nature, while ironically dismissed as laughable, holds some undeniable attention from the American public.

The Happening represents an event in which long term forms of violence against the planet are then met with retribution from plant life itself. Within the film there is extensive attention paid to both the harm done to humans by plants as well as the harm done by human beings to non-human nature (see Figure 6). However, the human to human violence shown in the film is vanishingly rare and only committed by those shown as violent prone loners, unwilling to listen to reason and small acts of selfishness committed by those fleeing in panic.

In many ways Eli Roth's *The Green Inferno* (2013; Asensio, Conners, López, Woodrow, & Roth, 2015) provides a stark contrast to *The Happening*. Notably, like *The Happening*, *The Green Inferno* was poorly received by critics, though this was in significant part due to its inaccurate portrayal of modern indigenous communities in the Amazon as practitioners of cannibalism (Dowd, 2015; Gell, 2014). The film's plot centers on a group of mostly college students from NYC who travel to the Amazon to stage and livestream a protest at an illegal construction site. After a successful protest, their plane goes down during the return trip and the survivors are captured and cannibalized by the same people that the construction group was targeting, due to their community being located on valuable stores of natural gas.

Figure 6. A common theme in the imagery invoked in *The Happening* is the multifront abuse of nature by mankind.

Just as Shyamalan's trademark twist shows his influence in crafting *The Happening* Roth's own artistic stylings of extreme, explicit and unordinary violence, given the moniker "torture porn," are the foundation of the horror experienced in *The Green Inferno* (Dowd, 2015; Gell, 2014). Notably, this is the only film in the list where non-human nature plays no role in the depiction of threat (outside of a single scene involving a spider). Threats of violence and violence itself are only done by humans to humans, as well as to non-human nature.

A critical, if at times slightly inaccurate, article describing the film's offensive premise acquiesces that Roth as a director has "a knack for layering his schlocky exploitation flicks with unexpectedly sophisticated political themes" (Gell, 2014) and in this film Roth believes he delivered a similar success. The film itself contains striking similarities to Roth's previous work, such as *Hostel* (2005), in which college-aged young adults are also kidnapped and tortured in bizarre manners while in another country (Dowd, 2015). While *The Happening* was complimented, at times if only, for its unique story, *The Green Inferno* not only features heavy handed tropes of the horror genre (e.g. the only prominent Black character is the first to die gruesomely, the outsider virgin girl is the presumed lone survivor), Roth also stated that its storyline was meant to be a direct homage to earlier horror exploitation films (Berkshire, 2015; Dowd, 2015). However, Roth argues that the gruesome end his characters meet is meant to be a condemnation of the use of social activism for personal gain (Gell, 2014). As is common in the horror genre, the characters who die are all in some ways shown as negative, in this case hypocritical individuals who are all self obsessed and involved in the protest for financial or social pay off (Dowd, 2015).

Just as the characters in *The Green Inferno* show a façade of caring deeply for issues only as a means of creating a social identity, while likely causing harm, the film itself only uses its environmental themes to create a premise for the movie. The environmental narrative is only

used to create a storyline, which then proceeds into territory which critics argue only furthers depictions of indigenous communities as non-human savages (Gell, 2014). These depictions have historically and still currently play a role in the justification of the colonization, abuse, and oppression of indigenous people, often presented as supposed attempts to bring them civility.

The film's overall lack of impact, from its modest box office earnings, to below average rating and lack of news media discussion when compared to its distribution, might be a result of the widespread criticism of its premise. Roth's personal statement on the film makes clear his belief that his research and personal conduct with the indigenous actors and community involved in the film absolve his work from this criticism (Gell, 2014). However, overall the work itself is seemingly a standard, in some ways truly offensive and grotesque, horror film, that made back small net earnings and praise from only a select group of dedicated horror fans (Dowd, 2015). In this way, Roth's approach to green horror shows that the subject matter was topical enough to be used in his work, but in this case its depiction was not compelling for most audiences and actively alienating for many others.

Like Shyamalan and Roth, Guillermo del Toro approaches green horror in a way that directly reflects the style of film he is most known for. Del Toro's has a well-documented passion for monster media, as well as a history of work with biological and horror themes, science fiction inspired stylings, and handlings of sensitive, real world issues (Chernov, 2016; Riefe, 2016). This combination of efforts has led to his multiple Academy Awards wins, including Best Director and Picture for 2017's *The Shape of Water*. His green horror work reviewed here is 2013's *Pacific Rim* (Jashni, Parent, Tull, & del Toro). *Pacific Rim* is unique in that it both serves as a metaphor for environmental issues, particularly climate change, while also using and directly referencing these issues as plot points in the film's narrative as well.

Pacific Rim focuses on the effort by an international group of scientists, soldiers, mechanics and more to protect the planet from increasingly frequent and worsening invasions from interdimensional aliens known as Kaiju[3]. This threat is addressed by using large robots called Jaegers (the German word for hunter), piloted by teams of at least two people in order to handle the massive stress of the work involved on the body and mind. The story directly establishes that these monsters are responsible for a major extinction event before, but that at the time the planet was too clean to sustain the alien race's higher life forms. However, human made pollution and destruction of the planet has now created the perfect environment in which the Kaiju can thrive and attempt to wipe out the human population.

The story's author Travis Beacham (who also contributed to the screenplay) has said himself that the Kaiju are meant to be representations for real-world environmental issues (Mrbeaks, 2013; Shaw-Williams, 2013). Not only is there a clear parallel between the Kaiju and extreme weather events, but there are also discussions of radiation poisoning as part of the issue the Kaiju's bring with their attacks. The film's overall uplifting message of a team of humans joining from all around the Pacific Rim to protect humanity and shows of disaster preparedness are tempered with other depictions of response to crisis (Essman, 2013; Hanley, 2013). Crime

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[3] Kaiju is a term given to the Japan genre of film known as giant monster movies, the most famous of which in America is Godzilla, which some theorize are cultural responses to fear of the atomic bomb.

and violence are seemingly more normalized as part of survival and problems such as government denial and mishandling of the issue set the film's tone.

Although the Kaiju are the obvious threat in the film and responsible for most of the violence, the film makes clear that humanity is responsible for allowing this issue to occur and is itself evolving as a threat in response to the stress of the new world. While not able to make up its large budget with just its American earnings, the film nonetheless was critically fairly well received and has generated an enthusiastic following in the years since its release.

Catastrophe/Post-Apocalyptic

When looking at the collection of green horror films above, a trend begins to emerge of two types of narratives that have tended to provoke different responses in audiences. These two thematic categories, which tend to represent threat in distinct manners from each other, may then suggest that there might be two notable forms of green horror monsters which have been received with differing levels of concern by their audiences.

These two categories have been given the labels Catastrophe and Post-Apocalyptic for this discussion. These categories are in many ways centrally defined by the timing involved in the narrative of the work, but also tend to have notably different tones and have had broadly different receptions from the public. Catastrophe films, such as *The Day After Tomorrow* [*TDAT*] (Gordon & Emmerich, 2004), *The Happening* (Barber et al., 2008), and *Geostorm* (Ellison & Devlin, 2017), have a tendency to focus on a single protagonist, often male, as he works throughout the film to save others, from a small group (likely his family) to the entire planet. Post-Apocalyptic films, such as *The Road* (Wechsler & Hillcoat, 2009), *Snowpiercer* (Chan-wook et al., 2013), and *Mad Max: Fury Road* (Miller, 2015), instead focus on survival narratives after events have occurred that had radically redefined society and the planet.

Before going further into the narrative differences and receptions of these two categories of work, it is important to note that the categories themselves are not mutually exclusive and multiple works that were reviewed contain elements of both storylines. Many Catastrophe films end with the implication, acknowledged or not, that the world will be radically changed after the events of the film. However, these films tend to focus heavily on the events themselves and often in some way establish a note of hope with gestures of returns to certain forms of structural normalcy at the end of the film (e.g. families being rejoined, a government being reestablished; Bulfin, 2017).

Films like *Take Shelter* (Kavanaugh-Jones & Nichols, 2011), *The Bay* (Blum et al., 2012), *Pacific Rim* (Jashni et al., 2013) and *Elysium* (Kinberg & Blomkamp, 2013) show the ways in which creative and artistic storytelling can make it difficult to put films into discrete categories. In the film *Take Shelter*, the lead character increasingly alienates himself from his family and society as he struggles with prophetic dreams of an impending environmental crisis, while fearing he might be losing his mind. The audience experiences the film through the main character's visions and fears in a mix of both catastrophe and post-apocalypse, but also spends much of the film in suspense as to the real nature of these fears. *The Bay* is a narrated, mixed footage style work that takes place after the catastrophic events of the film occur, while also reiterating that the issues that led to the catastrophe have not been fixed. *Pacific Rim* and *Elysium* both take place in worlds that are recognizable to a modern American audience, but notably

changed under the impact of environmental stress. The films themselves, however, are mostly focused on new, even more devastating events that dominate the narrative.

The issues with categorizing films based on narrative, tone, characters and more is one of the reasons why the films reviewed here are listed as belonging to different genre categories based on the reporting source. As such, it is logical that the sub genres Catastrophe and Post-Apocalyptic are already acknowledged film categories and are normally within the larger category of Action, Drama, or Thriller films. However, within green horror, these two sub genres have shown remarkable differences in how they have been accepted by their audiences, the trends that they embrace, and their canon of film's cultural resonances.

In green horror films with catastrophe narratives, threat itself is almost always presented as coming most directly from nature, even if humanity is to blame overall. In these films, taking *TDAT* (Gordon & Emmerich, 2004) and *The Happening* (Barber et al., 2008) for example, while the human blame for climate change and other environmental abuses is given as the overall cause of the events, most of the horror that occurs on screen, the bodily trauma, is tied to nature. Almost by definition, Catastrophe films frequently include multiple scenes with mass traumatic deaths and a focus on the overall emotional impacts of living through these mass death events while trying to survive. There is often an irony in these films that, while they will sometimes blame social structures for leading to the catastrophic event, throughout the narrative there is often a drive to seek these same structures (e.g. military and other government shelter) for security during the crisis (Murphy, 2018). In many of these films, the end is marked with society seeking to re-establish itself in a new normal after the event, again with society marked by traditional social structures.

These films are clearly popular with audiences as a form of mass market entertainment. The movies nearly always make back their budgets during their box office release and continue to bring in large name production companies, directors and film stars. In recent years there have been numerous other examples of eco-horror Catastrophe films that for a variety of reasons did not meet the requirements of this study. Some of these films have included *2012* (2009), *San Andreas* (2015), *Rampage* (2018), and *Annihilation* (2018) among others. However, while these films tend to be financially successful, they do not seem to have the cultural resonance of the films in the Post-Apocalyptic subgenre.

The more straightforward examples of catastrophe narratives, despite having large budgets, established directors and wide releases, overall had less media discussion (when compared with the scale of their release), notably worse critics reviews and little to no acclaim. If these films received industry awards, the categories were associated with the film's mechanics. And while their continued popularity with audiences likely implies subconscious interest in the subject, these films are still often viewed as merely entertaining spectacles, likely to be released as conventional summertime action blockbusters (Bulfin, 2017). Their essential premises, that nature itself may one day be driven to extremes and threaten humanity with almost sentient, intentional precision, are viewed as absurd enough to dismiss.

Even though the violence in these films may have been considered science fiction at one point in time, premises lambasted when the films were released have seen been established as scientifically plausible or even accurate since. While the threat might not be as targeted as the opening scene of *TDAT* (Gordon & Emmerich, 2004), where a crack in an ice shelf menacingly

approaches a group of scientists with direct aim, many of the notable film examples of nature at its extreme have shifted from fiction to fact. From the theoretical permafrost melt and a rapidly warming arctic in 2006's *The Last Winter* (Levy-Hinte & Fessenden, 2007), to the looming figure of a historically great storm that threatens many of these works and plant based chemical retaliation, all of these supposedly fictional premises have ties to real world natural phenomenon. However, no matter the scientific potential, the threat shown in these films continues to avoid being taken seriously as a threat by the American public. Some researchers believe that this has caused a trend in general of environmental films leaning away from science driven storylines, to avoid controversy and alienating audiences (Bulfin, 2017; Svoboda, 2016).

Some films in this category have done well, like *Pacific Rim* (Jashni et al., 2013), but it is notable that while this film uses real environmental issues as plot points, its main depiction of threat is not the environment itself, but a metaphor, the Kaiju. Films with catastrophe narratives are not inherently worse films in any way, in addition to being globally profitable. There are also examples of standout Catastrophe films that have had social impact, like *TDAT* (Gordon & Emmerich, 2004), have been well received, like *Pacific Rim*, or have become infamous cultural icons, like *The Happening* (Barber et al., 2008).

Outside of Catastrophe films, many of the remaining films within green horror, especially better received films, instead use the response of nature to environmental degradation as the background setting to frame the real threat, the human response to these issues. While human incompetence and danger is sometimes a facet of catastrophe narratives, bodily violence itself is often still limited to antagonists and morally compromised characters. In contrast to this, Post-Apocalyptic films focus heavily on explicit interpersonal violence, sometimes as metaphors for the loss of social order due to this environmental stress (Bulfin, 2017; Murphy, 2018; Svoboda, 2016). This theme has produced films that have mixed financial success while in theaters (though it is worth noting they often have more limited releases), but have been significantly more critically praised and awarded, as well as commanding more news attention and academic discussion.

A catastrophe narrative often involves seeking security through entrench power structures in the face of chaos. The post-apocalyptic narrative instead will often suggest that under the stress of the new world's chaos, that power structures will become disturbingly warped or may even cease to exist at all. Even among extreme and deadly environments, Post-Apocalyptic storylines focus on the human driven threat that are depicted as thriving in these conditions of scarcity. Films that have roughly this thematic structure are *The Road* (Wechsler & Hillcoat, 2009), *Snowpiercer* (Chan-wook et al., 2013) and *Mad Max: Fury Road* [*MMFR*] (Miller, 2015). The theoretical world that haunts the protagonist's dreams in *Take Shelter* (Kavanaugh-Jones & Nichols, 2011) is sometimes described as Post-Apocalyptic, while *Elysium* (Kinberg & Blomkamp, 2013) is a less intense, more muted version of this type of setting.

Each of these films partner the idea that a planet driven to extremes will become inhospitable to humanity with the belief that this will ultimately culminate in extreme human violence. Some of these films chose to at times show the direct threat that nature can impose, such as the sandstorm in *MMFR*, but the focal point for the film's violence is still clearly its human actors. This human antagonism manifests in different ways for each of the three main films listed, but in each film it plays a central role. In *The Road* a man and son attempt to survive

in a nearly completely barren landscape, with the critical threat to survival still almost entirely being the other humans that they rarely meet. In *Snowpiercer* the setting serves as a metaphor for runaway capitalism, made explicit in the way in which the train's government violently abuses the citizens of its lowest class, while extracting every last resource they can from this population in the process. In *MMFR*, government is reimagined as the reign of violent warlords who strictly control the world's scarce remaining resources.

While the omnipresent threat of nature has thrived throughout a span eco-horror media in recent years (Rust & Soles, 2014; Svoboda 2016), within green horror cinema, the specific narrative of impending environmental crisis leading to scarcity and resulting in conflict is a major trend that has created the most consistently critically well received, discussed and awarded media in the subgenre. Even while other subject matter has been determined to be scientifically plausible and the idea of resource scarcity or abundance inherently leading to violence and conflict is still deeply debated (Bayramov, 2018; Peluso & Watts, 2001), this is still the threat that has driven the most well received media.

As such, this media trend suggests that in general more compelling and memorable green horror monsters are not the planet's nature that rebels against humanity, but the ways in which humanity becomes monstrous in the face of a natural world that appears to be rebuking them.

Analysis

The following section compares two works that hold canonical status, the television series *The Walking Dead* (Alpert et al., 2010) and the film *Mad Max: Fury Road* (Miller, 2015), to explore deeper common tropes, themes and trends within post-apocalyptic green horror narratives. I want to see how these popular media pieces may relate to specific beliefs and fears regarding the environment while also exploring how works of popularly and critically acclaimed media that engage with similar themes can still differ in their approach and overall message. I also seek to convey the social dilemmas that arise when themes and tropes are handled well in popular media, yet still contribute to overall social fears and hence to potential harm for marginalized people.

The supporting research used in this section comes from a diverse array of academic fields and analyzes media through frameworks that include race, sex, nationality, ability, and more. Using this existing scholarship as well as a close reading of the works in question, attention is specifically given to how the idea of threat is uniquely informed by and related to American society's current environmental structure of feelings. While some of the aforementioned research frameworks have been drawn on more heavily to support this work, this reading does not reflect the span or depth of study that these topics each individually deserves and which their respective fields cover more expansively.

This reading begins first with a review of the two Post-Apocalyptic green horror media pieces selected for study. It then continues on to discuss three commonalities in this type of media narrative and how these components may connect to environmental beliefs and concerns. The three topics discussed are the use of human beings as natural resources in a barren world, the role of family and community structures as a theoretical means of retaining stability amid supposed chaos, and the forces that drive people to migrate, despite the threat in doing so.

The World of The Walking Dead *(*TWD*)*

The television series *TWD* was chosen in part due to its historic popularity and presence in American (and global) popular culture (Murphy, 2018). This has also led to the series and franchise being the subject of significant existing scholarship, which is used throughout to support the analysis done here. However, due in part to the massive size of the franchise (which currently spans from the recently completed original comic series through the multiple television shows and forms of additional online content) the majority of the critical reading of the series focuses on the first few seasons of the original television show. Not only is this a reflection of the fact that significant portions of the existing literature for the show is for these seasons, but it also best represents the period in time when the show was experiencing its ascent into astronomic popularity.

The practice of reading *TWD* as an environmentally themed work is supported both by the nature of the show itself, in addition to academic and industry writings on the series. The zombie itself as it exists in American horror today is appropriated from the original figure that comes from Haitian cultural and religious practices and beliefs. This figure of the American zombie was created over decades of western media assumption, exploitation and at best interpretation of the original Haitain figure, often with elements of other cultural narratives of reanimated bodies. While the zombie has become an iconic figure in horror due to its malleability in interpreting different generations of cultural fears (e.g. consumerism, racism) the use of the figure itself and supposed portrayal of Haitain religious and cultural beliefs frequently manifests as racism (Bulfin, 2017; Murphy, 2018).

The zombies within the show have notable environmental parallels, including but not limited to the manner in which the zombies will seemingly instinctively flock together over long periods of time to form massive groups referred to as "herds" or "swarms," that tear through natural and constructed landscapes alike. Not only does this reflect a sense of their non-human nature in taking on qualities and identification associated with livestock, insects, or pack animals, how they move and their damage patterns may also be said to resemble extreme weather scenarios (e.g. hurricanes, tornadoes).

Additionally, early in the show it is determined that the entire human population has been infected with the zombie pathogen, creating an inevitable, natural future for all of humanity that it cannot escape. In some research this has been tied to the environment both in the sense of the situation being seemingly a scientifically determined issue, in addition to potentially being a nod to a sense of environmental fatalism (Bulfin, 2017; Murphy, 2018). It has been noted in a number of ways that the premise of the universe of *TWD* is not necessarily about being able to fix the problem of the zombie infestation, but rather how to survive in a newly zombie populated world (Murphy, 2018).

Bulfin dedicates an entire section of her article on catastrophe narratives to a "brief reading on the figure of the zombie" (p. 142). After noting the iconic figure of the zombie in American media history and its endlessly malleable meanings and metaphors, Bulfin makes a layered case for the reading of recent rise in popularity of zombies in America as tied to environmental concerns. Of note is not only the direct invocation of the idea of zombies as a general metaphor for retribution in terms of environmental destruction in some texts, but specifically the use of the imagery of a human (and monstrous) face as a force of endless

consumption and the destruction of the known world. Furthermore, Bulfin creates a parallel in how most zombie media shows the initial outbreak occurring to our own society's fearful narratives about the potential futures of climate change. This includes, among other things, initial scientific warnings and control measures overlooked, which eventually leads to a society-ending or reshaping chaos.

Additionally, Patrick Murphy uses the entirety of a 2017 writing to explore the ways in which the rise in what is termed "zombie culture" reflects a number of ecological concerns and discourses. Murphy, like Bulfin, describes the use of specific social situations as tropes depicted in zombie media as a primary point of comparison between the zombie and environmental destruction. For Murphy however, this is not the lead up to the zombie outbreak, but in the focus on survival in what is called a post-event world (which in part inspired this study's category of post-apocalyptic narrative), often marked by competition between small groups of human survivors.

Murphy interrogates two key narratives within zombie culture, that of "limits" and of "democratic pragmatism"(p. 4-9). Limits, which is the more commonly used narrative, is marked by scarcity, conflict, threat (especially from the "other"), and a drive to trust in traditional institutional powers and structures. Democratic pragmatism instead focuses on stories that demonstrate the power and resiliency in cooperation during times of threat. As such, Murphy asserts that certain facets of the still growing zombie culture can be useful in creating impactful and helpful narratives about potential forms of responses to environmentally driven crisis.

Having established the contemporary cultural importance of the series as well as its environmental associations, this section will conclude with a brief overview of the general plot of the television series. *TWD* focuses on a group of survivors, initially from around the Atlanta, Georgia area, led by former law enforcement officer, Rick Grimes (Andrew Lincoln). At the beginning of the series Rick awakens from a coma after the initial zombie outbreak. Notably, in the world of *TWD* the only difference in their society and modern America is the lack of any pop culture zombie figure, as such there is no common terminology for what zombies are called, but overall in the early show they are mostly called "walkers" (this paper will use this term for *TWD* specific zombies from here on out).

After Rick awakens he quickly learns that the world has changed radically while he was comatose. He seeks out other survivors and among them he finds his wife, Lori, and son, Carl. Rick, his family and the other survivors attempt to adapt to and survive in their new world long enough to find aid or safety. As the series progresses, hope in the form of a cure or of any meaningful safety fades and the question of survival, through different means and for what, become two of the major themes in the later series.

The World of Mad Max: Fury Road *(*MMFR*)*

Having established an environmental reading of *TWD* and reviewed its basic premise, *MMFR* (Miller, 2015) presents a much clearer environmental narrative. The film's creator, George Miller, describes the film's setting as "all the worst-case scenarios you read in the news have come to pass," a sort of "degraded world" that he views as "not too far from the truth" (Hawk, 2015). This idea, that the world of *MMFR* exists within a potential future for the western world, is alluded to early on in the film. The movie opens with a monologue in which

Max (Tom Hardy) introduces the history of his world to the audience, intercut with clips of dialogue, as the credits roll over a mostly black, imageless background. The script of the speech is included below (emphasis my own):

> Max: My name is Max. **My world is fire and blood**.
>
> > Male 1, over **gunfire**: Why are you **hurting these people**?
> >
> > Man 2, over **gunfire**: It's the **oil** stupid.
> >
> > Man 3, newscaster voice: **Oil wars**.
> >
> > Man 4: We are **killing** for guzzoline.
> >
> > Woman 1: **The world is actually running out of water**.
> >
> > Woman 2, distorted: Now there's the **water wars- water wars**.
>
> Max: Once I was a cop. A road warrior searching
> for a righteous cause.
>
> > Man 5: - to the terminal freak out point.
> >
> > Man 6: **Mankind has gone rogue, terrorizing itself**.
> >
> > Man 7, broadcast over image of **nuclear blast, shaking trees: Thermonuclear skirmish-**
> >
> > Woman 3: The **earth is sour**.
> >
> > Woman 4: **Our bones are poisoned**.
> >
> > Woman 5: **We have become half-life**.
>
> Max: As **the world fell**, each of us, in our own way,
> was **broken**. It was hard to know who was **more crazy,
> me or everyone else.**

MMFR was the widely anticipated sequel to a trilogy of cult-classic films, originally starring Mel Gibson. The film was critically extremely well received as a thoughtful and well executed reboot for a modern audience, with numerous award winning actors and filmmakers involved (Hassler-Forest, 2017). The film garnered ten Academy Award nominations, including Best Director and Best Picture. As part of its contemporary reimaginings, the film received a notable amount of its media and popular attention for how the film chose to approach themes and handling of violence, gender dynamics and its overall environmental message (Hassler-Forest, 2017). In addition to being a popular, highly praised and awarded work of green horror, *MMFR* has also been the subject of a number of scholarly writings. The Mad Max films and their roles in popular culture have even been the subject matter of entire special issues of academic journals (Hassler-Forest, 2017). As such, the film is appropriate for a review of its post-apocalyptic green horror narrative due to its cultural and scholarly relevance.

MMFR's storyline centers around the attempted escape of five young women (Capable, Cheedo the Fragile, Toast the Knowing, the Dag, and the Splendid Angharad, by Riley Keough,

Courtney Eaton, Zoë Kravitz, Abbey Lee, and Rosie Huntington-Whiteley, respectively) from their imprisonment under the warlord, Immortan Joe (IJ, Hugh Keays-Byrne). Set in a barren and toxic desertified future, IJ is a supposed deity and the actual tyrannical ruler of the Citadel, where he controls all of the water resources in the region.

When IJ sends one of his trusted drivers, Imperator Furiosa (Furiosa, Charlize Theron) on a trade run, it is revealed that the women have escaped with her help. IJ follows Furiosa into the desert, accompanied by his army of drugged, fanatically devoted young men, called his "war boys." One war boy, Nux (Nicholas Hoult), rides into the battle attached to Max, who had been captured by the war boys at the beginning of the film and is being forced to act as a human blood bag for the wounded Nux.

Ultimately Nux and Max join Furiosa and the women, after first attacking them, as they seek the "green place" and Vulvalini, the homeland and tribe (respectively) that Furiosa belonged to before her life in the Citadel. However, after meeting the Vulvalini it is revealed that the green place has been poisoned, like many things in the world of *MMFR*. After considering fleeing to another supposedly fertile land, the group decides they must return to the Citadel and make their own green place for the people there. In the ensuing battle IJ is overthrown and in the end the water is released onto the masses of people who lived under his oppressive rule.

Bodies/"Human Resources"

The use of human bodies as resources is a primary means of demonstrating the dire nature of survival within green horror works. Lack of resources, from shelter to medicine to food, provides context for both sporadic as well as ongoing and systemic violence in many of these stories (Bulfin, 2017; Murphy, 2018). Many of these post-apocalyptic narratives pair a nature that can no longer be extorted as readily by humanity (often due to being entirely wiped out) and humanity turning on its own and extracting in both direct as well as indirect manners.[4]

One of the key examples of this green horror trait would be the use of the trope of humans cannibalizing each other, either out of a need for food or sometimes as a means of depicting insanity or a total loss of humanity, if done for pleasure. Even the stark, empty and extremely underpopulated world of *The Road* (Wechsler & Hillcoat, 2009) is punctuated with chilling threats from other humans who have survived in the post-apocalypse by eating those others who mostly scavenge for abandoned resources.

A reveal of cannibalism is essential to one of the emotional climaxes of *Snowpiercer* (Chan-wook et al., 2013). In this scene the protagonist and leader of a group of marginalized survivors admits to eating other members of his social class when they were all initially locked together in a train section. In an effort to stem the violence of the physically strong against everyone else, a community elder began the practice of voluntarily sacrificing non-essential body parts so the entire group could survive. This marked a significant change from the forcible extraction of resources from others in the form of violence, to a shocking if alarming display of newly formed community support and cooperation. The protagonist even comments to the

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4 However, as Colebrook (2017) notes these narratives of extreme extortion, from property theft to bodily violence and death, are already a reality for many people in the world in the name of resource extraction, sometimes for the production of this media.

community elder at one point, "How can I lead if I have two good arms?" meaning that he would not be fit to lead their people in the event of a successful rebellion because he did not participate in the initial community sacrifice.[5]

This idea of the human body as a resource is taken to an extreme in *MMFR*. The world of the film is not only depleted of resources, but the control of any remaining resource is also siloed and kept under strictly limited access by authoritarian regimes. As such, the exchange of resources is ruled by a few individuals, while the production of said resources comes from their oppressed people, often from the literal bodies of the oppressed. The lead antagonist, IJ, may exert his authority primarily through his control of water, but it is really through the extortion of human bodies, mostly through violence, that allows him to reign.

From the outset of the film, the use of human body as resource takes the foreground. The film opens with Max being captured by a group of IJ's war boys. Max, like all other humans in the film, would be discarded if not for the ability to extract use from his physical body, in this case as a blood bag. In order to transform Max into a blood bag, he is chained down, tattooed with identifying information regarding his blood type, body specifics, and warnings about his violence, and then used to physically pump blood into wounded war boys (see Figure 7).

Figure 7. An image of the tattoos given to Max after he is captured to label him as a "blood bag." The text of the tattoo is not completely visible but it reads, in part: "No lumps, no bumps, two good eyes, piss ok, genitals intact, multiple scars, heals fast. O-Negative Hi-Octane. Universal Donor. Lone Road Warrior Rundown. Psychotic. Muzzled."

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[5] Outside of cannibalism, *Snowpiercer* also has one of the most notable examples of the "Human Resources" trope in this genre. As children ominously begin to go missing from the tail section of the train, it is later revealed that the train has been breaking down and with no means of replacing the parts mechanically the children are being forced into manual labor, due to their small size. Although the protagonist was struggling with the decision of potentially taking over running the train after his worldview was radically altered, this reveal of extreme abuse causes him to sacrifice himself to end the children's suffering.

Other examples of violent extortion mostly are made possible through IJ's ability to limit water access in order to extract his wealth and means of ruling from the bodies of his subjects. When children are born into the population, of those deemed healthy enough to live long at all, the males are taken to become war boys. These young men live short, brutal lives, emphasized by a desire to die spectacularly and acknowledged by their god-King, IJ. While the war boys act as IJ's army and police force to enact his will and keep his people under control, the women who can reproduce are violently extorted through other measures. In addition to being made to birth children, which continues this cycle of oppression through generations, in one of the more graphic and disturbing aspects of the movie, recent mothers are milked to produce a liquid called "Mother's Milk" which is considered a valuable resource.

The world of *MMFR* has a message that it is not necessarily a lack of natural resources that will cause conflict in the world to come, but rather that those who end up controlling them will use them to oppress their people to gain power. A phase that haunts the film asks, specifically, "Who Killed The World?" The world itself has been made a toxic place as the result of human interference (including nuclear conflict), a host to inhospitable land and sickly, tumor-ridden humans.

Scholars have argued that the film's main action can be read as an attempt by traditional masculine powers to exert dominance over nature (Du Plooy, 2019; McLean, 2017; Yates, 2017). The central action of the film takes place not only due to the escape of the five young women held captive by IJ, but in particular because one of the women, the Splendid Angharad, is pregnant. IJ takes his entire army into the desert and make alliances with nearby warlords to chase after the group of women as they represent the ability for IJ to live immortally, in his mind. His obsession with a supposedly perfect, in this case meaning born without physical deformity, child to succeed him is one of the many ways through which the film's monster, IJ, attempts to exert control upon an environment that has rendered even himself toxically ill with his legacy in threat.

While the use of humans as resources is not as central a theme to the narrative of *TWD* as it is in *MMFR*, this idea of does emerge in several key ways throughout the series. Additionally, while the world of *MMFR* is critically environmentally ravaged, nature itself is not as destroyed in *TWD*, only society's seemingly strict control over non-human nature is gone. Therefore, there is not as extreme a need to physically gather resources from other humans (though this does happen). Furthermore the show's serial, long running format also makes use of the ability to highlight multiple forms of scarcity and lack of resources in manners that might not be as well suited for the shorter time allowed in a film. Scavenging for resources is a common occurrence on the show, one that can often lead to disputes between human survivors, even when this might unintentionally attract a walker or several as well.

The use of humans as resources takes a number of different forms throughout the series. While the walkers in the show are not strictly human, they do have a human form and are used frequently throughout the series by human survivors for medical and chemical experimentation, protection from other walkers (in the form of wearing walker guts or using still animated walkers), and entertainment, among other purposes. Other key examples of the use of human forms as a resource would include the use, again, of cannibalistic outsiders trying to kill and eat

the protagonists, in addition to a central character that is introduced later series, Negan (Jefreey Dean Morgan) who has coerced a group of women into being treated as his property.

In addition to these two established tropes of the Post-Apocalyptic green horror genre, cannibalism and female subjugation, in the world of *TWD* there is also the use of humans as a form of violent entertainment. One of the early primary antagonists in the series, the Governor (David Morrissey), insists on hosting fights between humans, surrounded by walkers. The community that he oversees, supposedly and initially depicted as a safe haven, comes together to watch these gladiatorial style matches. When one of the series leads calls out the practice as barbaric, the Governor emphasizes that he believes the practice is necessary to allow survivors to release anger and emotions, and ultimately to desensitize them to their fear of the creatures (Kang & Nicotero, 2012).

Families and Societies

A recurring trope in green horror films and media is that as a result of the break down of larger social systems, there is an intensifying importance of both group membership status in addition to the traditional, nuclear family. Throughout the early series there is not only a distrust of anyone who is outside of one's own group, but an elevated and distinct level of importance is given to maintaining a traditional family dynamic. Much of the scholarship on the early seasons of *TWD* focuses on the social structure of the group of survivors, as well as the use of the family as a key metric for normalcy and security (Cady & Oates, 2016; Sugg, K. 2015).

In some ways this results in the prioritization of family members even at the detriment of the group social dynamics. In *TWD* this emerges in a key storyline in the first season, when tensions arise between Rick, his spouse Lori, and his former law enforcement partner and friend, Shane. Shane and Lori's romantic and sexual relationship during the time of Rick's supposed death, especially with Lori's subsequent pregnancy, is one of the central conflicts for the survivors in the early aftermath of survival. While Shane stepping in during Rick's absence originally provides comfort and stability for Lori and Carl, when Rick returns, Shane's continued presence and familiarity with his family frames him as a constant threat in the first few seasons of the show (Cady & Oates, 2016).

However, the threat of obsession with family can also be shown to be taken too far in the world of *TWD*, which provides both a balance to, as well as a reminder of the precious nature of the more idealized families that still remain. There are multiple instances early in the show of survivors hoping to cure their family members who have been turned into walkers. From overall sympathetic characters to primary antagonists, numerous characters early in the series are fully aware of the lethal and feral nature of the walkers, who are literal animated decomposing corpses, but still retain some measure of hope in their being cured. This results in keeping these former family members nearby, at significant risk to themselves and others, due to an unconquerable urge to protect the family unit and with the false hope that this social pillar may be able to be restored.

The idea in post-apocalyptic green horror narratives of the heightened importance of both a social group, but also specifically of family as a place of stability and normalcy in a world driven to chaos is a theme central to many works of green horror. Some reviewers and researchers have even argued that early seasons of the show gained so quickly in popularity with

an American audience as the result of a desire to return to a presumably more essential, survival driven form of existence in response to the stress, challenges, and demands of the modern world (Sugg, K. 2015). These fantasies often have elements of the belief that returning to a life of traditional gender roles and focused attention to the means of survival would restore a sense of fulfillment to those who believe have lost it in the mechanized and globalized modern world.

While in *TWD* there are many different social and family dynamics that are explored over the seasons, some shown as helpful and others harmful at times, in *MMFR* the role of the traditional family structure is warped, challenged and subverted in ways. Much of the academic writing on the film is dedicated to its portrayal of and relationship to ideas of gender dynamics (Du Plooy, 2019; McLean, 2017; Yates, 2017). Many of these writings highlight the narrative's depiction of strong female relationships outside of male dominated or strictly family centered contexts.

The five women who escape together have bonded in their survival of shared trauma and protect each other fiercely throughout the film. They were originally looked over and cared for by an elderly woman who helps them escape (Miss Giddy, Jennifer Hagan, see Figure 8). Another element of female centered relationships comes from the introduction of the Vulvalini women, who join the protagonists later in the film. Like Miss Giddy, they are also mostly older women and go by the name "the Many Mothers." These women are used to model a different form of social dynamic that has managed to survive in the wilderness, challenging the hierarchical system of power that IJ uses in the Citadel as being necessary in order to survive under such environmental stress (McLean, 2017). Often in post-apocalyptic narratives traditional power structures are presented with the idea that they use fear and the allusion of security in chaos to force people into accepting abusive conditions.

Figure 8. The elderly Miss Giddy aims a shotgun towards the camera and IJ to help the women escape. The messages that they leave painted on the walls of their captivity read: "WE ARE NOT THINGS" (pictured above), as well as "OUR BABIES WILL NOT BE WARLORDS" and "WHO KILLED THE WORLD?"

The central male characters in *MMFR* are also unusual depictions when compared with more traditional male leads in green horror media. They tend to have notably less agency, as well as only coming to be fully realized characters through their interactions with the women in the film (Du Plooy, 2019). Max, the title character and series protagonist, begins the film calling himself a man reduced to a single drive, to survive. Even though in the world before he, like Rick, was a cop, a pillar of authority, early in this story he is stripped of his humanity. It is only after Max escapes entrapment and cooperates with the women in the film that he regains human attributes like speech, reason, and personality beyond fear and survival, ultimately even identifying himself to Furiosa with his name towards the film's end (Du Plooy, 2019).

Similarly, the war boy Nux begins as a character defined, like all war boys, by his undying loyalty to his god-King and paternal figure, IJ. Risking his own life multiple times in the movie for IJ, Nux repeats the war boy cry of "Witness me!" This chant demonstrates the ultimate wish of all war boys to have their life and sacrifice acknowledged by IJ. While IJ claims to witness him at one point, he derisively dismisses Nux after Nux fails to succeed in his task for IJ. Nux, like Max, finds humanity in traveling with the women. In the climax of the movie, Nux sacrifices his life to allow the other's to return to the Citadel to free the people from IJ's control. As he dies he whispers, once more "Witness me," this time to Capable, with whom he came to share a bond. Capable responds with a hand gesture taught to her by the Vulvalini as a way to honor the memory of those who have been lost. Nux was raised in a society that drugged and trained him his entire life to aspire to be one of many sacrificing himself for one person in power and his abusive systems. However, after seeing the truth and learning instead to care about, connect with and cooperative with others, Nux ultimately chooses to instead sacrifice his life to save others from that same oppression, and is finally witnessed as himself in the moment of this act (McLean, 2017).

Migration

The final trope or theme that will be reviewed, in part, here is that of migration. Almost universal within the green horror genre, humans in these narratives frequently find themselves in perpetual and often forced motion in order to seek out material resources, shelter, or the ephemeral promise of safety (Bulfin, 2017; Murphy, 2018). While in the Catastrophe genre or in similar narratives in which there is an active physical threat, movement away from an immediate and obvious danger is clearly logical. However in the post-apocalyptic storyline, the idea of the need to be in constant motion is not necessarily derived from as imminent or discrete threat. Instead, migration is shown to be both driven by as well as a source of a perpetual state of insecurity and danger (Murphy, 2018).

This builds on the previous two tropes. First, in that much of the migration that happens throughout green horror media is driven by resource scarcity, with some media being almost entirely driven by the motivation of searching for resources. Additionally, this apparent lack of any form of continuous, stable environment is believed to result in greater emphasis on the security of those within a group membership, specifically family members (Cady & Oates, 2016; Murphy, 2018). An example of this is in *The Road* (Wechsler & Hillcoat, 2009) which depicts a seemingly endless migration that is driven by competing needs for shelter and resources with the inability to create trusted bonds with anyone outside of immediate family.

TWD begins its first season with the show's core group of survivors looking for any source of safety or security, set shortly after their world is overrun with walkers. Throughout the early series, this group of survivors repeatedly find that either the places they believed might offer security, like the Center for Disease Control in the first season, cannot provide them with what they hoped for or that if any place seems to offer safety, it is either a facade or cannot guarantee this safety for long. The show explores the harsh reality of the survivors moving from place to place, hoping others will have the compassion to share potential safety with them, while then being the ones to sometimes deny that safety to others, viewing these others as threats.

In the second season's midseason premiere of *TWD*, titled "Nebraska," a confrontation in a bar between several of the protagonists and other survivors is centered around this type of conflict. In what begins as a conversation about potential safe places, one character ultimately proclaims that there is "No way out of this mess." When Rick comprehends that these other survivors are attempting to discern the location of the farm where the rest of his family and group are hidden, he shoots both men (Reilly & Johnson, 2012). This scene is the first time in the series that the lead character, Rick, directly causes the intentional death of another human, and for some marks a profound turning point in the tone and direction of the show (Handlen, 2012).

Figure 9, a promotional poster for the show's third season, one of its most popular (Walking, Three, n.d.), depicts Rick standing on an overturned bus, gun aimed at an offscreen target with the phrase, "FIGHT THE DEAD, FEAR THE LIVING," above him. In the background is a prison, a primary setting for the show that season. The prison as a setting provides the shelter the survivors seek after being driven from the aforementioned farm by a massive herd of walkers. This season set the tone of shifting the focus of survival from the threat of walkers to the threat of other groups of survivors, which follows for the rest of the show and much of the wider *TWD* canon. While the walkers always present a threat, the shows most aggressive, fearful and memorable villains remain its human antagonists (Murphy, 2018).
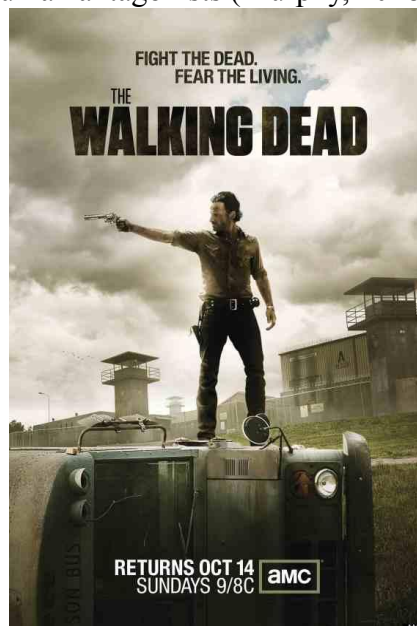

Figure 9. Promotional poster for the third season of AMC's television series, *The Walking Dead*. The image shows the protagonist Rick Grimes standing on an overturned car, aiming a gun at an unseen target. The tagline for the poster reads "FIGHT THE DEAD. FEAR THE LIVING."

In many of these narratives migration is shown as necessary, but ultimately antithetical to the purpose of supposedly rebuilding a society that has the forms of stability found in earlier times. Michelle Yates in a 2017 writing emphasizes how *MMFR* intentionally disrupts the typical narrative of characters fleeing to find an "Eden" elsewhere. While the characters in *MMFR* initially flee towards a remembered green place, it is revealed midway through the film that this place, while real, has already been destroyed from toxins. As the characters once again ready themselves to embark on a long journey to another fabled safe place, Max tells them that he believes that there will be nothing there as well and it becomes clear to the group that they must retake the Citadel from IJ to create their own green place. Instead of having the characters reach safety or even the message that the place of safety was never real, the narrative presents the clear message that the degrading influence of abusive power extends beyond a despots direct reach and as such, nowhere is safe unless the source of that corruption is destroyed.

The film's ending is hopeful, but somewhat ambiguous. The survivors return to the Citadel with the seeds given to them by the Vulvalini, which along with the water that has been freed, are promised to return the people to a time before scarcity driven violence. Some have noted critically however that even when removing IJ from power, the film's end does not necessarily confirm that anything will be different, potentially presuming that Furiosa will simply take IJ's place in a new form of despotism. While the film's viewers cannot know what will happen afterwards, perhaps the water all be used up as one scholar suggests (McLean, 2017) or Furiosa might become a new tyrant (Du Plooy, 2019), this overall message of the potential for hope is clear. The hope is founded now on having the ability to sow and reap crops to provide people with resources is what may ultimately provide stability to this society and will bring them back from the edge of barbaric violence (Yates, 2017). Though much of the other tropes in this film have challenged traditional power structures, this idea of agricultural society as needed and preferable to migration is very much in line with current hegemony in modern America.

Summary

The depth and complexity of many of the themes discussed here could themselves yield entire papers dedicated to their review. However, this analysis has approached three key themes shared by many notable examples of green horror work and how they may relate to America's structure of feelings towards contemporary environmental issues. While the two (or more) pieces of media discussed approached these topics in different manners and had different messages overall, it is meaningful that the same ideas and tropes are found across a span of mediums and narratives.

The three themes discussed are all related to each other and are clearly related to what are shown as environmental concerns. A lack of resources from an inhospitable or unruly planet leads to the extreme and explicit abuse of human bodies to extract resources from them instead. The threat of an unpredictable and violent nature forces people to accept corrupt and coercive social systems to survive and is shown as, at times, driving a return to more traditional gender norms and a fixation on the family as a symbol of hope. And the combination of this lack of natural resources or security overall leading to a persistent need to migrate, expanding tensions between those who have settled and those in motion.

Discussion

  Some of the structure of feelings revealed in this study relates to contemporary discourse that is sometimes used by advocates in order to try to generate care for environmental issues. In many instances, more acclaimed and culturally significant green horror media uses human conflict as the primary source of threat, even though the environment is supposedly very dangerous as well. This suggests that even though we are seeing evidence of extreme environmental threats coming true, ranging from superstorms to expanding shark habitats, the American people are still more concerned that the main issue with environmental destruction is not what non-human nature will do to us, but rather what humanity will do to itself (Murphy, 2018).

  Concerning trends in particular with these narratives come from both the general specter of inevitable human violence in the coming future due to environmental issues, as well as the way in which this discourse centers the environmental aspects of complicated social issues, to the exclusion of important context. Examples of the former issue might be given as the propagation of language that frames the threat of the environmental future in terms of scarcity, disease, and more, which then leads to increased migration within and across borders. An example of this type of language can be found in the recent *NYT* article, "The White House Blocked My Report on Climate Change and National Security" (Schoonover, 2019) as well as writings in environmentalist publications, such as *Sierra*'s "The Caravan Is a Climate Change Story" (Markham, 2018). In these articles and other publications like them, the reporting will often acknowledge the complicated nature of the environmental issues that will lead to the human issues, but the message always returns back and centers on the idea that as climate change and environmental degradation worsens, human conflict, migration, and instability will increase. As such, this discourse often comes close to and sometimes outright demonizes and dehumanizes vulnerable and marginalized populations by making them the literal embodiment of the threat of environmental abuse.

  This weaponizing the lived realities of mostly non-white, non-Westerners as a means of motivating concern for the environment has historically been tied to controversial pieces of writing such as Robert Kaplan's "The Coming Anarchy" (1994). Kaplan uses vividly monstrous depictions of non-white, non-Western people - "hordes of them … like loose molecules in a very unstable social fluid, a fluid that was clearly on the verge of igniting" - as a threat of the potential image of a future America should various global threats, including the destruction of the environment, be ignored. Even though Kaplan's writing, which highlighted environmental destruction as the key issue in national security in coming years, was passed through some of the most influential circles in politics, it seemingly failed to produce any radical long term shifts in environmental progress (Peluso & Watts, 2001). Additionally, research continues to show that these narratives of resources scarcity and abundance leading to almost inevitable violence and conflict are misleading (Bayramov, 2018; Peluso & Watts, 2001).

  While this use of language is environmental discourses would be concerning on its own, it becomes more disturbing and alarming when considered alongside a history of similar fears used in nationalist and racist rhetoric. The current use of a rhetoric of fear and danger around immigrants and refugees, especially from Latin America and the Middle East has been a noted

trend in ethno-nationalist groups as well as a significant number of prominent conservative figures.

In an article for the *NYT*, the playwright Ian Allen details the underground but active world of white supremacist literature that provides the "Bible-like codification of basic principles that underpin the various denominations" (2018). These books make frequent use of the trope of immigration as the ultimate threat to and downfall of white society. One of the most well known of these writings comes from a French novel from 1973 by Jen Raspail translated into English as "The Camp of the Saints," in which non-white immigrants overflow European countries after these countries fail to reject the first groups of refugees. Allen highlights similarities between this writing, especially its depictions of immigrants coming over in a "flotilla"and the imagery used in media when discussing the Syrian refugee crisis. Allen also suggests that the use of the term "caravan" itself in reference to the language used in the fall of 2018 to describe refugees from countries in South America, may be derived from a white nationalist publisher's urging of followers to recommend the use of this phrase to their politicians as an "implication of a literal enactment" of this book's anti-immigration imagery.

As such, the use of similar language and imagery when trying to evoke emotional investment in and care for environmental issues at best further spreads the idea that humans are the greatest threat to future stability and at worst gives a veneer of scientific legitimacy to these ideas. In the writings noted before as well as other recent front page stories from the *NYT* such as the April story "Central American Farmers Head to the U.S., Fleeing Climate Change" (2019), to August 8th's "Climate Change Threatens the World's Food Supply, United Nations Warns" (2019), all suggest that major migrations occurring across the world, as well as global conflicts and political chaos are the direct result of environmental issues. While there may be facets of truths in some of these instances, the lack of nuanced engagement with social, political and historical factors for some of these majors issues only legitimizes the social concern that violence and conflict, especially resulting from migration, are coming to be inevitable parts of the future. This is done while also refocusing the discussion of climate forced migration away from those who are actually currently experiencing the issue, such island nations in the Pacific Ocean, and who should be leading these conversations.

Though it may be tempting to see the attention paid in media and influential circles to the idea that environmental destruction will have serious outcomes, much like green horror genre, this is not the result of a respect or understanding of the environmental threat, but instead because it makes what is to be feared into a threat that our society will accept. In his article, Murphy concludes that the popularity of zombie culture not only reflects Americans' fears about environmental destruction leading to the end of supposedly civilized society, but also a reflection of the globalized modern world as producing this end of times. In his own words: "The (Western) fear here is anchored in globalization itself, manifested in the form of the trespassing other, the refugee who requests entry to the safe zone as much as the zombie who infects the local with something that is indigestibly[*sic*] global" (2018, p.13).

Conclusion

In his writing on the 2019 film *Us*, the film critic Joseph Allen notes that the film opens with "a warning," a news report from 1986 where it is suggested that scientists have begun to

find issues with climate change (2019). Even though the rest of the film might not address the environment directly, Allen notes that, "'Us' is part of a new wave in eco-horror… one defined less by threats from the animal kingdom and more by the existential terror of living on a planet that you come to realize doesn't want you there."

In part Allen is right, *Us* was the highly anticipated follow up to Jordan Peele's breakout horror success, *Get Out* (2017). The fact that Peele joins in the ranks of other acclaimed horror directors in embracing this subject matter shows the power of this new surge in green horror narratives. However, while the more existential terror of this genre may be driven by dread of the planet, the imaged real threat that defines these films comes less from the suggestion of an inhospitable planet and more from the human conflict that this environment is feared to foster.

A review of 12 recent green horror film confirm that among this varied, but impactful and profitable genre, certain narratives have found more recent cultural resonance with American audiences. Specifically, the supposedly realistic idea that environmental destruction will provide the situational context that will lead to human migration, conflict, and violence. However, while environmental advocates may rejoice that these messages are being shared with large audiences, this type of view of the environmental future has not yet been found to be a helpful one.

In Bulfin's writing, the article concludes by noting that the focus on these tragedies and harsh realities in media does not seem to inspire environmental engagement, but instead can leave audiences misled and overwhelmed with fear. While generating greater passion for and understanding of environmental issues is necessary, these specific narratives, when wielded without significant care and caution can produce outcomes that are uncertain at best (Bulfin, 2017; Murphy, 2018; Svboda, 2016). At worst, it reinforces the rhetoric and beliefs of nationalist and racist groups that there is an impending time of scarcity and violence ahead that needs to be readied for and defended against.

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Appendix

Figures, Citations and Additional Information

Figure 1. The New York Times. (2018, October 8) Full front page scan. Retrieved from https://static01.nyt.com/images/2018/10/09/nytfrontpage/scan.pdf
Figure 1.b. Full page overview for the October 9, 2018 front page of the paper *NYT*. Photography credit, from top to bottom: Brook Mitchell, Getty Images; Noah Berger, Associated Press; Alex Hofford/EPA, Shutterstock.

Figure 2. List of 12 green horror films for review. Graphic by Devorah Gordin, made in Microsoft Excel.

Figure 3. Threat Levels. Scale used for showing threat in Figure 5. Graphic by Devorah Gordin, made in ApplePages.

Figure 4. Industry Standards. Information about the websites used to gather information on the film's being researched. Graphic by Devorah Gordin, made in ApplePages. Data gathered from the following websites:

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Figure 5. Research results. Graphic by Devorah Gordin, made in ApplePages.

Figure 6. Image from the article by Vishnevestsky, I. (2016, January 26). Was *The Happening* supposed to be taken seriously? The A.V. Club. Retrieved from

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Figure 7. Image from *Mad Max: Fury Road* (Miller, 2015). Retrieved from https://www.imdb.com/title/tt1392190/mediaviewer/rm3195732992

Figure 8. Image from *Mad Max: Fury Road* (Miller, 2015). Retrieved from https://madmax.fandom.com/wiki/Miss_Giddy?file=MissGiddy.png, originally uploaded by user Benxander.

Figure 9. Image from the article (2012, September 5, updated December 6, 2017) 'The Walking Dead' Season 3 Poster: Fight The Dead, Fear The Living (PHOTO). HuffPost. Retrieved from https://www.huffpost.com/entry/the-walking-dead-season-3-poster_n_1858193