Genre in/of Crisis: Formal Mediations of the Anthropocene in Video Games and Digital Cinema

Zachery Dracek

A Thesis

in

The Mel Hoppenheim School of Cinema

Presented in Partial Fulfillment of the Requirements for the Degree of Master of Arts (Film and Moving Image Studies) at Concordia University Montreal, Quebec, Canada

> June 2023 © Zachery Dracek, 2023

CONCORDIA UNIVERSITY

School of Graduate Studies

This is to certify that the thesis prepared

By:	Zachery Dracek
Entitled:	Genre in/of Crisis: Formal Mediations of the Anthropocene in Video Games and Digital Cinema

and submitted in partial fulfillment of the requirements for the degree of

Master of Arts (Film and Moving Image Studies)

complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Signed by the final Examining Committee:

____2023

Dean of Faculty, Dr. Annie Gérin

ABSTRACT

Genre in/of Crisis: Formal Mediations of the Anthropocene in Video Games and Digital Cinema

Zachery Dracek

This thesis theorizes new, uncertain formations of genre in contemporary digital video games and cinema as an effective approach to mediating the feeling of life during the environmental and anthropocenic crises of the Anthropocene. Employing Gerald Voorhees' Genre Trouble method of game studies alongside Selmin Kara's theoretical framework of anthropocenema, this intervention proposes a means to understanding our anthropocenic anxieties through unique generic forms realized within contemporary digital video games and genre cinema. This thesis therefore asks, how has the Anthropocene imaginary impacted genre in contemporary digital media? And how, in turn, has genre been used to mediate the widespread feeling of living through the Anthropocene as we face the widely-recognized likelihood of eventual human extinction? Simply put, what is the generic form of anthropocenic crises? Establishing the 'anthropogamic' as a video game category analogous to anthropocenema, this thesis first examines the productive ecocritical potential of video games' uncertain generic assemblage through the genre-bending extinction game Death Stranding. This thesis then follows the generic logics of the anthropogamic to examine similarly mutative relationships between digital technology and generic form in anthropocenema through the environmental science fiction/horror film Annihilation. Ultimately, this project posits the genre of crisis as genre in crisis to demonstrate how the Anthropocene has affected contemporary cultural production beyond explicit representations of crisis through uncertain and disorienting digital mutations of familiar generic categories. Additionally, through its interdisciplinary approach, this thesis aims to emphasize the productive scholarship that can occur in intersections between game studies and film studies.

iii

Acknowledgements

This thesis would not have been possible without the support, guidance, and encouragement of numerous people, to whom I am indebted.

First, I would like to thank my mom, Jocelyn, for her enduring love and support every step of the way.

I also express my gratitude to my professors, colleagues, and friends that I have crossed paths with in the Film and Moving Image Studies program at Concordia. I have grown so much, both personally and professionally, in this engaging and thoughtful community. I expressly thank Iuliia Glushneva and Nicholas Avedisian-Cohen for their efforts organizing and facilitating writing workshops, as well as my fellow thesis writing colleagues who provided invaluable feedback that has shaped the project through every iteration. I want to specifically thank my cohort mate and general partner-in-crime Cole Velders – your endless willingness to engage with my ideas and push me through the toughest moments of the writing process have made you an invaluable friend and colleague. Thank you to May Chew for being one of my readers, but more for being an incredibly insightful, kind, and generous educator whose efforts have supported my growth as a scholar. Thank you to Selmin Kara, as well, for graciously agreeing to participate as a reader, and her insight on 'anthropocenema' – a term that has reshaped the way I view the ecocritical potential of contemporary media and brought this whole project into focus.

Thank you to Marc Steinberg, my supervisor, professor and mentor, for encouraging my ideas from the start and believing in this project at every step of the way. Thank you for every opportunity you've extended my way, for being thoughtful and considerate with all your feedback, and your overwhelming generosity and support as a mentor.

Lastly, I would like to thank the members of my household for supporting me through the entire process. Thank you to my roommate, Aidan, for providing much-needed support and patience, as well as necessary video game breaks, that have helped me realize this project. I also thank Po, our very silly and rambunctious cat, who has provided endless companionship that has brought joy to every moment of the process, no matter how difficult. And finally, I would like to thank my partner, Daisy, for helping me realize my true potential every step of the way. For your willingness to discuss all academic topics (especially surrounding our shared love of affect theory), for all your support during moments of self-doubt, for always pushing me to be and do more than I ever thought possible myself – I am forever grateful for your love and kindness.

iv

Table of Contents

List of Figures	vi	
Introduction	1	
Literature Review: Crossing Boundaries and Creating Connections	5	
Methodology	9	
Chapter Structure	10	
Chapter I, Genre(s) of Crisis: Uncertain Formations for the Anthropogamic		
From Anthropocenema to the Anthropogamic	17	
The Formal Uncertainty of Digital Game Genre(s)	20	
Playing Through Extinction: Death Stranding and the 'Strand' Sub-Genre	22	
From 'Stick' to 'Rope': Death Stranding's Evolution of the Action-Adventure Genre	25	
Cliffs of the Past and Bridges to the Future: Generic Uncertainty as Crisis Heterotopia	31	
Conclusion	34	
Chapter II, Genre(s) in Crisis: Formal Mutations in Alex Garland's Annihilation		
Genre Trouble for Troubled Times	40	
Anthropocenic Affect and Post-Cinematic Theory	42	
Evolution or Extinction: Annihilation's Mutative Generic Form	45	
Conclusion	59	
Conclusion, Trouble At the End of the World	60	
Bibliography		
Ludography		
Filmography		
Discography		

List of Figures

Figure 1.1: Marketing Death Stranding's 'strand' sub-genre	23
Figure 2.1: Cellular scale under the microscope	48
Figure 2.2: The digital mutation of cellular scale	48
Figure 2.3: Blurring ontological boundaries between the human and the other-than-human	52
Figure 2.4: Digital mutation and ecological subsumption	52
Figure 2.5: The humanoid embodiment of 'The Shimmer'	54
Figure 2.6-2.8: Lena's uncertain fate	56

Introduction

What do you do when the world starts to fall apart?

– Anna Tsing, The Mushroom at the End of the World (2015, 1)

We are preoccupied with the feeling of crisis. While innumerable examples of this populate our contemporary media landscape, we need not look further than HBO's most recent streaming juggernaut - The Last of Us (2023). An adaptation of Neil Druckman's post-apocalyptic video game of the same name (2013), TLOU follows Joel (Pedro Pascal) and Ellie (Bella Ramsey) as they try to survive the human and other-than-human dangers that have resulted from the spread of the 'zombifying' fungal infection, cordyceps. While formally belonging to the 'zombie' sub-genre of science fiction/horror, popularized through texts such as Night of the Living Dead (1968) and, more recently, The Walking Dead (2010-2022), TLOU goes beyond the conventions of the genre, complicating its tropes of solutionist-oriented, individualistic heroism in an effort to explore the immense anxieties that accompany pervasive ecological crisis. As an example, in the concluding scene of the final episode ("Look for the Light," 2023), Joel emphasizes the affective uncertainty that fundamentally structures the experience of living through crisis. Attempting to comfort Ellie following his own morally questionable decisions, Joel emphasizes that survival during the end of the world means "sometimes things don't work out the way we hope. You can feel like you've come to an end, and you don't know what to do next. But if you just keep going, you find something new to fight for" (2023). By focusing the last moments of the series on the existentially uncertain feelings of living through times of apocalyptic crisis, ostensibly the feeling of our own experiences under the contemporary crises of the Anthropocene, Joel's sentiment exemplifies a larger shift in contemporary disaster media's mediations of ecological crisis – a shift away from narrative tropes of unwavering certainty and heroic individualism to, instead, focus on the affect, the *feeling*, of living in the era of the Anthropocene.

Contemporary digital media across film, television, video games, and more have become increasingly fixated on this question – *what does it feel like to live during the Anthropocene*? The Anthropocene – the term proposed in 2000 by environmental scientists Paul Crutzen and Eugene Stoermer to mark the epochal transition from the Holocene to our current geological era in which human action has irreversibly impacted the planet's biosphere (2000) – has brought about widespread anxieties surrounding both the impact and finitude of human life on Earth. These

'crisis affects', specifically the pervasive feelings of existential uncertainty and disorientation that theorists have argued accompany times of overwhelming socio-historic crisis (Berlant 2011; Kara 2016; Voorhees 2019), have now become prevalent in contemporary cultural production in the West.¹ While many popular texts have attempted to narratively explore the anthropogenic climate crisis, and the now-realistic possibility of human extinction emphasized by the environmental humanities (Nixon 2011; Morton 2013), a number of contemporary digital texts have recently experimented with generic form as an effective approach for mediating the difficult and contradictory feelings that stem from the crises of the Anthropocene.

While *The Last of Us* and other extinction texts fantastically envision an apocalyptic end of the world, it is essential to realize that we are already living during the end of the world – the world understood strictly through anthropocentrism.² Although environmental philosophers once posited the end of the anthropocentric world in the future, beyond a cataclysmic destruction of humanity finally realized by our inability to meaningfully address the dangers of the anthropogenic climate crisis, the end of a strictly anthropocentric worldview is now firmly in the present. Timothy Morton, in their book *Hyperobjects: Philosophy and Ecology after the End of the World* (2013), argues that the overwhelming uncertainty provoked by the other-than-human world has brought about this psychological end of our world; under the pervasive crises of the Anthropocene, "the worry is not whether the world will end [...], but whether the end of the world is already happening, or whether perhaps it might already have taken place" (16). The extensive, and mostly imperceptible,³ temporal and spatial effects of the climate crisis have increased the likelihood of human extinction, leading contemporary media cultures into a period marked by existential and phenomenological uncertainty. Whether labeled as "the Anthropocene imaginary" (Kara 2016, 757), the contemporary lifeworld shaped through our growing awareness

¹ While the white settler Global North may be recently fixated on the overwhelming existential affects and adverse ecological effects that have resulted from our own disproportionate anthropocenic actions, the issues and affects of environmental crisis have been long felt and recognized by the Global South (Gadgil and Guha 1995, Nixon 2011) and other non-settler communities.

² However, it is the very human-centrism of the Anthropocene that is the cause for the potential extinction of humans and all other biospheric life. It is also, and perhaps most crucially, the end of a world-without-consequences – a world where "humans" could do as they like without second thought of the wide-ranging temporal and spatial impacts. This too is bisected by the problem of who counts as human as well as critiques of the white settler catastrophism regarding the Anthropocene given our direct responsibility for it (Adamson and Monani 2016, Guasco 2020, O'Key 2023).

³ However, in the time since Morton's work was initially published, I would argue that more people have become better attuned to what were previously thought as the imperceivable temporal and spatial flows of the climate crisis and related phenomena.

of our own accelerating rate of extinction and increased biospheric precarity, or as "climate catastrophe culture" (Bould 2021), contemporary media is suffused with narratives, game systems, and images that are increasingly symptomatic of our anthropocenic anxieties as we continue towards (and perhaps beyond) the likely possibility of human extinction.

To grapple with these anthropocenic media texts, this thesis will work within the broad orientation of ecocriticism to examine how the affective uncertainty invoked by the anthropogenic climate crisis has been mediated through popular texts, specifically narrative video games and contemporary genre cinema. Since the early 1990s, innumerable scholars have examined the connection between ecological consciousness and cultural production through the wide-ranging field of ecocriticism (Willoquet-Maricondi 2010, 1). However, as opposed to the numerous ethically-focused environmental justice documentaries and narrative films that have long-sustained the interest of ecocritics, I am interested, instead, in ecocriticism's ability to identify and critically examine texts that are not overtly educational with regards to the effects of the Anthropocene but "nonetheless offer us needed perspectives on the relations between the human and the non-human" (Willoquet-Maricondi 2010, 3). This, I argue, includes the existential uncertainties provoked through our increased interactions with the other-than-human agencies highlighted by the effects of the Anthropocene.⁴ Therefore, inspired by Chelsea Birks' call for further ecocritical media research both within and beyond film studies to examine how contemporary media challenges anthropocentrism, mediates the other-than-human, and addresses other phenomena related to the Anthropocene (2021), this thesis will attend to contemporary disaster media across video games and digital cinema to examine how popular digital texts have experimented with generic conventions to mediate the 'crisis affects' that have stemmed from our unpredictable encounters with the other-than-human agencies of the Anthropocene. In short, in what follows, I am concerned with the feeling of our contemporary crises and how these feelings become expressed in popular cultural production through creative transformations, mutations, and evolutions of ludic and filmic genre forms.

While some, including Willoquet-Maricondi (2010), have regarded popular media as largely insufficient for critical explorations of the environmental crisis, other interdisciplinary

⁴ While evaluating the socio-historic affect of the Anthropocene through contemporary media may seem, at first glance, to reaffirm an anthropocentric approach to ecocritical issues, I extend from Selmin Kara's thinking to argue that tracing the flows of these affects, instead, highlight our transition towards species-thinking to understand the impact of humanity on the other-than-human world and, crucially, vice versa (2016, 765).

scholars in film studies, game studies, cultural criticism, genre studies, to name just a few fields, have argued against this limited view for the ecocritical study of cultural production. My position in what follows builds on scholars like Selmin Kara (2016), Shane Denson (2020), Adrian Ivakhiv (2013; 2014), along with many others, to make the case that we can represent and, by extension, experience the feeling of anthropocenic crisis through popular media texts.

Although popular media is often ineffective for educating viewers on fact-based issues related to the environmental crisis, the propensity for genre in popular texts can, instead, provide an effective vehicle for encapsulating the *feeling* of living amidst the interconnected environmental, political, and social crises of the Anthropocene. As Alexa Weik von Mossner articulates in her introduction to *Moving Environments: Affect, Emotion, Ecology, and Film*, "the commercialism and sentimentalism of popular [media] does not necessarily stop them from being effective eco-films; their affective appeal may in fact give rise to both enjoyment and reflection" (2014, 2). While many popular texts remain anchored to familiar generic identities, others have experimented with generic conventions, either explicitly or implicitly, as a way to encapsulate the affective uncertainty and disorientation of our contemporary anthropocenic lifeworld.

This thesis takes two popular-yet-unconventional ecocritical genre texts as its primary objects of study – specifically, the disaster video game *Death Stranding* (Kojima 2019) and the environmental science fiction/horror film *Annihilation* (Garland 2019). Inspired by Alenda Y. Chang's imperative to further investigate the social, political, and ethical "curative potential" (2021, 234) for environmental consciousness through digital media, this thesis will examine how experimental or unconventional formations of genre in video games and digital cinema have been utilized to mediate the anxieties of the Anthropocene and, in some cases, explore the potentials for perseverance beyond the end of the anthropocentric world. Examining genre's relationship with the ecocritical 'crisis affects' of uncertainty and disorientation, this thesis asks two central questions: How has the Anthropocene imaginary impacted the generic form of contemporary digital media? And how, in turn, has genre been used to mediate the widespread feeling of living through the Anthropocene as we face the widely-recognized likelihood of human extinction? Simply put, *what is the generic form of anthropocenic crises*?

Literature Review: Crossing Boundaries and Creating Connections

Pairing video games with digital cinema through the popular and generic cultural objects of Death Stranding and Annihilation, respectively, this thesis works across film and digital game studies to interrogate the connections between genre theory, affect theory, and ecocriticism present in popular contemporary mediations of the Anthropocene imaginary. Although these two texts seem oddly paired, if only for the fact that one is a 'Triple-A' narrative console video game and the other a feature-length genre film, I have chosen to examine these objects together for two primary reasons – both are narratively concerned with working through realized extinction and, more importantly, both attempt to productively embrace the fundamental uncertainty and disorientation of anthropocenic crisis through their generic form. While this approach may have been previously unpopular, given the historically contentious ludology versus narratology debate that initially divided the two fields (Aarseth 1997, 2004; Frasca 1999), many video game and film studies scholars have taken up research that works across the two media forms. From early combinatorial approaches, such as Mark J. P Wolf's work on the cultural production of digital technology (2002) and Geoff King and Tanya Krzywinska's interdisciplinary collection Screenplay: Cinema/Videogames/Interfaces (2002), to recent transmedia scholarship found in projects like Shane Denson's Discorrelated Images (2020) or Michael Fuchs' and Jeff Thoss' Intermedia Games - Games Inter Media (2020), many scholars across the disciplinary divide have exemplified the productive conversations that can emerge from scholarship that address both media forms.

Following these approaches, this thesis will examine how the 'crisis affects' related to the Anthropocene, primarily uncertainty and disorientation, have shaped the generic identity of popular digital games and films that are narratively concerned with environmental and anthropocenic disaster. By approaching the intersections between genre, affect, and ecocriticism in digital media as exemplified by *Death Stranding* and *Annihilation*, this thesis will work beyond explicit representations of the climate crisis in order to highlight how the feeling of the Anthropocene has been embedded in the generic identities of our most popular contemporary media. Ultimately, I argue that new ecocritical formations of genre are best understood by traversing medium boundaries, comparing and contrasting the different ways generic mechanisms interact and have been assembled to reflect the affect of the Anthropocene imaginary. To effectively establish this thesis' transmedial, interdisciplinary approach, however,

it is first important to outline previous scholarship on issues of ecocriticism, genre, and affect in the digital landscape of our climate catastrophe culture.

Ecocriticism

This thesis operates, both methodologically and theoretically, at the intersection of numerous interdisciplinary conversations surrounding the capacity for environmental consciousness in digital media. While older scholarship has skeptically acknowledged the capacity for serious ecocritical thought in popular digital media, ecocriticism in the digital humanities has undergone extensive reevaluation throughout the 2010s. As the wide-ranging effects of anthropogenic climate change on both the human and the other-than-human have accelerated in both extent and severity,⁵ media scholars have turned to digital texts and objects to highlight how our media cultures a) have been affected by issues related to the Anthropocene and b) offer compelling ways to reflect upon the wide-ranging, often imperceivable, socio-historic effects and affects of living during the anthropogenic climate crisis.

While ecocritical research on popular cinema can be traced back to early interventions by Leo Braudy (1998), David Ingram (2000), and Sean Cubbit (2005), among others,⁶ research in 'post-cinema' – defined as the study of cinema's "new formal strategies, radically changed conditions of viewing, and new ways in which films address their spectators" (Denson and Leyda 2016, 4) that have emerged alongside digital visual technology – has recently drawn from ecocriticism to explore digital cinema's mediations of the Anthropocene imaginary. While much of ecocriticism in film studies focuses exclusively on the representational elements that contribute to a texts often overt ecocritical messaging, post-cinema scholars such as Steven Shaviro (2010), Shane Denson (2020), and Selmin Kara (2016) have, instead, examined the ways digital media engenders ecocritical perspectives through its technological affordances in addition to overt representations of other-than-human perspectives and agencies. Specifically, this thesis is anchored around an engagement with Selmin Kara's conceptualization of "anthropocenema"

⁵ While writing this thesis, the rate of climate disasters in Canada have continually increased, particularly in my home province of British Columbia (2023, "Province boosts funding for communities to help tackle climate challenge."), and the UN climate report now indicates that the global temperature will increase 1.5 degrees celsius, the advisable limit to ensure human survivability, in the 2030s if drastic measures are not taken (McGrath and Rannard, 2023).

⁶ For a complete historical overview of ecocritical work in film studies, please refer to Alexa Weik von Mossner's "Introduction: Ecocritical Film Studies and the Effects of Affect, Emotions, and Cognition" in the collection *Moving Environments: Affect, Emotion, Ecology, and Film* (2014).

(2016, 750-784). According to Kara, to mediate the experience of the Anthropocene,

anthropocenematic texts use "digital filmmaking to stretch cinema's temporal imagination over primordial and post-extinction realities [...] locat[ing] in the tropes of primordiality (the origin of all origins) and extinction (the ultimate obsolescence) articulations of our contemporary anxieties regarding the finitude of human life on Earth" (758). Extending from Kara's temporal and spatial evaluations of anthropocenema, this thesis interrogates how anthropocenematic (and gamic) texts use digital visual technology to mutate recognizable generic identities and undermine conventions of generic certainty to effectively articulate the prevalent anxieties of the Anthropocene.

In game studies, ecocriticism has only recently been employed to question how digital games' simulated environments, ludic systems, and representational narratives have mediated ecocritical issues such as climate change, environmental sustainability, and the relationship between human and non-human agents. While scholars such as Adena Rivera-Dundas (2017), Dennis Jansen (2019), and Tom Tyler (2022) have undertaken focused research on specific ecocritical issues along the lines of those listed above, Alenda Y. Chang has consistently worked to develop an ecocritical approach specific to game studies (2011; 2019). Attempting to bridge the nature-culture divide prevalent in the ecocritical humanities, an approach that "reflexively treat[s] nature and technology as mutually exclusive realms" (2019, 2), Chang's work emphasizes that "games can offer a compelling way to reconcile a deep connection to nature and the non-human world with an equally important connection to technology and the virtual" (5). Through the representational, mechanical, and procedural layers that give shape to digital interactive worlds, Chang shows how digital games hold the potential to "create meaningful interaction within artificially intelligent environments, to model ecological dynamics based on interdependence and limitation, and to allow players to explore manifold ecological futures" (16).

Working through the lens of ecocriticism across video games and digital genre cinema, this thesis will extend Kara's and Chang's approaches to further evaluate the ways digital technology contributes to effective and affective ecocritical media in two of the most prominent cultural industries. By combining previous approaches in ecocritical media studies with issues in affect theory and genre studies, this thesis evaluates the generic tendencies of the 'anthropogamic,' my own term for a similar phenomena in video games, alongside Kara's

anthropocenema to better understand how the prevalent affects of the Anthropocene imaginary have been embedded in the generic form of contemporary digital media.

Affect and Genre

Since Raymond William's initially defined the "structure of feeling" (1961) – the not-yet-fully-articulated formations of thought and feeling that operate beneath the dominant structures of a particular socio-historical moment - cultural studies scholars, some from within film and digital game studies, have extend Williams framework to examine how affective regimes are mediated through prevailing or dominant forms of cultural production (Massumi 2002; Ahmed 2010; Shaviro 2010, 2012). Shaviro, for instance, uses the chaotic and frantic imagery of digital cinema to identify "what it feels like to live in the affluent West in the early 21st century" (2010, 2). By examining the aesthetics, narratives, themes and, in the case of digital games, the mechanics and procedural systems (Anable 2018), that become prevalent during a specific socio-historical moment, affect theory can effectively allow us to trace how changes in cultural production are symptomatic of the social and political issues of a historical period (and vice versa). Furthermore, the severity or obviousness of the relationship between cultural production and socio-historical affect is particularly heightened during times of trouble or crisis (Harraway 2016; Berlant 2011, 2022), making affect theory an indispensable framework for exploring contemporary mediations of the Anthropocene imaginary, a lifeworld defined, ostensibly, by the perpetual feeling of being in crisis.

While the affects associated with crisis are palpable, to some extent, in the narratives, themes, and aesthetics of many ecological disaster films, I am interested, alongside Lauren Berlant (2011) and Gerald Voorhees (2019), in understanding how ecocritical 'crisis affects' are mediated through genre – or, more specifically, through a crisis *in* genre. Lauren Berlant perfectly articulates the connection between crisis and genre in the introduction to *Cruel Optimism* – "genres provide an affective expectation of the experience of watching something unfold, whether that thing is in life or in art. The waning of genre frames different kinds of potential openings within and beyond the impasse of adjustment that constant crisis creates" (2011, 6-7). Socio-historical crisis is reflected in the crisis of our generic forms, making genre analysis a particularly effective approach for understanding digital mediations of the Anthropocene. Although genre, particularly in film, has been largely understood as easily

identifiable formal categories that undergo relatively predictable cycles of transformation over time (Altman 1999), classical genre theorists have also recognized the intrinsic connection between generic categories and their socio-historical context (Altman 1999; Braudy 1999). Recently, however, Lauren Berlant's (2011) cultural studies approach to genre and affect studies has inspired further research surrounding how the affective 'feeling' of the moment transforms long standing generic categories. Specifically, game studies scholar Gerald Voorhees has presented "Genre Trouble" (2019) as a compelling approach to the relationship between affect and genre that is not only effective for the study of video games' complex generic assemblage, but, I argue, is suitable for examining the generic complexity of other digital visual media as well. Following Berlant's claim that the improvisation of genre amid pervasive uncertainty frames "the becoming historical of the affective event" (2011, 6), Voorhees' Genre Trouble approach offers a versatile theoretical and methodological approach to understanding the uncertain transformation of genre under the affects of the Anthropocene.

Methodology

Responding to Bernard Perron's (2009) noted lack of game genre scholarship that persists today, Voorhees' Genre Trouble methodology understands genre as a "conceptual tool for studying historically contingent formations of text and practice, and Genre Trouble a critical practice for assembling and inventing forms of sociality to survive the present" (2019, 33). Arguing that experimentations with generic form signal a collective artistic crisis to formulate a coherent response to contemporary socio-historic issues and anxieties, Genre Trouble understands uncertain and ambiguous formations of genre during crisis as productive attempts to treat the "unintelligibility of the moment [as] an opportunity that invites new forms of response, new genres, and new orientations to the future" (33). Simply put, this approach understands experimental, unconventional, or 'troubled' generic treatments as indicative of the crisis in which they were made, making Genre Trouble a particularly effective approach for understanding how genre has been transformed under the 'crisis affects' of the Anthropocene imaginary. Using Genre Trouble as a central approach to the unconventional and, in some cases, challenging formations of genre across video games and digital cinema, this thesis will show how *Death Stranding* and *Annihilation* embrace generic crisis through their uncertain and, often,

contradictory combination of familiar conventions with experimental elements to mediate the feeling of the Anthropocene beyond strictly narrative or thematic representations.

Additionally, to actively resist the oft-critiqued approach of applying film studies scholarship to issues in digital game studies, this thesis will instead perform the opposite; through the Genre Trouble methodology, this thesis will evaluate intersections between generic experimentation, 'crisis affects,' and the Anthropocene across video games and digital genre cinema from a perspective fundamentally rooted in game studies. In this effort, I aim to emphasize the mutual learning and productive scholarship that can occur in the intersections between film studies and game studies – an approach that, in my view, has been woefully underexplored due to preexisting tensions between the two disciplines. For example, while film genre scholars have extensively theorized, discussed, and categorized the generic tendencies of pre-digital cinema, few have explicitly examined how digital visual effects have impacted the conventions of film genre.⁷ To address how the affordances of the post-cinematic image, which combines separate planes of live-action and fantastical digital effects into a single heterotopic frame (Chung 2018), have been drawn upon to productively 'trouble' generic categories as a response to the crises of the present, I draw from Voorhees' work across the representational, mechanic, and procedural assemblage of video game genres to treat digital film genre as a similarly malleable, experimental, and inventive assemblage. Through this approach, I ultimately argue that an ecocritical dialogue between film and game studies is long overdue and could contribute to mutual learning surrounding the ways cultural production is affected by the Anthropocene while simultaneously contributing to socio-historical understandings of the Anthropocene.

Chapter Structure

To begin my ecocritical genre study across popular video games and film, Chapter I will first examine the relationship between ecocriticism, generic 'trouble', and affect in the extinction video game *Death Stranding* (2019). Extending from Selmin Kara's "anthropocenema" (2016, 750-784), I offer the 'anthropogamic' as a new term for games that mediate the Anthropocene

⁷ Though many have integrated aspects of genre into their studies of related issues in digital cinema (*Post-Cinema: Theorizing 21st-Century Film* (2016) contains numerous examples, including Kara's "Anthropocenema: Cinema in the Age of Mass Extinctions" (750-784)), Carolyn Miller and Ashley Kelly's *Emerging Genres in New Media Environments* (2016) is one of the few collections dedicated to issues of genre in digitized cultural production.

imaginary and ask: what is the generic form of the anthropogamic? Drawing primarily from Voorhees, Audrey Anable, and Alenda Chang, I extensively interrogate *Death Stranding*'s newly defined 'strand' sub-genre of action-adventure games to understand how the game's extensive experimentation with its representational, mechanical, and procedural conventions embed and mediate affects of uncertainty and disorientation that reflect its narrative and thematic focus on human extinction. Examining key mechanics and narrative cutscenes that highlight the game's self-conscious deviations from the action-adventure genre, I argue that *Death Stranding* embraces generic crisis to resist the violent and individualist conventions of the action-adventure genre and, instead, posit alternative, contradicting conventions that emphasize empathetic connection to weather the vast uncertainties of the conjoined environmental and anthropocenic crisis.

Following Chapter I's focus on video game genre, Chapter II will examine the relationship between genre, affect, and ecocriticism in feature-length digital genre cinema through Alex Garland's experimental ecological science fiction/horror film Annihilation (2019). Extending Voorhees' Genre Trouble methodology to conduct a generic analysis of the film, I examine how digital visual technologies have been used to subtly mutate science fiction/horror conventions and, as a direct effect, undermine notions of generic certainty to effectively realize a uniquely anthropocenematic form. Drawing from Roger Warren Beebe's theorization surrounding the formal impacts of the digital effect of "the morph" (2000, 159-181), I theorize Annihilation's digital effects as mutative instead of morphogenic to articulate how Garland uses CGI and motion capture to ecocritically transform the film's generic identity. Through the connection between the mutative effects of digital technology and generic form, this chapter will focus on the film's use of digital effects used to visualize the ecological other-than-human agencies of Area X, an alien zone that mutates any biological material within its confines, that reference, subvert, and then mutate the generic conventions and narrative expectations of the science fiction/horror genre. Ultimately, through a close examination of Annihilation's generic mutations, I explore how contemporary genre films have transformed familiar generic categories by experimenting with the affordances of the post-cinematic image to formally embed the 'crisis affects' of uncertainty and disorientation beyond strict narrative and thematic explorations of anthropocenic crisis.

Examining the intersections of genre, affect, and ecocritical theory across video games and digital genre cinema, this thesis aims to, ultimately, understand how our Anthropocene imaginary has impacted our familiar generic categories and, in turn, how 'troubled' mutations of genre effectively and affectively mediate the feeling of our contemporary socio-historical moment amongst the crises of the Anthropocene. Through the formal mediations of realized extinction in *Death Stranding* and *Annihilation*, I extend Anna Tsing's question, "*what do you do when the world starts to fall apart*?" (2015, 1), to ask: how has our contemporary digital media responded to the world falling apart?

Chapter I

Genre(s) of Crisis: Uncertain Formations for the Anthropogamic

Over a pitch-black screen, a lone voice echoes: "Once there was an explosion... A bang which gave birth to time and space. Once, there was an explosion... A bang which set a planet spinning in that space. Once, there was an explosion... A bang which gave rise to life as we know it. And then came the next explosion ... "As the voice fades, Low Roar's song "Don't Be So Serious" (2017) begins to play over the opening cinematic montage of beautifully rendered environments depicting uncannily familiar landscapes, notably absent of all remnants of humanity. Slowly zooming in to give the sensation of dynamic movement into the game space, the camera hovers over these environmental vignettes for several seconds as Low Roar's voice hauntingly echoes across the barren physical geography. A pervasive mist hangs over the blackened earth, stretching out over the horizon, silvery water crisscrossing the expanse. An orange-green glow radiates from behind the sleek black face of a rocky mountain protruding from barren black soil, muted green moss and beige-orange fungus covering nearly every available surface. Then, a blue sky pokes through a cascading cover of thick white clouds behind an inverted rainbow suspended over a shadowy mountain range below. These melancholic and evocative images present an environment that is at once destroyed and destroyer, an uncanny sublime created by the effects of the Anthropocene that renders nature no longer hospitable for humanity as we know it. This is the world amidst the speculatively realized process of anthropocenic extinction, the world introduced to players in Hideo Kojima's audacious narrative video game Death Stranding (2019).

I start with this introduction to the game's expansive narrative experience of extinction due to its immediate ecocritical concerns that anchor the player in a new type of gaming experience, one which seriously interrogates the possibility for digital games to grapple with the effects and affects of our current moment of extensive environmental and anthropocenic crisis through play. Delivered by the game's protagonist Sam Porter Bridges (Norman Reedus), an evolved human delivery person who functions as both the narrative's protagonist and the player-character avatar for ergodic interactivity,⁸ this opening monologue traces previous moments of rupture in the temporal-spatial worlding of organic life on Earth to introduce the

⁸ As per game scholar Espen Aarseth, ergodic interactivity refers to narratives in which "nontrivial effort is required to allow the reader to traverse the text" (1997, 1-2).

imminence of another, presenting a speculative future that utilizes the digital plasticity of video game assemblages to explore our contemporary anxieties towards futurity beyond the increasingly suffocating confines of the Anthropocene. The future presented by *Death Stranding* is one of realized extinction-in-progress, in which the "slow violence" (Nixon 2011) enacted by the extractionist and accelerationist logics of globalized capitalism have led to the previously unperceivable temporal-spatial "hyperobject" (Morton 2013) of biospheric climate change to be both materially realized and viscerally present. Detailing a speculative near-future of human isolation and existential socio-political uncertainty amongst the beginnings of extinction, *Death Stranding* affectively engages players to productively play through the prevalent anxieties that shape our contemporary Anthropocene imaginary. This marks a unique approach to ecocritical speculative fiction, giving form to what I term the 'anthropogamic' within the video game cultural industry that deserves further critical inquiry.

Specifically, in order to form this uniquely empathetic and deeply affective experience of playing through the process of realized human extinction that could result at the end of the Anthropocene, Kojima Productions' popular yet divisive game *Death Stranding* was introduced by the company via the Twitter account of its auteur figurehead Hideo Kojima as a new generic identity within the established conventions of the video game cultural industry. Posted on May 30th, 2019 after the release of the game's official "Release Date Reveal Trailer" (Playstation 2019), Kojima tweeted the following:

"DEATH STRANDING is not a stealth game. It is brand new action game with the concept of connection (strand). I call it Social Strand System, or simply Strand Game. TOMORROW IS IN YOUR HANDS. #deathstranding" (@Kojima_Hideo, 2019).

Acting as the self-proclaimed vanguard to a new generic form, Kojima rhetorically posed *Death Stranding* as an entirely new reorientation of the action-adventure genre by actively establishing the game as the first in the 'strand' sub-genre. The strand game, as seen in *Death Stranding* and expounded upon by the game designer Xavier Nelson Jr., orients the representational, mechanical, and procedural design of the genre around themes of connection and empathy, focusing on central principles of nurturing, contemplative wandering, transportation, and material physicality to replace the action-adventure genre's conventions of individual heroism, violent action, and unfettered player agency (Nelson Jr. qtd. in Sledge 2022). Therefore, the

strand sub-genre is not merely a technophilic or superfluous mechanical experiment⁹ with the affordances of video games' loose relationship with generic identity, but a critical attempt to seriously reflect and mediate the "structure of feeling" (Williams 1961)¹⁰ surrounding anthropocenic crisis through an evolved, and unfamiliar, generic form. Connecting to Donna Haraway's introduction to *Staying With the Trouble* (2016), *Death Stranding* similarly recognizes that the urgencies of the Anthropocene "demand [a] kind of thinking beyond inherited categories" (2016, 7) in order to formally embrace the productive potentiality of uncertainty and disorientation that marks our contemporary moment as we grapple with the increasing likelihood of anthropocenic extinction.

Innumerable blockbuster 'Triple-A' video games have explored apocalyptic themes of human survival beyond societal collapse, most notably in the immensely popular Last of Us (2013-2022) series; however, these titles tend to merely draw upon familiar apocalyptic narratives, themes, and environments in order to design familiar 'first-person shooter' or 'action' mechanics inspired by the ultra-violent conventions popularized through early franchises such as Doom (1993-2020) and Resident Evil (1999-2023). Although Melissa Kagen's recent work on The Last of Us Part II (2020) has explored the game's mechanics and environmental representations as generically experimental for the 'action-adventure' genre (2022, 150-167), Death Standing marks the first Triple-A title to explicitly experiment with the genre in order to embed contemporary affects of crisis in its representational and ludic design with an explicit connection to themes of ecological calamity and anthropocenic extinction. Combining an eclectic mix of preexisting action-adventure conventions with unfamiliar experiments in its representational elements, mechanical design, and procedural systems, Death Stranding's strand sub-genre fundamentally embraces the pervading uncertainty of our present moment to construct an uncannily familiar generic identity through the heterotopic interplay between the militaristic conventions of the action-adventure genre's past and new uncertain, experimental conventions of empathetic connection for the present. Through this generic lens, *Death Stranding* can be read as

⁹ Although the strand sub-genre introduces and/or combines a myriad of new or adapted representational, mechanical, and procedural conventions, most reviews and articles about the game's newly introduced generic form merely focused on its multiplayer mechanics and systems that allow players to indirectly assist each others' individual progress by sending tools and completing unfinished package deliveries throughout the course of the otherwise single-player narrative experience (Dornbush 2019; Simelane 2022).

¹⁰ Drawing from Aubrey Anable's discussion of Williams, "structure of feeling" is a precursory term to contemporary affect theory that argues for the "possibility that media and art might give expression to emergent shared feelings that are not yet present in language, but in which we might sense the rhythms and emotional tones of new ways of being in the world" (2019, xi).

a concerted effort to transition the conventions of the action-adventure genre into a form capable of mediating the affective regimes that pervade overwhelming ecological and anthropogenic crises. This, I argue, is a generically informed approach towards what I am calling the 'anthropogamic', a term I extend from Selmin Kara's concept of "anthropocenema" (2016, 750-784). Through unconventional ludic mechanics and representational narratives that embrace and formally embed feelings of disorienting uncertainty, the anthropogamic mediates the contemporary affects that pervade our experience of the Anthropocene. Within this crisis of the human sensorium presented by the near imperceivable temporal-spatial "hyperobject" of ecological crisis, which "exceeds our framings of the world, and presses chaos, complexity, and non-linearity" on humanity (Bould 2021, 10), feelings of disorientation, vulnerability, alienation, and uncertainty have given form to the affective regimes of the Anthropocene as we grapple with the increasing likelihood of human extinction (Morton 2013; Kara 2016; Bould 2021). In the case of the anthropogamic, these affects of anticipatory extinction are not merely representational but intimately playable as well.

Building from Kara's work on anthropocenema, along with other research on formal, mechanical, and aesthetic responses to crisis in the work of Lauren Berlant, Gerald Voorhees, and Alenda Chang, this chapter will explore the productive uncertainty of generic mutation and evolution within the cultural production of video games as an effective formal tool for mediating the 'crisis affects' related to environmental and anthropocenic crisis. Through the uncertainty of the strand game as a new generic form, as well as the general ontological uncertainty of video game genres outlined by Voorhees (2019), I argue that *Death Stranding* effectively demonstrates how the blurry and indeterminable nature of generic formation and evolution can be effectively embraced to reflect contemporary crises in ontological and existential certainty. Through the game's representational, mechanical, and procedural assemblage that self-consciously and *diegetically* transitions the action-adventure genre towards the affective tenors of the strand sub-genre, best exemplified through the tension between the game's core narrative and ludic design and the short militaristic episodes "Unger," "Clifford," and "Clifford Unger," I will show how Death Stranding's "Genre Trouble" (Voorhees 2019) has intentionally embedded a disorienting uncertainty in its generic form as a productive ecocritical approach to interactive art that explores the *feeling* of living through the crises of the Anthropocene as we grapple with the increasing likelihood of anthropogenic human extinction.

To provide an effective analysis of *Death Stranding*'s generic mutation and evolution of action-adventure conventions into the strand sub-genre, this chapter heavily draws upon Gerald Voorhees' "Genre Trouble" as methodological approach (2019). First introduced in "Genre Troubles in Game Studies," Voorhees rejects the conventional simplification of generic complexities and uncertainties between competing aesthetics, modes, and mechanical design for the purposes of neat categorization. Instead, Voorhees' approach embraces an agnostic line of inquiry that privileges the interplay of generic pluralities within video games "in order to create connection and form" (17) that ultimately frames "genre [as] a conceptual tool for studying historically contingent formations of text and practice, and Genre Trouble a critical practice for assembling and inventing forms of sociality to survive the present" (33). Through this lineage of genre theory initially inspired by Lauren Berlant, this chapter will think with Voorhees' Genre Trouble to examine how generic fluctuations, formations, and reorientations in *Death Stranding* formally convey productive feelings of uncertainty to reflect the predominant affect of our contemporary socio-historical crises. As Aubrey Anable argues in her groundbreaking work on the relationship between affect theory and video games, the unique ontological assemblages of various computational and representational systems within video games are "uniquely suited to giving expression to ways of being in the world and ways of feeling in the present" (2019, xii). Consequently, the anthropogamic is, I argue, an affective expression of being in the Anthropocene.

From Anthropocenema to the Anthropogamic

In her chapter "Anthropocenema: Cinema in the Age of Mass Extinctions" for the collected volume *Post-Cinema: Theorizing 21st-Century Film* (2016, 750-784), Selmin Kara established 'anthropocenema' as a new category of popular eco-cinema that uses digital effects to articulate the contemporary affects stemming from the finitude of human life in the Anthropocene through visualizations of both pre-and post-human temporalities. Through examples from popular extinction films such as *Melancholia* (2011) and *Snowpiercer* (2013), Kara defines anthropocenema as a cinematic form that uses the wide-ranging temporal-spatial affordances of digital effects to explore the "contemporary (ontological) anxieties related to our knowledge about the possibility of extinction, which brings death and finitude back to the surface of consciousness" (2016, 763). However, both within and beyond film studies, Kara

pushes for this phenomena to be explored further, as "anthropocenema gives us a great deal to think about in terms of the diverse narrative, aesthetic, and political direction it might take in the near future" (2016, 772). Thus, I aim to answer this call through the anthropogamic, exploring, in parallel to Kara's treatment of digital cinema, how the 'crisis affects' of the Anthropocene have been formally expressed through the affordances of digital video game assemblages. While this term may appear to mark an unexplored intersection between ecocriticism, affect theory, and video games, it merely expands upon groundbreaking interdisciplinary research present in contemporary game studies.

As cinema's preoccupation with ecological and anthropogenic crises grew throughout the 2010s, thematic explorations of environmental crisis and human extinction began to proliferate beyond the confines of independent games¹¹ to become a burgeoning generic preoccupation for Triple-A console games. Games such as NeiR: Automata (2017), the Horizon series (2017-2022), and Death Stranding began exploring aspects of ecocriticism through their representational narratives, mechanics of interaction, and procedural systems, affording players the opportunity to play within and through the speculative process of extinction. Identifying this burgeoning tendency for games to seriously interrogate and integrate ecocriticism, film and media studies scholar Alenda Chang's recent book Playing Nature: Ecology in Video Games (2019) presents the first full-length critical inquiry into the realized possibilities and radical potentialities of video games as ecocritical texts. While previous scholars had explored ecocritical issues through specific aspects of video games (Denson 2020; Jansen 2019; Rivera-Dundas 2017), Chang's book interrogates nearly every component of video games' digital assemblage to demonstrate how "[...] games, like the natural world, can provoke curiosity, interaction, and reflection" (2) towards ecological issues. Chang highlights digital games as a notable blindspot for the environmental humanities, which has "largely passed over game environments as environmental media [...]" on the same artistic level as film and literature and "[...] excluded designed landscapes and methods of mediated interaction" (10) as impactful terrain for ecocritical experiences. Through five categories central to the environmental humanities – mesocosm, scale, the nonhuman, entropy, and collapse - Chang demonstrates how nearly every layer of a video game, from mechanics to narrative representation to the procedural systems that facilitate player

¹¹ Looking at lists compiled of the most notable environmental/ecocritical games of the 2010s (King 2020; Leijser 2022), as well as the examples used in Alenda Chang's *Playing Nature*, an overwhelming number of the games used as examples are classified as independent ('indie') games.

interaction, holds the potential to impart "a collective, multispecies, and multiscalar awareness that promises hope in the face of ecological precarity" (12). This is, arguably, the most promising aspect of video games compared to other visual mediums, as the haptic interactivity of digital games decreases the affective distance between the player and the text, holding the potential to "reconcile a deep connection to the nature and the nonhuman world [through] an equally important connection to technology and the virtual" (5). Thus, Chang's work not only highlights the centrality of environment and ecology to interactive experiences, but implicates affect as a fundamental aspect of ecocritical play in digital games as well.

While Kara engages with filmic affect to explore the feeling of uncertainty, disorientation, and loss mediated through anthropocenema, it is important to recognize how affect functions differently for the anthropogamic – as Aubrey Anabel argues in *Playing with* Feeling: Video Games and Affect (2018), video games are uniquely affective texts separate from other visual mediums (xii). While cinematic affect is primarily located in the viewing subjects visceral response to the visual language of the text (Weik von Mossner 2014, 1), Anabel argues that affect in video games operates differently and, perhaps, more intimately. Instead of just being located in-between the subject and the image, affect guides the player's pre-perceptual, instantaneous reactions as they navigate through the various interconnected layers of the procedural text's virtual world. According to Anabel, digital play requires inhabiting a "form of relation" (2018, xii) to the games representational, mechanical, and procedural dimensions as they "engage and entangle us in a circuit of feeling between their computational systems and the broader systems with which they interface" (xii). Affect, in this framework, then refers to the emotions, feelings, and pre-perceptual bodily engagements that circulate between the player and the object of play that are registered at the interface, where the affective "homologies among the actions of a player's body, the actions of a game's mechanics, and the actions of ideological signification" (xvi) become represented through the haptic interplay between player and computational procedure. Emphasizing the inseparability of video games' interdependent assemblages, Anabel's engagement with affect theory in digital game studies mirrors Voorhees' Genre Trouble approach (2019), as both argue for critical analysis "across code, images, and bodies without reducing video games to either their representational qualities or their digital and mechanical properties" (Anabel 2018, xvi). While Chang's work largely avoids the sticky issue

of game genre all together,¹² Anabel and Voorhees both articulate the need for both affect, and more importantly, genre theory to work across the uncertainties generated by the constantly shifting, nonlinear procedural systems of video game assemblages. However, as shown below, genre theory in game studies has been largely unwilling to embrace the uncertainty inherent to the medium's computational identity.

The Formal Uncertainty of Digital Game Genre(s)

The fact that genre has been underexplored in video games is unsurprising. While genre theory has long been a key pillar of theoretical research within literature and film studies (Neale 1980; Altman 1998; Grant 2012), the multilayered complexity of genre in video games remains a divisive area of research within game studies. Early attempts at genre theory in the field, including Mark J. P. Wolf's iconographic/interactive taxonomy (2002), Geoff King and Tanya Kryzwinska's platform/genre/mode/milieu categorization (2002), and Espen Aarseth's genres of simulation (2004), aimed to legitimize video game genres by strictly defining them through their ludic identity and disregarding their representational conventions, contributing to the well-worn narratology vs. ludology debate that has notoriously pervaded game studies.¹³ This evolved slightly through Thomas Apperley's widely accepted approach that conceptualized video game genres operating between the narratological and ludological taxonomies of genre (2006, 6); however, Apperley's conclusion unfortunately reinforced the perceived importance of ludic conventions over the superficialities of the representational elements (21). This conclusion has ultimately left game studies in a continually tumultuous state of "genre trouble" (Arsenault 2009; Voorhees 2019) that fails to seriously interrogate video games through their inseparable representational and ludic identity; however, given the important connection between generic form and its surrounding socio-historical context as emphasized by both Berlant (2011) and Voorhees (2019), it is essential to examine mutations and evolutions of game genre as "a stylized, formalized response to recurrent situations [... that] communicate advocacy for specific

¹² Chang's only references the connections between ecocriticism and genre in passing, recognizing that her research may "imply that some genres are innately more conducive to environmental gameplay [...] but [] also indicate that environmental gameplay spans a broad range of budgets, platforms, mechanics, modes, contexts, and genres" (2019, 181-182).

¹³ See Gonzalo Frasca's LUDOLOGY MEETS NARRATOLOGY: Similitude and differences between (video)games and narrative (1999).

actions, attitudes and orientations" (Voorhees 2019, 32) towards critical socio-political issues, such as environmental crisis and the looming threat of possible anthropocenic extinction.

In their book *Cruel Optimism*, Lauren Berlant emphasizes the connection between "the becoming historical of the affective event and the improvisation of genre amid pervasive uncertainty" (6), influencing the socio-historical orientation for genre theory in game studies staked by Voorhees. Asserting our moment as generic "impasse" (4) – a "time in which one moves around with a sense that the world is at once intensely present and enigmatic, such that the activity of living demands both a wandering absorptive awareness and a hypervigilance [... to] coordinate the standard melodramatic crises with those processes that have not yet found their genre" (4) – Berlant presents a post-genre approach through which generic evolutions "frame different kinds of potential openings within and beyond the [constant] adjustment[s] that constant crisis creates" (6-7). In other words, by examining the transitional crises of genre in the context of historic socio-political change, it is possible to ascertain the ways our generic structures mutate to reflect and embed the structure of feeling pervading times of overwhelming crisis, collapse, and, possibly, extinction.

Berlant's critical theorizations connecting generic modulation to prominent socio-historical affect provokes pertinent questions for the generic formulation of the anthropogamic that I elaborate here. While many aspects of audio-visual media cultures have been ecocritically examined, what does a generic framework contribute to critically interrogating mediated responses to environmental and, by extension, anthropocenic emergency? How can genre texts and generic form itself be a fruitful avenue for orienting ecological thinking in the present towards the future beyond the continual capitalistic crises of the Anthropocene? Additionally, how can this line of questioning connecting genre, affect, and ecocriticism provide a new approach to evaluating the form and function of genre within video games and other forms of simulated experience? Following Voorhees' agnostic Genre Trouble methodology, I aim to posit the uncertainty of video game genres as a productive space, embracing their heterotopic assemblage of multimedial generic forms and conventions in order to articulate how contemporary affects, such as anthropocentric uncertainty within our "climate catastrophe culture" (Bould 2021), become salient through generic play.

Playing Through Extinction: Death Stranding and the 'Strand' Sub-Genre

"Death Stranding... even now, I don't understand the game[.] Its world view, gameplay, they are all new. My mission is to create a genre that does not currently exist, and which takes everyone by surprise. There is, naturally, a risk in that... And it's not that I'm only creating the things that I want to make. The reason why I want to make things is that, through my past experiences, I know I can influence and help others who I haven't even met."

Hideo Kojima, CEO of Kojima Productions (2019).

As reflected in the quote above from Kojima Productions CEO and long-established video game auteur Hideo Kojima, Death Stranding was fundamentally predicated on designing a new generic form reflective of the surrounding social, political, and environmental crisis in 2019.¹⁴ This is not the first time Kojima has ostentatiously created a new genre for critical socio-political play; previously, through his work on the widely-regarded Metal Gear Solid series (1998-2015) at Konami Digital Entertainment, Kojima inaugurated the 'stealth' sub-genre¹⁵ as a critical intervention into the popular militaristic focus of unfettered violence and individualistic heroism that pervaded other action-adventure games (Siddiqui 2021). Therefore, the generic experimentation of *Death Stranding* isn't a new tactic from the developer, but a continuation of Kojima's preoccupation with the role of genre in effective and affective socio-historical play. For Death Stranding, this involved developing what he terms the 'strand' sub-genre, a thematically interconnected generic assemblage constructed through the indiscrete interplay between representational, mechanical, and procedural systems to effectively mediate the uncertain, disorientating, and isolating feelings of the Anthropocene through play. This uncertainty surrounding and embedded within Death Stranding's generic identity was not only a preoccupation of the game's creator but became the central component of the game's corporate marketing (Figure 1.1) and critical discourse around the game's release (Chen 2020; Dawkins 2019). Thus, the strand sub-genre signals an ecocritically-oriented, affective approach to the established conventions of the action-adventure genre, embedding a fundamental feeling of uncertainty by combining preexisting conventions with unfamiliar and unexpected

¹⁴ In addition to the obvious issues of the climate emergency and the resulting uncertainty of future human survival, Kojima has stated that *Death Stranding*'s focus on connection was also a response to the political turmoil in the West at the time, specifically referencing both Brexit in The United Kingdom and Donald Trump's controversial border wall between The United States and Mexico (Dawkins 2019).

¹⁵ It is important to note that, like the strand sub-genre, the stealth genre was initially a sub-genre of the action-adventure game as well. Over time, the representational, mechanical, and procedural conventions introduced through the stealth sub-genre have become pervasive enough throughout the video game industry that stealth is now largely recognized as its own generic category.

representational and gameplay mechanics to mediate the *feeling* of the Anthropocene and our anticipation of possible anthropocenic extinction. This, I argue, produces a purposeful formal experience of playing with the widespread anxieties surrounding our contemporary moment of overwhelming social, political, and existential crisis, productively utilizing the inherent 'Genre Trouble' of video games to mediate the predominant affects that pervade our Anthropocene imaginary. However, before analyzing the strand sub-genres ecocritically-reoriented representational, mechanical, and procedural assemblages, it is necessary to first provide a succinct overview of *Death Stranding*'s central narrative of survival and connection amidst the inevitability of extinction.

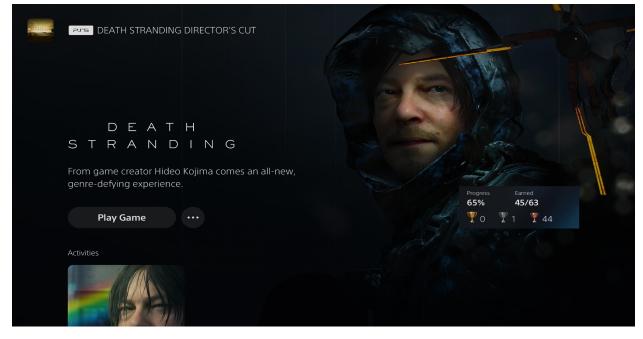


Figure 1.1: Marketing *Death Stranding*'s 'strand' sub-genre. On the PS5 digital storefront, *Death Stranding* is primarily promoted as "an all-new, genre-defying experience," highlighting the centrality of the game's unique generic form to its narrative and ludic experience of anthropocenic crisis.

Death Stranding details a speculative near-future in which the process of human extinction has begun in North America, set during the events of the titular Death Stranding – a recurring cosmological event that 'strands' those killed by the wide-ranging temporal-spatial 'slow violence' of environmental crisis amongst the world of the living, left to spectrally haunt the uncannily beautiful yet dangerous environment produced by anthropogenic destruction. Due to the hostility of both the environment, pervaded by a poisonous new substance created by the Death Stranding called chiralium, and the Beached Things (BTs), the lingering spectral forms of those killed by the effects of environmental and anthropogenic violence, the remaining population has been forced to congregate in vast underground cities across the country, anticipating the predicted sixth major extinction event that will result in the complete annihilation of humanity after the Death Stranding. The game follows the protagonist and player-character Sam Porter Bridges (Norman Reedus), a human deliveryman with an evolutionary adaptation called DOOMs,¹⁶ as he is reluctantly enlisted by the delivery company and acting defacto government Bridges to reconnect the country's underground cities by linking them up via the Chiral Network, an evolved internet of sorts, while simultaneously rescuing his sister Amelie Strand (Lindsey Wagner) from the anti-nationalist terrorist Higgs (Troy Baker), as she is supposed to act as Bridges' president following the death of their mother, former president Bridget Strand (Lindsey Wagner). Along his journey through realized extinction-in-progress, Sam forges impactful and affective bonds through the delivery of essential packages to both rural and urban survivors, empathizing with their struggles and sharing his own as he reconnects people across the eerie environment in contemplative isolation.

Working with an ensemble cast of those also reluctantly helping with the reunification effort, consisting of Fragile (Léa Seydoux), Mama (Margeret Qualley), Deadman (Guillermo del Toro) and Heartman (Nicolas Winding Refn), Sam unravels a convoluted conspiracy surrounding Bridges. Through the game's episodic narrative structure, the team slowly uncovers Bridges' less-than-altruistic motives for American reunification, their concealed responsibility for causing the Death Stranding, and their knowledge of inevitable extinction despite their continual insistence otherwise. Ultimately, Sam's empathetic actions defer the imminence of the sixth major extinction event; however, since extinction cannot be avoided altogether, the effects of the Death Stranding still pervade and the threat of extinction continues to loom as humanity attempts to survive and meaningfully reconnect both amongst themselves and with the other-than-human world in the post-Anthropocene. Following the temporary deflection of human extinction, Sam ostracizes himself from Bridges to live in the vulnerable uncertainty of the environment instead of continuing to support their corrupt government and reunification program. Rejecting the very system he helped build, Sam's final actions highlight the productive resistance of living toward

¹⁶ The DOOMs adaptation, present in a few characters besides Sam, is an evolved sensual ability that gives the person a greater capacity to perceive both the afterlife and the upcoming major extinction event. For example, Sam has had lucid nightmares of the Death Stranding since childhood and, after it has taken place, is both sensitive to the presence of BTs and resistant to the chiralium poisoning that has driven the remainder of humanity underground.

the fundamental uncertainty of the future through material, affective connections with the other-than-human environment as well as other vulnerable survivors. While this truncated narrative overview is unable to unpack the entirety of *Death Stranding*'s expansive and intricate story, it provides the necessary context for exploring the interconnected representational and ludic elements of the strand sub-genre that fundamentally embed affects related to anthropocenic uncertainty in the game's generic form.¹⁷

From 'Stick' to 'Rope': Death Stranding's Evolution of the Action-Adventure Genre

Hideo Kojima's goal to adapt the action-adventure genre into a form suitable for our socio-historical moment of crisis is obvious both within the diegesis of the game and in paratextual interviews surrounding the game's release. As mentioned earlier, Kojima wanted to create a "genre that does not currently exist" (qtd. in Lewis 2019) in order to respond to a myriad of concerning socio-political issues present at the time of the game's development, including Donald Trump's proposed border wall between the United States and Mexico, England's Brexit referendum, and increased ecological disasters without committed nor sustained concern from the Global North (Dawkins 2019). All of these issues provoked widespread ruptures of community and connection through an ideological focus on combative individualism and socio-political apathy, leading to what Kojima saw as an increase in alienation, isolation, and, ultimately, a 'stranded' hopelessness (2019). Death Stranding, then, encapsulates Kojima's artistic response to these issues through play, as Kojima Productions designed a uniquely impactful narrative-focused open-world experience through representational themes and ludic systems that champion connection, cooperation, and empathy over the conventionally masculine violence and individualism of the action-adventure genre. This fundamental design goal, to create a sense of persistent hopefulness amongst anxious uncertainty through objectives, mechanics, and representational themes of connection to both the human survivors and the other-than-human environment, is best articulated through an opening quote from the Kobo Abe short story "Nawa" ("The Rope") that appears upon selecting "New Game" on Death Stranding's title screen:

¹⁷ For a more in-depth breakdown and analysis of *Death Stranding*'s expansive episodic narrative, refer to Amy Green's book-length narratological examination in *Longing, Ruin, and Connection in Hideo Kojima's Death Stranding* (2022).

"The 'rope,' along with the 'stick,' are two of mankind's oldest tools. The stick to keep the bad away, the rope used to bring the good towards us. They were our first friends of our own invention. Wherever there were people, there were the rope and the stick" (1960).

This opening quote emphasizes many important narrative and mechanical themes that structure the game's transition from action-adventure to the strand sub-genre, using the 'stick' to refer to generic tendencies towards violence, exclusion, and defense in comparison to the 'rope' as a tool that represents the capacity for formal elements to engender connection and empathy towards the human and the other-than-human. To accurately detail the myriad of mutations that evolved the generic identity of *Death Stranding* from the violence of the 'stick' to the 'rope' of connection, it is necessary to outline the conventions of the action-adventure game that *Death Stranding* responds to through the mutations and evolutions of the strand sub-genre.

Action-adventure is a widely recognized genre in the video game cultural industry, combining key elements from the previously distinct genres of action and adventure within some form of narrative framework. According to game designers Jacob Habgood and Mark Overmars, this includes the action genres focus on "fast and furious interactions with lots of physical challenges," which often takes the mode of first or third-person perspective to engage in fast-paced combat or gunplay encounters, and the adventure genres more exploratory design around "short-term puzzle-based challenges and long-term story-led challenges" (2006, 87-88). Prime examples of the action-adventure genre include The Legend of Zelda series (1986-2017), the Tomb Raider series (1996-2019), and the Sony Playstation franchise Uncharted (2007-2022), in which the central gameplay oscillates between puzzle-solving sections and combat encounters to advance narrative progression. Like the gendered orientations of the action and adventure film genres (Gallagher 2006), action-adventure video games are heavily oriented around traditional conceptions of masculinity. Akin to the first-person shooters that largely overlap with the genre, the representational and ludic conventions of the genre glorify and perpetuate macho-heroism and reactive violence by rewarding players for these actions through various forms of in-game progress, such as unlocking a narrative cutscene or receiving new abilities or weapons that increase the destructive power of the player (Voorhees et al. 2012; Welsh 2016). Historically, the action-adventure genre has been extremely popular in the digital games industry, with countless sub-genres making additions to the basic formula while largely adhering to masculine ideologies

of domination over both the non-player characters (referred to as NPCs) and the often flat, unrealistic, and immaterial environments that construct the ludic game space.

These extremely popular, masculine-oriented conventions of the action-adventure genre, which ultimately design play and reward around the successful navigation of weapon-based interactions for combat, exploration, and progression, is the design philosophy referenced by the 'stick' in "Nawa" (Abe 1960). Despite the popularity of the action-adventure genre's central narrative and ludic design that operates through masculine tropes of violence, domination, and unchallenged individualism, Death Stranding actively refutes this masculine identity, asserting these conventions as insufficient or inappropriate forms to mediate our social, political, and ecological crises in connection and care. The 'stick' of the action-adventure game, a symbolic metaphor for the avatar-as-weapon through which player agency is ultimately expressed by 'acting-on' NPCs, game environments, and other non-player elements of the game world (Navarro 2012), rewards division by ludically and representationally constructing the player as an exclusively righteous aggressor against the digital other. As noted by Melissa Kagan in her discussion of *Death Stranding*'s ludic and representational design, "when a player confronts any landscape with a gun in hand, its violent takeover feels both literally and morally easier" (2022, 14). Instead, Death Stranding's strand sub-genre reorients nearly every aspect of its generic assemblage around the 'rope,' forming connection through empathetic play and co-dependence with the non-player components of the game. This key change in the generic form, from overt masculine agency to an affective play of empathy and connection that resonate with ideas from eco-feminist scholarship (Haraway 2016; Puig de la Bellacasa 2017; Tsing 2015), evolves the action-adventure genre into a suitable form for our contemporary moment of crisis in ecological and anthropocenic connection. Through these previously uncharted mutations of the action-adventure genre, Death Stranding's generic form is able to mediate an affective uncertainty by challenging players to interpret, embody, and act through the uncanny familiarity of new representational and ludic designs of action and adventure and, in turn, emphasizes the hopeful potential of connection and empathy amidst uncertainty as a productive response to overwhelming crises of the Anthropocene.

As mentioned earlier, *Death Stranding*'s core gameplay revolves around ludic mechanics of connection – to progress through each chapter, the player-as-Sam must deliver packages to and activate technological infrastructure for those isolated by the inhospitable environment that

have resulted from the Death Stranding. Using package delivery as the central ludic and representational metaphor for the necessity of connection amongst crisis, the player spends nearly all of their time in the ludic game world delivering basic supplies and technologies to reconnect survivors across the continent, wandering the realistic environment in contemplative isolation as they scale snowy mountains, cross treacherous rivers, and avoid the other-than-human BTs tethered to the ruins of cities and other anthropocenic infrastructure such as highways and factories. By completing a variety of primary quests and side-mission deliveries, the-player-as-Sam forms personal, empathetic connections with the dispersed survivors that are enhanced through subsequent repetitions of delivery routes, rewarding the player's effort to maintain these connections through increasing star levels from one to five, reminiscent of 5-star rating system popular amongst media criticism (Green 2022, 29), that unlock further ludic tools to aid in environmental navigation as well as provide supplementary narrative information. These deliveries, however, do not merely realize mechanics of connection through repeated visits to NPC shelters, but also encourage a visceral, ecological connection to the representationally and mechanically realistic game environments.

As Amy Green explores in her book-length narratological examination Longing, Ruin, and Connection in Hideo Kojima's Death Stranding (2022), the repetitive deliveries that structure Death Stranding encourage environmental exploration that "allows the player to [viscerally] exist in the natural environment of the game [...] becom[ing] at once tourist, witness to ruin, and instrument of hope" (29-30) by designing the central mechanical-procedural relationship around extensive sections of contemplative walking through the uncannily beautiful extinction environments. By focusing the mechanical, procedural, and representational elements on the seemingly insignificant action of tactile movement over challenging, realistically-designed terrains, including snowy mountain ranges, rocky plains, rivers, and more, the player gains a "greater tactile and narrative connection to the environment [...] forging ahead one package at a time [to] reiterate[] the critical importance of landscape to the game" (34). This intense focus on the environmental realism of the game world's physical landscapes and biospheric interrelations, as seen through environmental design aspects such as realistic procedurally generated weather patterns and dynamic environmental sound design, as well as the realistic design of player interaction with the material contours of these environment, as opposed to moving over it unchallenged like most other games, are essential to the game's ecocritical

design and cement the game as a fundamentally ecocritical text according to Alenda Chang's criteria (2011, 60). This tactile and visceral experience is one of the most notable ecocritically-informed mutations made to the action-adventure genre, emphasizing slow, contemplative movement through a realistically designed representational-ludic environment as a meaningful mechanic of playful action that guides players towards connection instead of domination. This critical generic intervention into the mechanical and representational design of movement and environmental tactility is not a new preoccupation inaugurated by the strand sub-genre, however, but is a central design practice of the 'walking simulator' genre that has been previously regarded as both a feminist and an ecocritical modulation of the action-adventure genre.

Labeled as one of "gaming's most detested genres" (Clark 2017), the walking simulator has become a major generic movement throughout the 2010s. Purposefully resisting masculine generic conventions that heavily feature violent combat encounters, the walking simulator centers "the player's traversal of the landscape as a fundamental part of the game's mechanics" (Green 2022, 14). Focused on the agency and affect generated through simple mechanics of movement and interaction within game spaces, the genre foregrounds realistic interactions with the environment not merely as background but as intimately interconnected with the mechanics of player agency (Montembeault & Deslongchamps-Gagnon 2019; Chang 2019). This invokes a generic resistance to masculine assumptions of 'meaningful' action within video games similar to the ecocritical aspects outlined by Chang, such as their slowness, lack of spectacular action, absence of NPCs, and spatial storytelling, making the genre a powerful ecofeminist reorientation of agential mechanics (2019, 43). Including the walking simulator's critical connection between movement and environment as a central component of action is integral to the strand sub-genres' evolution from the conventions of the action-adventure game. And although I agree with Amy Green's hesitation to frame the totality of *Death Stranding*'s innovative experience through the walking simulator (2022, 14), it essential to highlight the influence of the genre on Death Stranding's evolutions of the relationship between the player and environment within the action-adventure genre.¹⁸ Furthermore, the strand sub-genre does not only renegotiate the

¹⁸ For more regarding *Death Stranding*'s connection to the walking simulator genre, Melissa Kagen's recent book *Wandering Games* (2022) dedicates an entire chapter connecting the game's central ludic theme of wandering to its representation of a post-anthropocenic world.

relationship between the player and the in-game environments, but extends this unfamiliar interconnectedness to disrupt expectations of the player's relationship to enemy NPCs as well.

While designing more realistic, visceral relationships with game environments already disrupts player expectations of an action-adventure game, *Death Stranding's generic focus on* connection extends to the relationships between the player-character and the computer-simulated enemies as well. Given the action-adventure genre's ludic focus on weapon-oriented action, violent combat and individualistic domination conventionally structure the primary mechanical and procedural relationship between the player and enemy NPCs. This, however, is not the case in the strand sub-genre, as *Death Stranding* purposefully dissuades or altogether limits violent interactions with a majority of the enemies populating the game space. For instance, with the exception of a few notable sections that will be discussed shortly, the player is mostly provided non-lethal tools and weapons for interacting with enemies, encouraging minimal hostile interactions through mechanics that encourage avoidance, stealth, and other forms of non-violent confrontation. Although the player is given access to lethal weapons at certain points throughout the game, using these against common enemies such as BTs and MULEs¹⁹ procedurally results in overtly negative consequences through game-ending Voidouts.²⁰ Additionally, both the human MULE's and the non-human BT enemies generate further affects of non-violence through their avoidant mechanical and procedural design. While enemies in action-oriented games are conventionally designed to instantaneously provoke the player into violent conflict, Death Stranding's enemies only indirectly threaten the player-character. For example, although dangerous to the player if provoked, BTs do not actively attack the player-character upon entering BT areas if the player guides Sam through the encounter slowly and quietly as directed by the in-game tutorials.²¹ Therefore, along with the representational, mechanical, and procedural changes that enhance the environmental realism through an unfamiliar combination of generic signifiers, the non-violent enemy design marks another ecofeminist intervention of the strand games generic evolution. As Adena Rivera-Dundas argues in her article "Ecocritical Engagement

¹⁹ Narratively, MULEs are former delivery-people who have been driven mad by the environment's poisonous Chiralium. These enemies will only attack the player-character if they are carrying packages, and do not harm the player-character if they are captured. Instead, MULEs steal the player's delivery packages and then dump the player-character outside of their encampments.

²⁰ Voidouts are game-ending procedures that are triggered when a human NPC is killed by the player-character. They can only be avoided through either non-violent interaction or by delivering the deceased body to one of only two in-game incinerators before it explodes.

²¹ In BT encounters, the tutorial instructs the player to only move through these areas while pressing commands that make the player-character crouch and hold their breath.

in a Pixelated World," "elements of the video game medium, specifically those which emphasize exploration and disallow combat, offer ethical attunements to the nonhuman world" (123), and given that nearly every hour of gameplay extensively encourages non-violent exploration, these generic modulations in the ludic and representational design of the other-than-human environments and enemies foregrounds the game's ecocritical focus on non-violent connection and empathy.

As seen through these key examples, Kojima Productions' generic evolution of the action-adventure game into the strand sub-genre effectively embeds ecocritical affects beyond its central narrative of extinction. Through the interconnected reorientations of the game's representational, mechanical, and procedural generic identity through unfamiliar environmental and enemy design, *Death Stranding* forms a generic response to the socio-historical events of contemporary crisis by creating a crisis in the generic identity of the conventionally masculine action-adventure game. By resisting the genre's violent individualism, the strand sub-genre has attempted to evolve the formal identity of the action-adventure genre to effectively mediate affects surrounding crisis, primarily concerning connection and empathy amongst existential, anthropocenic uncertainty and vulnerability. However, the mutation of the action-adventure genre into the uniquely affective strand sub-genre is not only evident through indirect historical comparisons between past and present conventions. Instead, Death Stranding explores the necessity and inevitability of generic evolution self-consciously and diegetically through the trio of episodes surrounding the mysterious and disconcerting militaristic antagonist Clifford Unger (Mads Mikkelson), titled "Unger," "Clifford," and "Clifford Unger." Emphasizing the importance of generic evolution directly within the game's interactive narrative, *Death Stranding* creates moments of productive, heterotopic tension through copresent generic forms, diegetically contrasting the experimental representational and mechanical conventions of the strand sub-genre, symbolically attached to Sam, to the conventional identity of action-adventure games, symbolically linked to Clifford Unger.

Cliffs of the Past and Bridges to the Future: Generic Uncertainty as Crisis Heterotopia

Upon completing a primary delivery objective at the end of the third chapter, "Fragile," *Death Stranding* briefly transitions to a very different game space compared to the central gameplay of environmental traversal and delivery encountered thus far. Fading back in after Sam

is consumed by the gyre of an intense storm, now in a completely unfamiliar in-game environment, the camera pans across the muddy trenches of a WW1 battlefield, hovering just above the surface as the black oily substance begins to flood the scene. As the inky black liquid covers all the ground in the frame, the camera then pans up as blackened, skeletal soldiers emerge from the trenches, walking toward the camera. Then, a figure covered emerges from the oily substances in the center of the formation, holding onto black strands connected to the soldiers like leashes. The eerie soldiers surround the man in a tactical position, guns drawn and at the ready. The man then directs the soldiers with a military hand signal to move forward, rising to his feet as they move out of frame in tactical formation. The camera shakily moves forward towards the man as he is shown clearly for the first time. Tracking up from his combat uniform, past military-issued dog tags hung around his neck, the camera settles on a close-up of his face as oily black tears stream down his face. He opens his eyes as a credit appears beside his figure, reading "Combat Veteran – Mads Mikkelsen," before the camera cuts to black and reveals the episode's title – "Unger."

While this scene seems entirely disconnected and out-of-place given the previous description and analysis of *Death Stranding*'s generic resistance to the militaristic conventions of the action-adventure game, this episode introduces the first of three short interludes that abruptly punctuating the game's central generic identity with war iconography and weapon-based combat central to the conventional generic identity of action-adventure games. Through the "Unger," "Clifford," and "Clifford Unger" episodes, set during WW1, WW2, and the Vietnam War, respectively, the player's ludic agency is abruptly seized at a narratively predetermined moment before they are inexplicably transported to one of these disconnected battlefields connected to the mysterious "Combat Veteran," later revealed as Clifford Unger (Mads Mikkelson), Sam's biological father and a once highly decorated soldier of the now-defunct United States military. Upon regaining ludic control of Sam, the player must defeat Cliff's jarring combat-oriented boss encounters in order to escape the horrors of war and return to the narrative, mechanical, and procedural gameworld established and encountered throughout the rest of the game. In these unexpected sections of brief generic disruption, the player is confronted with the masculine violence of the conventional action-adventure game as the non-lethal weapons introduced in the primary game space are replaced with the conventional weapons used for reactive combat in action-adventure encounters. These episodes, thus, place the player in eerily familiar narrative

and mechanical encounters that uncomfortably juxtaposes the conventional violence of the action-adventure genre to the non-violent and empathetic reorientations of the strand game.

By interspersing these unexpected sections throughout the game, Kojima makes the conventional run-and-gun gameplay central to the ludic identity of the action-adventure genre feel grossly out-of-place and inappropriate through the stark comparison to the game's connection-oriented mechanics of delivery and non-violent exploration. Interestingly, the mechanical design of Sam's delivery-based movements and actions make the player-character feel awkward, clunky, and unsuited to the militaristic conventions of combat that pervade action-adventure games. This generic tension between the masculine conventions of the action-adventure game and the ecofeminist evolutions of the strand sub-genre, as explicitly explored through the ludo-narrative diegesis of Clifford Unger's episodes, indicates the insufficiency of previous generic forms²² for mediating the contemporary structure of feeling accompanying the environmental and anthropocenic crises of the Anthropocene. Symbolically, as explored by Derek Garcia, both Cliff's name, which indicates a rupture in geography that prevents forward movement, as well as his fatherly connection to Sam additionally mark these sections as points of commentary surrounding generic transition and evolution (2022). By emphasizing the insufficiency of previous forms for our contemporary moment and asserting the necessity of uncertain, disorienting experimentation with familiar conventions through Cliff's episodes, Death Stranding diegetically creates a generic space that resembles Foucault's "crisis heterotopia" (1981), a space constructed through contradictions intended for working through states of crisis, to ludically and representationally stake the productive potentiality of generic evolution from previous formations for the contemporary crises of the socio-historical present.

Extending from Faucault's brief formulations of heterotopia, Lauren Berlant further defines crisis heterotopia in their book *On the Inconvenience of Other People* (2022). Offering a compelling interpolation that connects the concept to discussions of contemporary anthropocenic crises, crisis heterotopia, as per Berlant, defines either a physical or mediated "transitional space where the social [has] reache[d] a limit and opens a window to an outside, to new dictionaries and the counternormative" (Berlant 2022, 14). When normative social and political structures break down, crisis heterotopias provide a space to explore alternative ways for

²² In this case, the previous genres being responded to are both the literary and cinematic war genre and the militaristically-inspired action-adventure video game genre that mechanically and narratively poses unquestioned violence as righteous heroism.

being-in-the-world. Through heterotopic spaces which allow us to experience and process the messy contradictions and anxious uncertainties of the moment, we can begin to both articulate the affect of living through crisis while simultaneously exploring new forms of response to adapt to the new realities that crisis brings. Extending from Hye Jean Chung's heterotopic media analysis, an approach which works to "challenge[s] the notion of [digitally mediated] space as a seamless unity" (2018, 4), I argue that *Death Stranding* self-consciously and diegetically establishes a generic 'crisis heterotopia' in order to work through the affects of anthropogenic crisis and explore a new generic form, whether that be the specific 'strand' sub-genre or the more general category of the anthropogamic, for our contemporary consciousness shaped by the crises of the Anthropocene.

By diegetically refuting the masculine violence synonymous with the action-adventure genre through the affective uncertainty, vulnerability, and empathy of the strand sub-genre, mirroring Kojima's own career transition from the previous militaristic genre of the Metal Gear Solid (1998-2015) series, Death Stranding heterotopically intertwines the generic conventions of the past and the present to create a generic crisis heterotopia that mechanically and narratively exposes the insufficiencies of past forms and asserts the productive potentiality for uncertain generic transitions oriented towards our contemporary Anthropocene imaginary. In this generic space of heterotopic crisis, Death Stranding mirrors Berlant's conceptualization of crisis heterotopias through its 'troubled' ludo-narrative tensions. By framing Clifford's episodes' disjointed generic tensions as heterotopic spaces of crisis, Death Stranding's self-conscious generic mutations form a productive and necessary space that is "dynamic and unpredictable, offering as the scene of life discontinuities and decaying holes and loose joints for reshaping" (Berlant 2022, 14). It is through the diegetic ludo-narrative play of *Death Stranding*'s heterotopic Genre Trouble that uncertainty is formally embedded, both reflecting the affective uncertainty of the Anthropocene while embracing uncertainty as a productive affective response to our contemporary socio-historical context of overwhelming environmental and anthropocenic crisis.

Conclusion

Through these episodes, in which the generic tensions between past action-adventure games and the present mutations of the strand sub-genre are made intimately playable, *Death Stranding* ultimately embraces its Genre Trouble to effectively mediate the 'crisis affects' of the

Anthropocene through a self-conscious crisis in form. By diegetically contrasting the slow, contemplative, non-violent, connection-based gameplay of the strand sub-genre with the conventional militaristic identity of the action-adventure game, Kojima Productions not only pushed the conventions of the action-adventure genre beyond their masculine limitations but retained aspects of the genre's past as a persistent spector of familiarity that heterotopically engages both the possibility and necessity to adapt popular generic forms to the socio-historical contexts of the present. Death Stranding, therefore, presents the potentiality for uncertain and experimental generic evolutions to mediate our contemporary feeling of living through the crises of the Anthropocene through a generically constructed crisis heterotopia. Unlike the largely uncomplicated idealism or cynicism prominent in utopian or dystopian genres, the generic contrast of *Death Stranding*'s heterotopic game spaces establish an interactive narrative through which the tension between the violence of the past and the uncertainty of the future can be affectively explored and experienced. Through the representational, mechanical, and procedural evolutions introduced in *Death Stranding*, the strand game's diegetic tension in generic conventions heterotopically stakes the revolutionary nature of resisting nostalgic familiarity through radical generic evolution towards forms that critically mediate the disorienting affective flows of pervasive uncertainty under threat of anthropocenic extinction. As Svetlana Boym argues in The Future of Nostalgia, "the word revolution... means both cyclical repetition and the radical break. Hence tradition and revolution incorporate each other and rely on their opposition" (19). Therefore, the heterotopic interplay between the generically invoked spaces of militaristic war and ecocritical extinction proves a powerful example of the revolution possible within the anthropogamic, as *Death Stranding* actively and diegetically embodies contemporary affects of uncertainty and disorientation through both its powerfully empathetic narrative and its generic experimentation with ludic action for mediating the Anthropocene. By transitioning the action-adventure genre into an experimental new formal identity, the strand sub-genre mediates the affects of the Anthropocene while simultaneously connecting us to a future beyond the possibility of extinction through its self-conscious crisis in generic form, positing the potential for anthropogamic play itself to ecocritically embrace revolutionary uncertainty, disorientation, vulnerability, and empathy to evolve beyond the suffocating, and overwhelmingly violent, conventions that largely pervade established video game genres.

Death Stranding's generic crisis heterotopia, therefore, provides a powerful example of the ecocritical and affective power of embracing the inherent Genre Trouble of video games to mediate the feeling of living during the Anthropocene. Through Gerald Voorhees' Genre Trouble methodology, which embraces the inherent uncertainty and plasticity of generic identities in video games, I have shown how experimentations in generic form can be interpreted, not as failures in game design as they are often framed (Webster 2019; Ogilvie 2019), but as productive spaces of "historically contingent formations of text and practice [...] assembling and inventing forms of sociality to survive the present" (Voorhees 2019, 33). Therefore, as we continue to live through the Anthropocene and progress towards likely human extinction, the heterotopic generic form identified in the anthropogamic is an essential practice, one that can both challenges the anthropocentrism and violent masculinity of previous genres while simultaneously arguing for alternative formal connections between representation, ludic mechanics, and procedural systems during moments of crisis - connections which give form to the anthropogamic as a form for not only representing the feeling of the Anthropocene, but playfully experiencing it as well. While this heterotopic genre analysis has proven fruitful for understanding the complex, medium-specific assemblage that gives form to video game genre, what could a similar approach to digital cinema's generic mutations contribute to critical understandings of the relationship between genre, affect, and ecocriticism in contemporary cinematic mediations of living through the crises of the Anthropocene?

Chapter II

Genre(s) in Crisis: Formal Mutations in Alex Garland's Annihilation

Throughout the 2000s and 2010s, as the prevalence of both environmentalism and digital technology rose extensively in the West and, if unevenly, across the globe, genre cinema has also transformed. Narrative genre cinema has become increasingly preoccupied, either implicitly or explicitly, with the environmental crisis and our collective experience living through the multitudinous crises of the Anthropocene. While explorations of environmental and ecological issues between humans and the non-human world can be traced back to earlier genre texts, such as Planet of the Apes (1968), Silent Running (1972), Mad Max (1979), and Dances With Wolves (1990), genre films since the 2000s have marked an increased presence of ecocritical themes, issues, and affects relating to crisis in tandem with significant advances in digital filmmaking technology (Denson 2020, 193-236). From genre cinema's initial forays into distinctly ecocritical themes and aesthetics through disaster films, such as The Day After Tomorrow (2004) and the remake of The Day the Earth Stood Still (2008), to the countless contemporary films across a variety of generic categories since 2020 alone - e.g. Moonfall (2022), Don't Look Up (2021), and Avatar: The Way of Water (2022) – it is apparent that the widespread anxieties of the environmental crisis have permeated the conventions of Western genre cinema's most distinctive categories. However, this raises several questions about the transformative relationship between ecocriticism and genre theory. Given the prevalent impact of ecocritical themes on genre cinema, how have formal conventions been transformed to effectively mediate the interlinked environmental and anthropocenic crises, including the possibility of accelerated human extinction emphasized by ecocritical theorists, such as Timothy Morton and Rob Nixon (2013; 2011), and popular writers, such as Elizabeth Kolbert (2014), alike? Furthermore, given the abundance of digital effects in cinematic mediations of ecological crisis (Kara 2016, Denson 2020), how have digital technologies been used to embed contemporary 'crisis affects' of the Anthropocene into our contemporary cinematic forms, specifically the affective uncertainty and disorientation provoked by crisis as emphasized by previous scholars (Berlant 2011, 2022; Weik Von Mossner 2014; Kara 2016; Denson 2020)?

In order to critically assess the connection between genre cinema, digital technology, and the affective regimes of the Anthropocene, it is essential to recognize the digital transformations of contemporary genre cinema that have contributed to widespread mediations of ecological

crisis. While the general characteristics of genre cinema have remained consistent throughout their history, such as the use of identifiable formal conventions or the reliable cycles of generic transformation outlined by Rick Altman (1999), the adoption of digital visual effects throughout the early 2000s has introduced alterations to the structure and conventions of preexisting generic forms (Beebe 2000, McClean 2007; Mayer 2016; Denson 2020). Following the previous chapter's approach to the 'crisis affects' mediated through the heterotopic assemblage of video game genres, this chapter will now focus on digital cinema's transformative relationship with genre, ecocriticism, and affect to transmedially explore how conventional generic categories have been mutated to give cinematic form to the *feeling* of the Anthropocene.

Although countless films have been analyzed for their overt ecological themes, narratives, and aesthetics, the ways in which these environmental themes and ecocritical ideas become realized through generic form remains relatively underexplored. While a few key theorists have addressed the narrative and thematic complexity of 'eco-films,' most notably in the work of Leo Braudy (1998) and David Whitley (2012; 2014), I aim to apply the productive "Genre Trouble" (Voorhees 2019) methodological approach beyond game studies to examine how popular film has been formally transformed through the use of digital effects to mediate the affective regimes of our anthropocenic climate crisis culture. Inspired by previous work on the transformative nature of "morphing" digital visual technologies on film form (Sobchack 2000, Beebe 2000), this chapter will examine how digital effects have been used to mutate generic conventions towards a 'troubled' form that effectively mediate what Donna Haraway would refer to as the 'trouble' of the Anthropocene (2016).

Unlike the modular affordances of video game's generic assemblages, which can easily recombine a variety of elements to drastically transform its generic identity as seen through the previous chapter's exploration of *Death Stranding*'s (2019) self-asserted 'strand' sub-genre, film genres rarely undergo such distinctive rifts between individual texts and preexisting generic forms. However, despite the relatively formal rigidity of film genre, noticeable and definite thematic, iconographic, and syntactic shifts have occurred to embed ecocritical themes and issues into the genetics of contemporary generic forms. While the weight of the ecological crisis and anthropocenic extinction is apparent through the sheer number of commercially successful (and unsuccessful) films that have explored narratives surrounding these issues, many of these films merely draw upon generalized aesthetics and themes related to these crises while maintaining the

formal conventions of their generic identity. For instance, although generically conventional films such as *Avatar* have proved effective for drawing sustained attention toward ecological issues, Adrian Ivakhiv has persuasively argued they often lack the affective tenors reflective of our own fraught and uncertain experience within these crises (Ivakhiv 2014). However, amongst the multitude of genre films about ecological disaster – which generally overlay preexisting genres, most often the disaster film, with signifiers of environmental crisis²³– a handful of texts have used digital affordances to mutate familiar generic conventions toward a new formal identity capable of mediating the contemporary affects of existential uncertainty and anxiety-inducing disorientation that have accompanied the environmental and anthropocenic crises of the Anthropocene.

Drawing upon the modular, heterotopic affordances of contemporary digital cinema (Chung 2018), these ecocritical genre texts, which form a sub-group of Selmin Kara's broader cinematic category of "anthropocenema" (2016, 750-784), have utilized digital technology to not only mediate the disorienting uncertainties of environmental crisis on narrative, thematic, and aesthetic levels, but to mutate the structure of their cinematic form toward the affective regimes of the Anthropocene as well. In what follows, I take Alex Garland's Annihilation (2018) as a signal example of this transformation. Through a critical analysis of *Annihilation*'s generic form, placing focus primarily on the film's use of digital effects to reference, subvert, and then mutate the expected conventions of the science fiction/horror genre, I will show how some anthropocenematic films have utilized the mutative effects of digital technology to invoke an uncertain and disorienting cinematic form capable of mediating both the potential effects and the pervasive affects of our contemporary anthropocenic experience. Similar to Vivian Sobchack's examination of the Dark City (1998) as a paradigmatic text for examining the morphogenic effects of digital visual technology (2000, 131-158), Annihilation is an exemplary anthropocenematic genre text as the mutating effects of digital technology not only 'trouble' the generic structure of the film but are also narratively allegorized and visibly figured through the film's ecological antagonist, The Shimmer. By examining Annihilation's use of digital effects to ecocritically mutate the conventional form of the science fiction/horror genre, I will show how contemporary genre texts have been transformed under the critical pressures of the Anthropocene

²³ E.g. the freezing of the earth in *The Day After Tomorrow* or the extreme natural disasters in both *Geostorm* (2017) and *2012* (2009).

and how generically 'troubled' texts within the broader category of anthropocenema can be understood as a productive formal approach to mediating the affective regime of the Anthropocene imaginary.

Genre Trouble for Troubled Times

Thoroughly outlined in this thesis' previous chapter, Gerald Voorhees' Genre Trouble methodology does not aim to "simply identify novel patterns of form and activity that constitute distinct formations of [texts]" (2019, 33) like many prior approaches to genre study.²⁴ Instead, inspired by Lauren Berlant's affective view of generic "impasse" as the connection between "the becoming historical of the affective event and the improvisation of genre amid pervasive uncertainty" (2011, 6), Voorhees asserts genre as a "conceptual tool for studying historically contingent formations of text and practice, and Genre Trouble a critical practice for assembling and inventing forms of sociality to survive the present" (2019, 33). Recognizing the productive potential of combining unconventional, contradictory generic elements together, Genre Trouble understands experimentations with generic form as a signal of collective artistic crisis to formulate a coherent response to contemporary socio-historic issues and anxieties. Formulating a productive methodological approach to perceived failures or crises in generic form, Genre Trouble highlights how uncertain and ambiguous treatments of genre are productive for moments of socio-historical crisis - like our contemporary epoch of environmental degradation and anthropogenic calamity - by framing the "unintelligibility of the moment [as] an opportunity that invites new forms of response, new genres, and new orientations to the future" (33).

While Voorhees' approach to 'troubled' generic formations under moments of crisis is an ideal entry point for understanding how generic form can mediate the affects of the Anthropocene, it would be errant to neglect Voorhees' specific orientation towards game studies. Compared to the relatively stable cycle of film genres, in which a distinctive form is established through repeated semantic and syntactic conventions that are then extensively utilized, satirized, and, eventually, evolved through a multi-discursive interplay between producers, audiences, and critics (Altman 1999, 207-215), video games genres inherently develop in relatively uncertain

²⁴ Voorhees is referring to the relatively limited scope of prominent genre theorists in game studies such as Espen Aarseth (2004) and Gonzalo Frasca (2003). These theorists would be equivalent to the conservative categorical work of classical film genre theorists outlined by Altman, such as Will Wright (1975), Thomas Schatz (1981), and Jane Feuer (1982).

and unpredictable ways due to the near infinite parameters of change inherent to the medium's computational assemblage of differing representational elements, mechanical design, and procedural systems. It is in this inherent formal uncertainty that Voorhees locates the productive potential for disjointed, contradictory generic identities and conventions that, I argue, are crucial for mediating feelings of disorienting uncertainty present during our extended moment of crisis. However, this does not mean that film studies scholars have not previously examined similar phenomena in narrative genre cinema.

Presenting early work surrounding the effects of digital visual technology on cinematic form in the collection Meta-Morphing: Visual Transformation and the Culture of Quick-Change (2000), Roger Warren Beebe identified the potentially destabilizing effect of "morphogenic" digital technology on preexisting film genres (159-181). Taking Terminator 2: Judgment Day (1991) as a paradigmatic text of "the morph," Beebe proposes that the endlessly malleable morphogenic ability of digital effects mark a significant "transformation of the structure of Hollywood narrative film [...towards] new cinematic narrative forms that are produced under and bespeak this new cultural formation" (160). Within the texts Beebe identifies, digital technology "serve[s] more as the [potential] ground for a new narrative form than as a means of upping the ante within the narrative codes of [...] older narrative form[s]" (171). Reading the digital morph as a narratively rupturing effect that marks a potential turning point toward alternative cinematic forms and affective regimes, Beebe's conclusions surrounding the relationship between digital technology and generic form connects well to Genre Trouble similar to Voorhees, Beebe recognizes how digital technology creates more potentials for ruptures, contradictions, and inconsistencies within previously homogenized cinematic forms that can, "through its disruptive pleasures" (161), facilitate the emergence of alternative forms and, with them, affective mediations of their surrounding socio-historical moment.

However, instead of directly applying Beebe's early conceptualization of the morph to the contemporary effects of digital technology on genre cinema, I extend his logic to instead theorize mutation as the digital effect that has been used to produce productively 'troubled' generic forms within anthropocenema. Whereas Beebe understands the morph "as a figure for, and symptom of, the shift from [...] classic[al] narrative models [...through its] appearance as a visible rupture" (2000, 160) that introduces the potential for new forms to emerge from the confines of previous generic identities, I posit digital mutation, instead, as the process wherein digital technology

combines with live-action elements in a process that simultaneously reference, subvert, and then transforms previous generic conventions into a new cinematic form fundamentally predicated on the uncertain genetics of its generic identity. As opposed to the morphs' gradual evolution of formal conventions by challenging the solidity of preexisting conventions, mutation instead recognizes the potential for the heterotopic combination of live-action conventions with digital modulations to produce a productive formal uncertainty that is uniquely suited to mediating the 'crisis affects' of the Anthropocene. To further explore the potentially mutative effect of digital technology on the generic form and, by extension, affective regimes of certain anthropocenematic texts, I turn now to previous examinations surrounding the connections between ecocriticism and digital technology in contemporary image cultures undertaken by post-cinema scholars Steven Shaviro, Shane Denson, and Selmin Kara.

Anthropocenic Affect and Post-Cinematic Theory

Although Beebe's initial research on the generic impacts of morphogenic digital effects is useful for establishing mutation - the referencing, subversion, and then transformation of previous generic conventions through the indiscrete blending of digital and live-action elements - as a potential process for ecocritical generic formations within anthropocenema, it is essential to outline the relationship between digital technology and anthropocenic affect in contemporary cultural production. Luckily, the connections between digital post-cinematic texts, affect, and the Anthropocene have been explored at length by a number of film and media studies scholars. Steven Shaviro provides one of the earliest theoretical inquiries into the connections between digital technology and ecocritical post-cinematic affect; examining the affects evoked through Lars von Trier's use of digital imagery in Melancholia (2009) for the titular planet's collision with Earth – an effect which evocatively visualizes human extinction for the first eight minutes of the film – Shaviro champions the ability of contemporary digital filmmaking to viscerally link the latent anxieties of anthropogenic crisis, in this case existential melancholia and malaise, to cosmological concerns through digital visualizations of cosmological forces and other non-human agencies (2011). Through its ability to present both human figures and various scales of other-than-human beings in the same frame, post-cinematic texts can effectively connect the affective melodrama of human existence to scales of cause-and-effect beyond conventional human perception.

Connecting to Shaviro's exploration of the ecocritical affects realized through von Trier's post-cinematic imagery, Shane Denson further explores prominent post-cinematic mediations of anthropogenic and anthropocenic extinction through his theory of post-cinematic discorrelation. Moving beyond the "subject-oriented perceptual vistas" (2020, 193) associated with celluloid cinema, post-cinematic discorrelation names the phenomena in which "the images that [now] populate our world are themselves discorrelated from [the perceptive register of] human subjectivity" (2). Through the discorrelation inherent to digital imagery, post-cinematic texts can mediate ecological agencies through non-realist perspectives that highlight the "irreversible shift in our planet's ecology by way of mediating a heightened urgency of extinction, which comes to serve as the experiential horizon for our actions and our images alike" (193). By expanding the temporal and spatial limits of cinematic narratives and images. Denson argues that the ecological agency of post-cinematic technologies are centrally involved in the mediation "of an experience of 'the world without us' [...] both thematically (e.g in films about impending or actual extinction events) and *formally*, in terms of [...] the general discorrelation of post-cinematic moving images from the norms of human perception" (194). Through post-cinematic theory, Denson locates the potential for post-cinematic texts to mutate the formal conventions of cinema through discorrelated, and thus formally mutative, digital mediations of other-than-human perspectives and temporalities. Simply put, the discorrelated, non-anthropocentric perspectives and imagery realized through digital technologies present alternative perspectives that can effectively challenge and mutate the anthropocentric conventions largely entrenched in our moving image cultures.

While Denson's work on post-cinematic discorrelation asserts the mutative potential of all digitally-augmented images, what characteristics, then, mark specifically ecocritical post-cinematic texts? What formal and thematic traits do ecocritical post-cinematic films share that embed specific anthropocenic affects akin to the melancholic disillusionment that Shaviro identifies in *Melancholia*? To answer this, I turn to Selmin Kara's "anthropocenema," a cinematic category she periodizes in the digital shift that denotes "new formulations of time and space brought about by the becoming-cinematic of the Anthropocene imaginary" (2016, 752) in post-cinematic texts. Digital technologies, Kara argues, allow contemporary films to "stretch the boundaries of cinematic time and space across deep pasts, vast futures, and previously unmappable topographies in order to project visions of humanity under constant threat by factors

of its own making" (753). In anthropocenematic texts, exemplified through films such as Alfonso Cuaron's *Gravity* (2013) and Bong Joon-Ho's *Snowpiercer* (2013), CGI, virtual cameras, and other digital effects provide effective visualizations of both the temporal and spatial effects of ecological hyperobjects like the climate crisis as well as distinctly non-human agencies, located in effects such as *Gravity*'s digitally-realized space debris or the polar bear that punctuates the ending of *Snowpiercer*. By blending together live-action filmmaking with non-anthropocentric digital mediations of time and space, anthropocenema is able to explore ecocritical themes, issues, and affects by "stretch[ing] cinema's temporal imagination over primordial and post-extinction realities[, ...] locat[ing] in the tropes of primordiality (the origin of all origins) and extinction (the ultimate obsolescence) articulations of our contemporary anxieties regarding the finitude of human life on Earth" (758). Through both discorellated, other-than-human cinematic perspectives and digital visual effects, post-cinema's blend of live-action and digital filmmaking can effectively visualize a cinematic form for the Anthropocene, one that "brings us face to face with the effects of the so-called Epoch of Man, including the possibility of a total ecosystemic collapse or human self-annihilation" (770).

And yet, while these theorists clearly emphasize the ability of the post-cinematic image to mediate our socio-historic moment of ecological and anthropogenic crises, it is not immediately apparent how these digitally-expanded regimes of visibility relate to ecocritical mutations of conventional generic forms. While Shaviro briefly addresses the impact of ecocritical themes on generic formation through the concept of "cosmological melodrama" (2011) and Denson explores how his theory of discorrelation has materialized in a number of generic categories, I am interested in critically analyzing generic tendencies within Kara's anthropocenema to further explore the relationship between genre, affect, and ecocriticism in popular narrative digital cinema. Merely gesturing toward genre to supplement their dedicated focus on the temporal and spatial implications of digital versus analog cinema, previous theorists have brushed over significant transformations that have occurred in the form of contemporary genre cinema.

Following the previous chapter's exploration of video games' potential for ecocritical generic form within the 'anthropogamic,' this chapter will now work across the complementary theoretical considerations outlined above to explore how digital mutations of recognizable generic conventions in contemporary genre cinema have been used to formally mediate the affective uncertainty of the Anthropocene. To understand how the digitally-realized

other-than-human environments and agents within anthropocenema have been used to mutate preexisting generic conventions toward the contradictory, unsettling, and uncertain affects of the Anthropocene, I turn now to Alex Garland's *Annihilation*.

Evolution or Extinction: Annihilation's Mutative Generic Form

"I like genre because you've got limited bandwidth in a story in some respects. What genre allows you to do is to use shorthand in lots of areas. That gets you a lot of mileage quite quickly, and then you've got space to subvert, do something strange, do something unsettling. If you're given a bunch of paradigms, which genre does, then that gives you a bunch of things you can break or use to your advantage"

- Alex Garland, Director of Annihilation (Qtd. in Howard 2018).

While I have outlined the necessary theoretical considerations pertaining to the intersections between genre, digital cinema, and ecocritical affect, the exact ways that digital effects facilitate ecocritical mutations to the conventions and affective regimes of genre remain relatively unclear. While many anthropocenematic films have included both digital visual effects and ecocritical themes, the use of digital technology in these films does not necessarily augment their generic form.²⁵ Often, in fact, many films gravitate towards the opposite; as in James Cameron's Avatar or Christopher Nolan's Interstellar, digital effects are not used to challenge or mutate generic conventions to realize new generic forms and, instead, are largely used to reify the preexisting conventions of their generic identities.²⁶ While these films still reside within Kara's definition of anthropocenema – given their digital formations of time and space beyond conventional human perception - their narrative mediations of the Anthropocene imaginary are not reflected through their generic structure. Instead, these films use digital effects to technologically update the long-held conventions of their generic identities, exploring contemporary issues pertaining to the Anthropocene while returning to 'safe' generic conventions that reify narrative and thematic certainty – for example, despite Nolan's extensive development of specialized CGI technology for Interstellar (Collins 2015), these effects are

²⁵ This avoids any notion of technological determinism that could be implicated in my argument; the ecocritical impact of digital effects on the generic form and affective regimes of anthropocenema is a potentiality and not a determinate effect inherent to all forms of digital filmmaking or every anthropocenematic text.

²⁶ For example, in *Avatar*, although the film is realized through the extensive utilization of digital visual effects and motion capture performances, the film still reifies tropes from the science fiction and action genres through its "traditional linear narrative of an encounter and conflict between two cultures, which seemingly takes the side of the underdogs but insists on casting the hero as a renegade member of the overdog (white, human) group. This hero is a traditional masculine point of identification [...] and in the end he triumphs, "gets the girl," and even becomes a messiah" (Ivakhiv 2014, 166).

largely used to spectacularly update the visual conventions of space travel previously established in the science fiction genre²⁷ while otherwise maintaining conventions that ultimately reify generic conventions of narrative certainty.

However, a few notable texts amongst the ever-expanding array of ecological genre films have realized the limitations of these generic categories and hybridized sub-genres; much like the syntactic complexity of Leo Braudy's "films of nature" (1998), these anthropocenematic texts have utilized genre, not as an ideologically or affectively fixed template, but as a malleable formal tool for exploring the overwhelming, contradictory uncertainties of life during our contemporary moment in the Anthropocene. Turning now to the recent ecocritical genre film *Annihilation*, exemplary due to both director Alex Garland's stated enthusiasm towards generic experimentation (Howard 2018; Fennessey 2018) and the film's complimentary formal and narrative focus on the mutation of anthropocenic forms, I will show how digital effects have been used in certain anthropocenematic texts to reference, subvert, and then mutate generic conventions away from conventions of certainty to realize a cinematic form that fundamentally embraces uncertainty and disorientation to mediate the overwhelming anxieties of the Anthropocene.

Following his previously successful science fiction feature *Ex Machina* (2014), Alex Garland's science fiction/horror film *Annihilation* presents a loose adaptation of Jeff Vandermeer's so-called "weird fiction" novel of the same name. Narratively, the film follows Lena (Natalie Portman), a biologist and US army veteran, as she joins a government expedition into the mysterious ecological disaster zone, Area X, to investigate her husband Kane's (Oscar Isaacs) death and subsequent reappearance during the previous expedition. The result of a mysterious asteroid crashing into a lighthouse on the north Florida coastline, Area X is an uncontrollable mutation of the anthropogenically destroyed environment, a beautifully lush yet ruthlessly violent ecological zone that consistently grows in size and physically affects anything that crosses into its semi-translucent boundary – 'The Shimmer,' a reverse-Anthropocene of sorts that mutates biological material by refracting and recombining the genetic code of anything within its bounds. Initially accompanied by a team of stock generic roles previously established in science fiction films like *The Thing* and *Alien*, including the psychologist Dr. Ventress

²⁷ These conventions surrounding space travel in the science fiction genre were largely established by Stanley Kubrick's *2001: A Space Odyssey* (1968).

(Jennifer Jason Leigh), the physicist Josie (Tessa Thompson), the paramedic Anya (Gina Rodriguez), and the anthropologist Cass (Tuva Novotny), Lena becomes the last survivor of the expedition as the rest of her team is progressively mutated and subsumed by the ecological agency of The Shimmer. Upon reaching the lighthouse at the heart of Area X, Lena encounters an androgynous humanoid, implied to be an embodiment of The Shimmer. Confronting the creature, Lena realizes that violent resistance proves ineffective against the humanoid Shimmer and, highlighting the disorienting uncertainty of this interaction, engages in a sort-of mirrored dance with the being as it begins to replicate her physical appearance. After an extended sequence in which the two figures are mutated through their non-violent engagement, Lena eventually sets the lighthouse aflame and escapes Area X. However, upon reuniting with Kane's replicant after her escape, a close-up on Lena's rapidly changing eye color reveals that she has been irreversibly mutated by her encounter with The Shimmer – or potentially replaced by The Shimmer entirely.

Before detailing the generic mutations of Garland's quiet and disconcerting ecocritical sci-fi/horror film, it is first important to emphasize how mutation is thematically embedded within Annihilation's unique ecological disaster narrative. Highlighting prevalent issues and anxieties related to the Anthropocene, Garland's film explores the uncertain and disorienting affective force of ecological, other-than-human agents through the imperceptible yet transformative effects of genetic mutation. Drawing upon the scalar affordances of digital technology, the film diegetically explores the mechanisms of cellular mutation, depicting animated visualizations of cellular reproduction and, eventually, mutation; first depicted through the framing of a microscope (Figure 2.1) and then later visualized through digital visual effects (Figure 2.2), Garland explores the scalar issues of the environmental crisis by connecting the films narrative and thematic concerns with mutation to the uncertain temporal and spatial effects of ecological crisis. Working across human, cellular, and even cosmological scales – through the inciting incident of the asteroid plummeting towards Earth - the digital camera connects the transformative effects of ecological crisis across previously impossible visual scales to mediate the imperceptible ecological agencies that have contributed to feelings of anthropocenic uncertainty.²⁸ This focus on cellular mutation to blur ontological boundaries between the human

²⁸ According to both Rob Nixon and Timothy Morton, the humanly imperceivable temporal and spatial scales of ecological change is one of the most notable problems for conceptualizing and acting towards the environmental crisis (2011; 2013).

and other-than-human pervades throughout the entire film – from Lena's continual monitoring of the uncertain and unexpected ways that Area X is mutating her genetic structure to the final segment in which Lena's and The Shimmer's genetic identity becomes inseparable and indistinguishable. By drawing upon the scalar affordances of digital filmmaking, as well as past experiments in scalar visualization in projects like Charles Eames *Power of Ten* (1977), *Annihilation* is narratively and thematically preoccupied with the ambiguous potentiality for anthropocenic mutation under by the previously imperceptible agencies illuminated by ecological crisis. To further support *Annihilation*'s thematic focus on ecological and anthropocenic mutation, however, Garland embeds mutation on a structural level as well – while the narrative visualizes mutation through the scalar affordances of the digital camera, digital effects structurally mutate the conventions of the science fiction/horror genre to give form to the uncertain and disorienting affects of the Anthropocene.



Figure 2.1: Cellular scale under the microscope. In *Annihilation*, cellular scale is first realized through a conventional regime of visuality, filming the process of cellular mitosis through the framing of an analog microscope (0:03:52). **Figure 2.2: The digital mutation of cellular scale.** Later in the film, during the mutation of Lena's genetic material by conventionally imperceptible force of The Shimmer, unfamiliar, mutated cellular mitosis is realized directly under the digital camera (1:35:04).

As per trade industry sources, *Annihilation* has been both commercially labeled and popularly received as a hybridized genre text that straddles the categories of science fiction, horror, thriller, and mystery (Robinson 2018; Tallerico 2018). Splicing science fiction elements, such as Area X's alien origin and the narrative pursuit for scientific knowledge of the ecological phenomena, with the affective fear generated through the horror genre, exemplified through the body horror invoked by Area X's invasive mutations, *Annihilation* draws upon the conventions of its hybridized generic identity in order to adapt the source material's unsettling and often contradictory "weird fiction" genre – a genre defined through its often contradictory

combination of speculative fiction, horror, fantasy, and science fiction (Vandermeer and Vandermeer 2011). However, where the 'weird fiction' of Jeff Vandeermeer's Annihilation (2014) is purposefully ambiguous and narratively uncertain (Hossaert 2020), this is usually not the case for the science fiction/horror film genre. While films that draw from the aesthetics and conventions of each genre often contain moments of ambiguity, usually to set up short- or long-term reveals of an obscured monster or to conceal a narrative plot twist, they often conclude with some form of narrative certainty, either through the resolution of the central character melodrama or through the resolution of the major thematic issue(s). However, given the source material's focus on the imperceivable and unpredictable ecological effects of the Anthropocene through the narrative mutations of Area X, Garland eschews predictable generic conventions to mirror the text's thematic preoccupation with the dreadfully ambiguous uncertainty that accompanies the crises of the Anthropocene. Speaking in an interview with The Ringer's Sean Fennessey, Garland explains that Annihilation's generic mutations are necessary to effectively reflect the narrative's focus on genetic mutations in the encounter between humans and the ecologically mutated other-than-human agencies that populate Area X (2018). Thus, Annihilation is a particularly effective anthropocenematic text as it not only explores ecocritical themes and anxieties on a narrative level, but structurally embeds its ecocritical focus as well through the subversion of generic expectations, the mutation of recognizable conventions, and, ultimately, resistance to the narrative certainty conventionally expected from popular genre films.

Although I have briefly explored the theoretical aspects of generic mutation through digital technology, I have yet to detail Garland's specific ecocritical approach to mutating preexisting generic forms. Building from Clément Hossaert's rhetorical evaluation of the film, *Annihilation* takes a transgressive approach to narrative conventions of the science fiction/horror genre by monopolizing the codes of representation and affect usually generated "at the crossroads of these two genres and splicing their genetic heritage" (2020, 30), mutating the film's generic identity to explore the horrifying existential uncertainty provoked by the crises of the Anthropocene. Connecting our contemporary anthropocenic anxieties to the film's generic subversions, Hossaert argues *Annihilation*'s mutated generic identity productively produces "a fiction capable of provoking [ecological questions] and maintaining [them] in a state of ontological uncertainty" (32). While Hossaert's generic analysis is essential evidence for the film's digital effects are

essential to *Annihilation*'s effective formal mutations. To further articulate the connection between the film's use of digital effects and its uncertain anthropocenematic form, three generically subversive scenes – the bear attack, Josie's disappearance, and the final encounter between Lena and the humanoid embodiment of The Shimmer – effectively exemplify how digital effects have been explicitly employed to mutate the science fiction/horror genre into an effective form for mediating the feeling of the Anthropocene.

Upon entering the temporal and spatial anomaly of Area X, the expedition team begins feeling the mutative effects of The Shimmer immediately. After finding a videotape filmed by the previous all-male expedition team, which details their inexplicable descent into delusions and paranoia to the point of interpersonal hostility, and following the abrupt disappearance of Cass shortly after, Anya succumbs to a similar paranoia. Blaming the rest of the group for Cass's disappearance, Anya holds the remaining woman hostage out of fear of being the next victim of the group's perceived delusional violence. However, as Anya proceeds to interrogate the group, an uncanny scream-like roar punctuates the scene before a genetically-mutated bear-like creature attacks the group. While Anya is killed by the creature, Lena, Josie, and Ventress are able to fight back and escape into the wilds of Area X.

An interpolation of the paranoid hostage takeover scene introduced to the science fiction/horror genre by films like *The Thing*, Garland's ecocritical preoccupations and digital effects mutate the conventional narrative outcome of the scene to further blur the boundaries between the human and the other-than-human. Conventionally, this scene exposes the character concealing their non-human transformation before they are quickly disposed of by the other group members, ultimately warranting the paranoia of the other-than-human forces that are, evidently, infecting the group. To pay further homage to this narrative trope, *Annihilation* references the conventional outcome of the scene through the found footage from the previous militaristic expedition. However, this is not a suitable outcome for Garland's ecocritical application of this recognizable generic trope. Instead, Garland mutates the conventions of this scene through the digitally-rendered bear-like creature to instead explore the affective uncertainty often provoked through disorienting encounters with the other-than-human forces accentuated by the environmental crises of the Anthropocene.

While the set-up is generically familiar, the scene sharply deviates when the creature's roar, a digitally-augmented sound effect that combines Cass' dying scream with a bear's roar, is

first heard. This sound punctuates the direction of the scene, veering from the conventional outcome towards an arrested affective uncertainty provoked by the ambiguous mutation of the human and other-than-human. Following the arresting effect of the scream/roar hybrid, the mutated bear-like creature enters the room; however, increasing the tension of the scene's generic subversions, the creature does not immediately attack the captive women. Instead, the digitally-realized creature sniffs around them with its mutated snout, occasionally pausing to hauntingly vocalize Cass' dying scream of "help me." Countering the normative conventions of the trope in which the non-human other is found silently infiltrating the otherwise solid ontological boundary of the human, Garland's digital mutations instead embeds the human, through Cass' scream, within the other-than-human body. This subversion, realized through the digital alteration of the film's sound and image together, mutates the trope through the digital recombination of human characteristics with Area X's mutated other-than-human agents. By transforming this familiar trope from the science fiction/horror genre through the creative mutation of analog sounds and digital effects, Annihilation performs both "an underlining and a subversion of the [text] in which these tropes initially appeared" (Hossaert 2020, 39) to effectively mutate this familiar generic convention, and the others explored below, toward a cinematic form that structurally mediates the disorienting, uncertain affects of the Anthropocene.

As with Anya's and Cass' unfortunate fate, Josie's final scene also performs a subversive generic mutation. While examining the uncanny mutation of some of Area X's flora, which have begun growing in humanoid form, Josie theorizes that The Shimmer is not directly targeting specific genetic material but, instead, acts as a lively barrier that refracts the genetic information of every organic being within Area X. Shortly after, Lena finds Josie sitting outside of their shelter, contemplatively gazing at the digitally hybridized humanoid-plants. Lena confirms Josie's theory. Josie, now certain that she will be mutated by The Shimmer, indicates that if the other-than-human mutations are going to consume her like the bear-like creature consumed Cass, she would rather not be remembered purely through the memory of her pain and trauma. She then reveals that plant material has already begun growing from the scars on her arm (Figure 2.3). Abruptly, she stands up and walks into a maze of overgrowth besides their shelter. Lena attempts to follow her, but Josie's figure becomes increasingly obscured as Lena pursues through the dense growth. Emerging on the other side, Lena finds no trace of Josie; instead, Lena discovers a clearing of humanoid-plants, the only possible remnants of Josie's last moments

before ecological subsumption – or mutative diversification – by the non-human environment (Figure 2.4). Whether humans become plants, plants take on humanoid shapes, or humans and plants merge in the process of genetic mutation, Josie's fate highlights the formal uncertainty of our ecological entanglements within and beyond the Anthropocene.



Figure 2.3: Blurring ontological boundaries between the human and the other-than-human. Narratively and formally, Josie's transformation highlights the mutative effects of encounters with other-than-human agents as well as the mutative capacity of digital technology (1:20:37).



Figure 2.4: Digital mutation and ecological subsumption. Seemingly disappearing into thin air, Josie's fate is left purposefully ambiguous as she is mutated with, and/or subsumed into, the natural environment of Area X (1:21:37).

Reflecting the narrative's concern with the quietly horrifying uncertainty of human mutation by (and with) the other-than-human, Garland again references, subverts, and then mutates a preexisting convention through digital effects to structurally embed uncertainty into the film's form. Conventionally, this scene builds from the science fiction/horror trope in which a minor character becomes psychologically consumed by the overwhelming threat posed by the non-human other. These characters are usually far less central than Josie, like Fuchs (Joel Polis) in The Thing, or have ulterior motives, such as Ash (Ian Holm) in Alien. However, Annihilation again references this conventional character archetype through basic signifiers before mutating their narrative outcome to explore potential reactions to anthropocenic uncertainty beyond the conventional assumptions of personal insufficiency or defeat. Instead, as Josie's figure becomes increasingly obscured in Lena's vision before disappearing altogether without concrete explanation, Josie exhibits a quiet, underappreciated strength through her acceptance of and resignation to the other-than-human effects of Area X. Recognizing the necessity to both accept and act through ecological uncertainty, Josie's obscured transition from a live-action human to the digitally-realized other-than-human humanoid-plants realizes the potential for digital effects to ecocritically mutate generic expectations by challenging perceived boundaries between live-action characters and digitally-realized ecological forms. By mutating the narrative expectations of this common character archetype, Annihilation instead explores the potential for this genre trope to offer an alternative sensibility towards our conflicted, uncertain feelings as we grapple with the overwhelming effects of the Anthropocene, including the potential extinction of the human as we know it. While this scene is a relatively short exploration of alternative responses to the ontological uncertainties presented by ecological crisis, the digitally-realized generic mutation of Josie's character archetype introduces the potential to confront and act non-violently through the uncertain and disorienting anxieties of anthropocenic crisis that is further explored through the film's climax and denouement.

Entering the lighthouse at the center of Area X, Lena discovers charred human remains sitting cross-legged in front of a handheld video camera and a comet-sized hole in the floor to the left of the corpse. Rewatching the videotape, Lena discovers that the remains belong to her husband Kane, who committed suicide with a phosphorus grenade prior to being replaced by a replicant formed by the mutative cellular effects of The Shimmer. Stepping back from the camera, Lena hears a scream emanating from the crater in the floor before descending into the cavern to follow the familiar cry. Emerging into the cavern, she discovers Dr. Ventress. Ventress outlines how The Shimmer's ecological mutations will result in complete anthropocenic annihilation, mutating humanity through refractive recombination with other-than-human genetic

material until it is no longer recognizable. After this confession, Ventress' body begins to convulse, expelling a bright, otherworldly light from her mouth as she is abruptly transformed by the imperceivable effects of The Shimmer. Following several seconds of convulsing, Ventress' body disintegrates in a flash of white light as the ribbons of The Shimmer expelled from her body coagulate into a constantly morphing spherical entity. Approaching the ever-mutating sphere, a digital creature which continuously turns itself inside-out in a manner reminiscent of a möbius strip, a droplet of blood is extracted from Lena's face and drawn into the center of the spherical being. The digital camera fluidly moves across scales as it follows the droplet into the light. Using CGI to visualize this cellular interaction (refer back to Figure 2.2), Lena's genetic material is mutated through its encounter with the other-than-human force of The Shimmer. Following the process of abnormal cellular mitosis visualized through digital effects, the mutated cells begin to form into the androgynous humanoid creature briefly seen in Kane's video (Figure 2.5). Lena attempts to shoot the creature and escape back through the lighthouse; however, when she emerges from the crater hole, she finds the humanoid creature inexplicably blocking the exit. Attempting to charge the creature, Lena suddenly realizes that it is mirroring her every movement as it charges towards her, knocking her unconscious in the collision.



Figure 2.5: The humanoid embodiment of 'The Shimmer.' An uncertain mutation of Lena's genetic material with that of The Shimmer, *Annihilation*'s final other-than-human antagonist invokes a threat to humanity, and the Anthropocene, that is ontologically terrifying yet decidedly non-violent (1:36:31).

Upon regaining consciousness, Lena cautiously engages the creature in a non-violent exchange – a mirrored ballet, of sorts – while she attempts to formulate a plan to escape The

Shimmer's non-violent yet threatening mimicry. After a prolonged struggle, Lena resorts to the additional phosphorus grenades left by Kane in a final attempt to destroy the humanoid embodiment of The Shimmer and its cavernous lair beneath the lighthouse. Placing the grenade in their joint hands, Lena gazes at the creature as it continues to mutate its form to replicate her appearance. Calmly, yet obviously distressed, Lena pulls the pin, activating the grenade as she immediately runs out of the lighthouse, leaving her replicant to parish inside. As the lighthouse is progressively consumed in flames, the creature appears unaffected by the fire as it crawls back into its cavernous sanctum. As Lena escapes down the coastline, the camera reveals that the fire at the lighthouse has indirectly radiated through Area X, destroying the zone's uncannily beautiful ecological mutations. The camera then cuts to the establishing shot of Area X used in the beginning of the film as The Shimmer gradually vanishes and the dead grass and malignant trees from the anthropogenically destroyed ecosystem return.

Returning from Area X, Lena is reunited with Kane, resolving the generically conventional melodrama while leaving the larger ecocritical questions of the narrative in a state of ambiguous uncertainty;²⁹ however, this conclusion is immediately doubled-back on, further resisting any conventions of narrative and, by extension, formal certainty. As Kane and Lena embrace, an extreme close-up on Lena reveals her iris' rapidly changing colors, similar to the digital effect used to visualize the mutative effects of The Shimmer in Area X (Figures 2.6-2.8). Undermining the generically-informed narrative assumption that Lena escaped untouched and destroyed the pervasive ecological threat of Area X, *Annihilation*'s ultimate conclusion, instead, refutes the certainty inherent to most generic forms, performing a final formal mutation to effectively embed the pervasive uncertainty that defines our Anthropocene imaginary.

This final sequence of the film provides a number of key deviations from the narrative conventions of the science fiction/horror genre as well as the larger conventions of generic certainty more generally. While narrative variations within the confines of conventional generic structures are expect in the cycles of generic evolution (Altman 1999, 62-68), *Annihilation*'s climax and denouement mutate generic expectations of certainty into an ambiguous and inconclusive finale that embeds the affective regime of the Anthropocene to realize a fundamentally anthropocenematic form; as David Whitley points out in his analysis of popular

²⁹ This conclusion reflects the narrative structure of Braudy's meta-genre of nature, in which the individual melodrama is resolved to provide a tangible sense of certainty while leaving the resolution of the larger environmental narrative in an ambiguous, uncertain, and thought-provoking state (1998, 288- 291).

texts' ecocritical potential, the ecocritical cultural work of genre films do not lay in definitive closure "but precisely in [their] articulation of irresolvable contradictions" (2014, p, 145). This refusal for definitive formal closure reverberates throughout the film (evident, for example, by the fact that none of the character's meet a definitive fate), but is most effectively realized in the aforementioned affective movement ballet between Lena and the humanoid Shimmer.



Figure 2.6-2.8: Lena's uncertain fate. Following her encounter with The Shimmer, Lena's eyes are shown to rapidly shift color in a similar way to the mutated cells seen earlier (Figure 2.2), highlighting the uncertain and ambiguous fate and form of the human that result from our encounters with the other-than-human forces highlighted by the Anthropocene (1:48:08-1:48:13).

As this final confrontation between the human protagonist and the other-than-human adversary is one of the most identifiable generic conventions referenced from the science

fiction/horror genre, a staple in innumerable films but particularly spectacular in *Alien*, *Predator* (1987), and *The Thing*, Garland's digitally-realized subversion of this conventionally violent encounter renegotiates assumed generic relationships between the human and other-than-human forces that are accentuated during times of ecological crisis. Using motion-capture technology and CGI techniques, Annihilation's final other-than-human creature is visually threatening yet decidedly non-violent – instead of outright attacking Lena like most conventional confrontations with the non-human other, the creature mirrors her every move, engaging her in a manner more similar to a choreographed ballet than a fight scene (Frei 2018). It is significant that the film changes the conventions of this encounter, as this dance visualizes the encounter as creatively mutative instead of destructively violent. Using this final choreographed dance as a visual metaphor for connection, exchange, and potential mutation that could result from our formal entanglements with other-than-human forces, Garland transforms the conventions of the science fiction/horror genre to realize a form uniquely suited to the affective anxieties of the Anthropocene. Whereas the conventionally violent climax and conclusion reaffirms the certainty of human domination over hostile forces, ecological or otherwise, the refracting genetic and generic mutations of The Shimmer suspends Lena's fate in a position of extended uncertainty. As The Shimmer was able to mutate through its encounter with Lena's genetic material, how, then, has Lena been imperceptibly mutated through this same encounter? How human is the figure of Lena that leaves Area X and reunites with the equally affected Kane? By subverting the conventionally violent final confrontation between the human and the other-than-human and mutating the scene into a threatening yet non-violent exchange of mimicry and dance realized through digital motion capture technology, Annihilation effectively enfolds the affective ambiguity and uncertainty of confrontations with the other-than-human during the crises of the Anthropocene into its formal identity.

Returning to the final shot of the iris' constantly mutating phenotype (Figure 2.6-2.8), which reveals the ultimate narrative uncertainty of Lena's mutative interaction with The Shimmer and, in my view, the affective uncertainty of the extent of our own ecological entanglements as we navigate the overwhelming crises of the Anthropocene, *Annihilation*'s conclusion performs a final subversion of generic certainty; however, as mentioned earlier, this subversion does not only mutate a convention specific to the science fiction/horror genre, but instead self-consciously undermines expectations of generic closure altogether. Through CGI,

motion capture, and other digital effects, Lena's terrifyingly non-violent exchange with The Shimmer mutates both specific narrative tropes as well as the broad generic conventions of narrative certainty. This final generic mutation, along with the other scenes explored above, fundamentally embeds affects of uncertainty and disorientation into *Annihilation*'s syntactic form – ecocritically mutating previous generic categories into a unique anthropocenematic form suitably reflective of our contemporary socio-historical experience within the Anthropocene. Additionally, as the film is narratively structured through Lena's recounting of her experiences in Area X, this ending not only rejects the melodramatic closure between Lena and Kane, but questions the certainty of all the encounters that the mutated Lena has described in these structuring interviews, further unsettling the already ambiguous narrative conclusion provided for Area X and the affective force of The Shimmer.

Through effective mutations of the science fiction/horror genre, and conventional assumptions of generic form more broadly, Garland rejects any notion of certainty in the melodramatic, thematic, and narrative conclusion to Annihilation. As a result, the film's generic form structurally mediates the notable socio-historic affects of uncertainty and disorientation that have pervaded the continued crises of the Anthropocene. By refusing any notion of generic certainty, Annihilation's formal mutations reflect our contemporary ecological affects through effective formal tensions between preexisting live-action conventions and inventive, uncertain digital modulations. And, although much more subtle and restrained than the heterotopic generic assemblage of anthropogamic texts previously explored through Death Stranding, Garland similarly explores the ecocritical potential of heterotopic digital images, referencing, subverting, and then mutating together conflicting, disruptive formal elements across live-action cinematography and digital visual effects into a singular cinematic form that is able to effectively address the contradictory uncertainty and disorientation of living during the crises of the Anthropocene. By "challenge[ing] the notion of [digitally mediated] space as a seamless unity" (Chung 2018, 4), Annihilation and other anthropocenematic genre films like it effectively draw on the heterotopic affordances of contemporary digital images to mutatively 'trouble' preexisting generic certainties and construct an effective form reflective of our uncertain and disorienting experience with the environmental and anthropocenic crises of the Anthropocene.

Conclusion

While recent genre films have become inundated with generalized aesthetics and themes related to ecological crisis, many do not effectively articulate the contemporary affects of uncertainty, disorientation, and anticipatory loss that have pervaded the Anthropocene due to the constraints of their conventional generic form. *Avatar, Interstellar, Moonfall,* and countless others have utilized digital effects to realize a myriad of ecological threats within the Anthropocene, but have not expressly experimented with the modular affordances of digital technology as a way to critically engage with the formal certainty that ultimately lies at the heart of film genre. However, *Annihilation* shows a world otherwise, mutated. As demonstrated in this chapter, *Annihilation*'s anthropocenematic form subverts familiar generic conventions through mutative digital effects to challenge narrative, thematic, and generic assumptions of certainty and produce a unique cinematic form *of* and *for* the Anthropocene.

Through the ecocritical implementation of digital effects to mutate Annihilation's formal identity - and arguably other post-cinematic genre films too, such as High Life, Snowpiercer, and Melancholia - I have shown how anthropocenematic films can embrace and explore the persistent 'trouble' of genre outlined by Berlant and Voorhees to effectively mediate the affective regime of the Anthropocene not only narratively, but formally as well. As shown through Annihilation's mutative generic encounters between live-action human characters and the digitally-realized other-than-human agents, Alex Garland's self-conscious subversions of science fiction/horror conventions capitalize on the heterotopic affordances of digital genre cinema to effectively mutate cinematic form towards the prominent affective regime of the Anthropocene. Therefore, Annihilation, and the larger formal mutations of digital narrative genre cinema contained within the wider category of anthropocenema, have effectively employed digital technology to reference, challenge, and transform preexisting generic forms, demonstrating how effective Genre Trouble can be as "a critical practice for assembling and inventing forms of sociality to survive the present" (Voorhees 2019, 33). Through Annihilation's digital mutated generic identity, and the digital mutations found throughout other ecocritical genre texts, anthropocenema has the potential to realize 'troubled' cinematic forms that allows us to feel, see, and experience aspects of our Anthropocene imaginary – and hopefully learn to live through the disorienting affect regimes of uncertainty that have accompanied the continual crises of the Anthropocene.

Conclusion Trouble At the End of the World

"Trouble is an interesting word. [...] We – all of us on Terra – live in disturbing times, mixed-up times, troubling and turbid times. The task is to become capable, with each other in all of our bumptious kinds, of response. [...] Our task is to make trouble, to stir up potent response to devastating events, as well as to settle troubled waters and rebuild quiet places" – Donna Haraway, Staving With the Trouble (2016, 1)

Troubled responses reflect our troubled times. Although this thesis has not drawn extensively from Haraway's exploration of 'troubled' material relationships between human and other-than-human creatures as a response to the crises of the Anthropocene, her approach to 'troubled,' unintelligible, or seemingly inadequate forms of response during times of unprecedented crisis connects well with Gerald Voorhees's "Genre Trouble" (2019). In my view, given the vast anxieties that pervades our contemporary moment, new forms of artistic response are one of several crucial ways to orient ourselves beyond the crises of the Anthropocene. Examining the generic experimentation in the contemporary ecological disaster texts *Death* Stranding (2019) and Annihilation (2019), this thesis has posited genre theory as a useful and indeed necessary lens for evaluating how contemporary digital media forms have come to mediate the Anthropocene imaginary - our contemporary socio-historic consciousness informed by accelerating ecological destruction and the realization of likely human extinction. Through Voorhees' Genre Trouble methodology, an approach which understands "genre as a conceptual tool for studying historically contingent formations of text and practice, and Genre Trouble a critical practice for assembling and inventing forms of sociality to survive the present." (32-33), I have explored how genre in contemporary digital media has been affected by the overwhelming concerns of the Anthropocene and, in turn, how experimental treatments of genre have attempted to mediate the feeling of living during, and potentially beyond, the environmental and anthropocenic crises of our contemporary socio-historical moment.

Inspired by Selmin Kara's (2016, 750-784) and Alenda Chang's (2019) ecocritical approaches to contemporary digital cinema and video games, this thesis examined disaster media across Triple-A video games and digital genre cinema to understand how generic identities have been structurally transformed to mediate our affective experience of the Anthropocene, focusing primarily on the 'crisis affects' of uncertainty and disorientation outlined by Lauren Berlant in their examination of generic "impasse" (2011). Engaging in an ecocritical genre study of the

anthropogamic, my own term for media that allows one to *play* through the experience of environmental and anthropocenic crisis, and anthropocenema through Kojima Productions' *Death Stranding* (2019) and Alex Garland's ecological science fiction/horror film *Annihilation* (2019), respectively, this thesis ultimately argues that contradictory, experimental, heterotopic formations of genre under crisis are extremely effective for mediating the various social, political, and environmental anxieties that pervade from the continuous, and often contradicting, crises of the Anthropocene. By mirroring the existential uncertainties inherent to our contemporary knowledge of possible anthropocenic extinction through unpredictable formations of genre, as exemplified through *Death Stranding*'s strand sub-genre of the action-adventure game and *Annihilation*'s digitally-realized mutations of well-defined science fiction/horror conventions, anthropogamic and anthropocene while simultaneously exploring potential responses to persist within and despite these existential uncertainties as we continue to approach the possibility of extinction.

Throughout this thesis, I have explored a number of exploratory questions pertaining to the relationship between the Anthropocene and contemporary genre media – what are the affective regimes of the Anthropocene? How has the Anthropocene impacted the cultural production of narrative genres in digital media? How does genre mediate the "structure of feeling" (Williams 1961) of a specific socio-historic moment? How does digital technology affect our understandings of generic formation and evolution? And, most importantly, what is the genre of anthropocenic crisis? Through a cross-media examination of illustrative texts across video games and digital genre cinema, I posit the genre of crisis as genre in crisis; in order to effectively mediate the affects of pervasive crisis, the anxieties of overwhelming uncertainty stemming from our disorienting and disruptive encounters with other-than-human agencies, experimental treatments of genre in identifiable anthropogamic and anthropocenematic texts have challenged conventional categorical boundaries to formally reflect the confusing and contradictory socio-historic reality of living during the environmental and anthropocenic crises of the Anthropocene. Applying Genre Trouble as an approach from the less-rigid generic assemblage of video games to the more well-defined conventions of film genre, I have shown how digital technology and its cultural objects can realize creative mutations and surprising transformations of well-known generic categories, challenging baseline assumptions of generic

certainty to, instead, explore the crises of the Anthropocene through a productive formal uncertainty.

Although this thesis showcases my thorough attempt to investigate the effect of the Anthropocene on contemporary digital media through the intersection of genre, affect, and ecocriticism, I have, ultimately, opened up a myriad of further questions regarding cultural production in our "climate catastrophe culture" (Bould 2021). For instance, while I have taken Death Stranding and its 'strand' sub-genre as one pertinent example of the anthropogamic's generic crisis, further research is needed on video games produced during, and ostensibly about, the Anthropocene. Akin to Selmin Kara's work on anthropocenema (2016, 750-784), the anthropogamic requires extensive examination beyond the confines of my genre studies approach to further understand how video games can offer inventive and challenging formations of time and space in which one can *play* through experiences surrounding the climate crisis and the larger Anthropocene imaginary. Additionally, while I have alluded to renegotiated relationships between the human and the other-than-human in these texts, more interdisciplinary work is needed across digital cinema and game studies to further understand the ways digital constructions of other-than-human worlds challenge anthropocentric perspectives. While this work has been touched on within larger film and media studies projects like Alenda Chnag's Playing Nature (2019) and Shane Denson's transmedial work in Disocorrelated Images (2020), further research is required – particularly in regard to video game's playful formations of other-than-human interactions through the player-character, non-player characters, the ludic environment, and other formal elements - to better understand the ways digital technology can effectively challenge anthropocentric perspectives through alternative relationships with the other-than-human.

Here too I must acknowledge the limits of focusing on two primary works - the limited oeuvre of this project strategically allows me to conduct close textual and formal analysis, but also prevents a wider consideration of many other ludic and filmic texts that could be addressed by this thesis. *Death Stranding* and *Annihilation* are both exemplary texts for understanding the ways the Anthropocene is impacting the generic form and, by extension, affective orientation of contemporary digital media. Yet many other examples across a variety of media forms have been released since that also embrace Genre Trouble as an effective response to the contradictory issues and affects of the Anthropocene. In independent cinema, *How to Blow Up a Pipeline*

(2022) combined the thriller genre with the aesthetic of social justice documentaries to interrogate objections to the environmentally devastating extractivism of late-capitalism. In independent games, *Terra Nil* (2023) redirected the representations, gameplay mechanics, and procedural systems of urbanization that conventionally define the 'city-building simulator' genre towards sustainability and environmental stewardship as players are tasked with rebuilding anthropogenic wastelands into thriving ecosystems and "then leav[ing] without a trace" ("Terra Nil," 2023). And even in music, Australian band King Gizzard and the Lizard Wizard has experimented with genre in their music and accompanying music videos for the albums *Omnium Gatherum* (2022) and *Ice, Death, Planets, Lungs, Mushrooms and Lava* (2022) to address contemporary environmental issues and the extensive precarity of life during the Anthropocene. While this represents only a handful of texts from select media forms, the persistence of generically experimental 'eco-media' warrants further attention by humanities scholars, and highlights the expansiveness of the anthropocenematic, the anthropogamic, and other media forms attuned to the Anthropocene imaginary.

Additionally, while the primary focus of my research falls on the intersection of genre, affect, and ecocriticism in digital disaster media, this thesis, ultimately, functions as an attempt to ignite further interdisciplinary conversations across digital game studies and film studies. Initially inspired by Chelsea Birks' invocations in *Limit Cinema* (2019) for further ecocritical research on the limits of anthropocentric perspectives in non-cinematic media, and additionally informed by Shane Denson's transmedial work on contemporary extinction media in Discorrelated Images (2020), this thesis emphasizes how conversations across different media forms can contribute to a deeper understanding of contemporary cultural production. While transmedia research should be undertaken on all topics connected to both game and film studies, interdisciplinary media studies is especially crucial with regards to the challenging, boundary-breaking effects of the Anthropocene on our contemporary digital image cultures. As the extended temporal and spatial effects of the Anthropocene continue to challenge well-defined anthropocenic boundaries between the human and the other-than-human world, media scholars, too, must strive to draw connections and understandings across different media forms in order to better understand changes in cultural production under the effects and affects of the Anthropocene.

Bibliography

- Aarseth, Espen J. 1997. *Cybertext: Perspectives on Ergodic Literature*. Johns Hopkins University Press.
- -----. 2004. "Genre Trouble: Narrativism and the Art of Simulation." N. WardripFruin and P. Harrigan, ed. *First Person: New Media as Story, Performance and Game*, MIT Press, 45-55.
- Adamson, Joni and Salma Monani. 2016. "Introduction: Cosmovisions, Ecocriticism, and Indigenous Studies." Joni Adamson and Salma Monani, ed. *Ecocriticism and Indigenous Studies Conversations from Earth to Cosmos*, Routledge, 1-19.

Ahmed, Sara. 2010. The Promise of Happiness. Duke University Press.

- Altman, Rick. 1999. Film/Genre. British Film Institute.
- Anable, Aubrey. 2018. *Playing with Feelings: Video Games and Affect*. University of Minnesota Press.
- Apperley, Thomas H. 2006. "Genre and Game Studies: Toward a Critical Approach to Video Game Genres." *Simulation & Gaming*, vol. 37, no. 1, 6–23.
- Arsenault, Dominic. 2009. "Video Game Genre, Evolution and Innovation." *Eludamos: Journal for Computer Game Culture*, vol. 3, no. 2, 149–176.
- Beebe, Roger Warren. 2000. "After Arnold: Narratives of Posthuman Cinema." Meta-Morphing: Visual Transformation and the Culture of Quick-Change, Vivian Sobchack, ed. MIT Press. 159-181.
- Berlant, Lauren. 2011. Cruel Optimism. Duke University Press.

-----. 2022. On the Inconvenience of Other People. Duke University Press.

- Birks, Chelsea. 2021. *Limit Cinema: Transgression and the Nonhuman in Contemporary Global Film.* Bloomsbury Publishing.
- Bould, Mark. 2021. The Anthropocene Unconscious: Climate Catastrophe Culture. Verso.
- Boym, Svetlana. 2001. The Future of Nostalgia. New York: Basic Books.
- Braudy, Leo. 1998. "The Genre of Nature," *Refiguring American Film Genres*, Browne, Nick, ed. 1998. University of California Press, 278-309.
- Buell, Lawrence. 1999. "The Ecocritical Insurgency." *New Literary History*, vol. 30, 699-712.
- Chang, Alenda Y. 2011. "Games as Environmental Texts." Qui Parle, vol 19, no. 2, 57-84.

-----. 2019. Playing Nature: Ecology in Video Games. University of Minnesota Press.

- Chen, Adrian. 2020. "Hideo Kojima's Strange, Unforgettable Video-Game Worlds." *The New York Times*, March 3, 2020, sec. Magazine. <u>https://www.nytimes.com/2020/03/03</u> /magazine/hideo-kojima-death-stranding-video-game.html.
- Chung, Hye Jean. 2018. *Media Heterotopias: Digital Effects and Material Labor in Global Film Production*. Duke University Press.
- Clark, Nicole. 2017. "A Brief History of the 'Walking Simulator,' Gaming's Most Detested Genre." Salon. November 11, 2017. <u>https://www.salon.com/2017/11/11/a-brief</u> -history-of-the-walking-simulator-gamings-most-detested-genre/.
- Collins, Deja. 2015. "The Visual Effects of Interstellar: Bridging Art and Science." ACM SIGGRAPH. April 10, 2015. <u>https://www.siggraph.org/news/the-visual-</u>effects-of-interstellar-bridging-art-and-science/.
- Crutzen, Paul J. and Eugene F. Stoermer. 2000. "The 'Anthropocene." *Global Change Newsletter*, vol. 41, 17–18.

Cubitt, Sean. 2005. EcoMedia. Rodopi.

- Denson, Shane. 2020. Discorrelated Images. Duke University Press.
- -----. 2020. "Post-cinema after Extinction." *Discorrelated Images*. Duke University Press, 193-236.
- -----, and Julia Leyda. 2016. "Perspectives on Post-Cinema: An Introduction." In Post-Cinema: Theorizing 21st-Century Film, Denson, Shane, and Julia Leyda, eds. 2016. REFRAME Books, 750-784.
- Dornbush, Jonathon. 2019. "Death Stranding Isn't Exactly a New Genre." *IGN*. November 14, 2019. https://www.ign.com/articles/2019/11/11/death-stranding-isnt-exactly-a-new-genre.
- Fennessey, Sean. 2018. "Alex Garland Leaves Nothing Behind." The Ringer. February 23, 2018. <u>https://www.theringer.com/movies/2018/2/23/17036466/alex-garland-annihilation-interv</u> Ew-ex-machina.
- Feuer, Jane. 1981. The Hollywood Musical. Bloomington, Indiana University Press.
- Foucault, Michel. 1986. "Of Other Spaces." Diacritics, vol. 16, no. 1, 22-27.
- Frasca, Gonzalo. 1999. LUDOLOGY MEETS NARRATOLOGY: Similitude and differences between (video)games and narrative. Parnasso, vol. 3.
- -----. 2003. "Ludologists Love Stories Too: Notes on a Debate that Never Took

Place." Paper Presented at the Level Up Conference of the Digital Games Research Association. University of Utrecht, The Netherlands.

- Frei, Vincent. 2018. "Interviews; ANNIHILATION: Andrew Whitehurst Overall VFX Supervisor – Double Negative." Art of VFX. March 21, 2018. <u>https://www.artofvfx.com/annihilation-andrew-whitehurst-overall-vfx-supervisor-double-negative/</u>.
- Fuchs, Michael and Jeff Thoss. 2020. Intermedia Games—Games Inter Media: Video Games and Intermediality. Bloomsbury.
- Gadgil, Madhav and Ramachandra Guha. 1995. *Ecology and Equity: The Use and Abuse of Nature in Contemporary India*. Routledge.
- Gallagher, Mark. 2006. Action Figures: Men, Action Films, and Contemporary Adventure Narratives. Palgrave Macmillan.
- Garcia, Derek. 2022. "Death Stranding's Cliff Symbolizes Metal Gear Passing The Torch." ScreenRant. July 17, 2022. <u>https://screenrant.com/death-stranding-</u> <u>metal-gear-solid-cliff-symbolism-kojima/</u>.
- Grant, Barry Keith, ed. 2012. Film Genre Reader IV. University of Texas Press.
- Green, Amy. 2022. Longing, Ruin, and Connection in Hideo Kojima's Death Stranding. Routledge Advances in Game Studies. Routledge.
- Guasco, Anna. 2020. "'As dead as a dodo': Extinction narratives and multispecies justice in the museum." *Environment and Planning E: Nature and Space*, vol. 4, issue 3, 1055–1076.
- Habgood, Jacob, and Mark Overmars. 2006. The Game Maker's Apprentice. Apress.
- Haraway, Donna J. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Duke University Press.
- Hossaert, Clément. 2020. "Shimmer et Chimère. Genre, transe et rimes à l'ère de l'anthropocène dans Annihilation de Jeff Vandermeer et Alex Garland [Simmer and Chimera. Genre, trance and rhyme in the Anthropocene era in Annihilation by Jeff Vandermeer and Alex Garland]." *Kinephanos*, s.i "Immersion Ecologies," 29-48.
- Howard, Noah. 2018. "Annihilation' writer-director Alex Garland talks genre, eerie films and working with others." The Stanford Daily. March 8, 2018. <u>https://stanforddaily.com/</u>
 <u>2018/03/08/</u>annihilation-writer-director-alex-garland-talks-genre-eerie-films-and-workin -with-others/.

- Ingram, David. 2000. *Green Screen: Environmentalism and Hollywood Cinema*. University of Exeter Press.
- Ivakhiv, Adrian. 2014. "What Can a Film Do?: Assessing Avatar's Global Affects." Moving Environments: Affect, Emotion, Ecology, and Film, Weik von Mossner, Alexa, ed. Wilfrid Laurier University Press, 143-158.
- -----. 2013. Ecologies of the Moving Image: Cinema, Affect, Nature. Wilfrid Laurier University Press.
- Jansen, Dennis. 2019. "The Environment at Play: Confronting Nature in The Elder Scrolls V: Skyrim and the 'Frostfall' Ecomod." *Press Start*, vol. 5, no. 1, 1-18.
- Kagen, Melissa. 2022. Wandering Games. MIT Press.
- Kara, Selmin. 2016. "Anthropocenema: Cinema in the Age of Mass Extinction." *Post-Cinema: Theorizing 21st-Century Film*. Denson, Shane, and Julia Leyda, eds. Falmer: REFRAME Books, 750-784.
- King, Geoff, and Tanya Krzywinska. 2002. *Screenplay: Cinema/Videogames/Interfaces*. London; Wallflower Press.
- King, Nico. 2020. "20 Incredible Environmental Games from the Last Decade."December 1, 2020. <u>https://www.chaostheorygames.com/blog/20-environmental-sustainability-</u> <u>Video-games-from-the-last-decade-2021</u>.
- Kojima, Hideo. [@Kojima_Hideo]. 2019. "DEATH STRANDING Is Not a Stealth Game. It Is Brand New Action Game with the Concept of Connection (Strand). I Call It Social Strand System, or Simply Strand Game. TOMORROW IS IN YOUR HANDS. #deathstranding Https://T.Co/XaraGs2P03." Tweet. *Twitter*. <u>https://twitter.com/HIDEO_KOJIMA_EN/status/1133981072524361728</u>.

Kolbert, Elizabeth. 2014. The Sixth Extinction: An Unnatural History. Henry Holt and Company.

- Leijser, Bas. 2022. "10 Games That Raise Environmental Awareness." *The Gamer*. June 20, 2022. <u>https://www.thegamer.com/games-increasing-environmental-awareness/</u>.
- Lewis, Leo. 2019. "Hideo Kojima on 'Death Stranding' and the Art of Cinematic Video Games." *Financial Times*. September 6, 2019. <u>https://www.ft.com/content/9ea34b6e-cea4-11e9-b018-ca4456540ea6</u>.

Massumi, Brian. 2002. Parables for the Virtual. Duke University Press.

Mayer, Ruth. 2016. "Early/Post-Cinema: The Short Form, 1900/2000." Post-Cinema: Theorizing

21st-Century Film. Denson, Shane, and Julia Leyda, eds. Falmer: REFRAME Books, 616-645.

- McClean, Shilo. 2007. *Digital Storytelling: The Narrative Power of Visual Effects in Film*. MIT Press.
- McGrath, Matt and Georgina Rannard. 2023. "UN climate report: Scientists release 'survival guide' to avert climate disaster." BBC News. March 20, 2023. https://www.bbc.com/news/science-environment-65000182.
- Miller, Caroline and Ashley Kelly. 2017. *Emerging Genres in New Media Environments*. Palgrave MacMillan.
- Montembeault, Hugo, and Maxime Deslongchamps-Gagnon. 2019. "The Walking Simulator's Generic Experiences." *Press Start*, vol. 5, no. 2, 1-28.
- Morton, Timothy. 2007. *Ecology Without Nature: Rethinking Environmental Aesthetics*. Harvard University Press.
- -----. 2013. *Hyperobjects: Philosophy and Ecology after the End of the World*. University of Minnesota Press.
- Navarro, Victor. 2012. "I Am a Gun: The Avatar and Avatarness in the FPS." In *Guns, Grenades, and Grunts: First-Person Shooter Games*. Voorhees, Gerald, Josh Call, and Katie Whitlock, eds. Bloomsbury.

Neale, Steve. 1980. Genre. British Film Institute.

- Nixon, Rob. 2011. *Slow Violence and the Environmentalism of the Poor*. Harvard University Press.
- Ogilvie, Tristan. 2019. "Death Stranding Review." *IGN*. November 1, 2019. https://www.ign.com/articles/2019/11/01/death-stranding-review.
- O'Key, Dominic. 2023. "Extinction in Public: Thinking through the Sixth Mass Extinction, Environmental Humanities, and Extinction Studies." *Environmental Humanities*, vol. 15, issue 1, 168-186.
- Perron, Bernard. 2009. "Introduction: Gaming After Dark." *Horror Video Games: Essays on the Fusion of Fear and Play*, Perron, Bernard, ed. 2009. MacFarland, 3-13.
- Puig de la Bellacasa, María. 2017. *Matters of Care: Speculative Ethics in More than Human Worlds*. Posthumanities 41. Minneapolis: University of Minnesota Press.
- Rivera-Dundas, Adena. 2017. "Ecocritical Engagement in a Pixelated World." Ecozon@, vol. 8,

no. 2, 121-135.

- Robinson, Tasha. 2018. "Annihilation is the most thoughtful science fiction movie since Arrival." The Verge. February 23, 2018. <u>https://www.theverge.com/2018/2/23/</u> 17042290/annihilation-review-natalie-portman-oscar-isaac-alex-garland-jeff-vandermeer.
- Sarkar, Samit. 2015. "Konami's Bitter, Yearlong Breakup with Hideo Kojima, Explained." *Polygon*. December 16, 2015. <u>https://www.polygon.com/2015/12/16/10220356/</u> hideo-kojima-konami-explainer-metal-earsolid-silent-hills.
- Schatz, Thomas. 1982. *Hollywood Genre: Formulas, Filmmaking, and the Studio System*. New York, Random House.
- Shaviro, Steven. 2010. Post-cinematic Affect. Zer0 Books.
- -----. 2012. "MELANCHOLIA Or, The Romantic Anti-Sublime," *Sequence*, vol. 1, no. 1, 2-58.
- Siddiqui, Mohammad Usaid. 2021. "How Kojima's Metal Gear Solid Series Influenced Stealth Games That Followed." *Game Rant*. April 27, 2021. <u>https://gamerant.com/metal-gear-solid-stealth-games/</u>.
- Simelane, Smangaliso. 2022. "Kojima Productions' 'Strand' Genre Explained." GameRant. November 1, 2022. <u>https://gamerant.com/kojima-productions-strand-genre-</u> mechanics-purpose-explained/.
- Sledge, Ben. 2022. "Death Stranding Is No Longer The Only Strand Game." *The Gamer*. July 12, 2022. <u>https://www.thegamer.com/death-stranding-witch-strandings/</u>.
- Smith, James. 2023. "Province boosts funding for communities to help tackle climate challenge." BC Government News. February 21, 2023. <u>https://news.gov.bc.ca/releases/</u> 2023EMCR0010-000215.
- Sobchack, Vivian. 2000. "At the Still Point of the Turning World': Meta-Morphing and Meta-Stasis." *Meta-Morphing: Visual Transformation and the Culture of Quick-Change*, Vivian Sobchack, ed. MIT Press. 131-158.
- Tallerico, Brian. 2018. "Reviews: Annihilation." RogerEbert.com. February 23, 2018. <u>https://www.rogerebert.com/reviews/annihilation-2018</u>.
- Tsing, Anna Lowenhaupt. 2015. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton: Princeton University Press.
- Tyler, Tom. 2022. Game: Animals, Video Games, and Humanity. University of Minnesota Press.

Vandermeer, Jeff. 2014. Annihilation. Farrar, Straus and Giroux.

Vandermeer, Ann and Jeff Vandermeeer. 2011. The Weird. Corvus.

- Voorhees, Gerald. 2019. "Genre Troubles in Game Studies: Ludology, Agonism, and Social Action." *Kinephanos*, s.i "The Rise(s) and Fall(s) of Video Game Genres," p. 16-39.
- -----, Josh Call, and Katie Whitlock. 2012. "Introduction—Things That Go Boom: From Guns to Griefing." *Guns, Grenades, and Grunts: First-Person Shooter Games*. Voorhees, Gerald, Josh Call, and Katie Whitlock, eds. Bloomsbury.
- Webster, Andrew. 2019. "Death Stranding is a long, bizarre journey that's both breathtaking and boring." November 1, 2019. <u>https://www.theverge.com/2019/11/1/20941606/</u> Death-stranding-review-ps4-hideo-kojima.
- Weik von Mossner, Alexa. 2014. "Introduction: Ecocritical Film Studies and the Effects of Affect, Emotion, and Cognition" *Moving Environments: Affect, Emotion, Ecology,* and Film. Weik von Mossner, Alexa, ed. Wilfred Laurier University Press.
- Welsh, Timothy. 2016. *Mixed Realism: Video Games and the Violence of Fiction*. University of Minnesota Press.
- Whitley, David. 2012. The Idea of Nature in Disney Animation. 2nd Edition, Routledge.
- Whitley, David. 2014. "Animation, Realism, and the Genre of Nature." Moving Environments: Affect, Emotion, Ecology, and Film, Weik von Mossner, Alexa, ed. 2014. Wilfrid Laurier University Press, 143-158.
- Williams, Raymond. 1961. The Long Revolution. Chatto and Windus.
- Willoquet-Maricondi, Paula. 2010. "Introduction: From Literary to Cinematic Ecocriticism."
 Framing the World: Explorations in Ecocriticism and Film. Willoquet-Maricondi, Paula
 ed. University of Virginia Press, 1-22.
- Wolf, Mark J. P. 2002. "Genre and the Video Game." *The Medium of the Video Game*, Mark J. P.Wolf, ed. University of Texas Press, 113–34.
- Wright, Will. 1975. *Sixguns and Society: A Structural Study of the Western*. Berkeley, University of California Press.

Ludography

Capcom. 1996- 2023. Resident Evil (video game series). Capcom. All major platforms.

- Core Design and Crystal Dynamics. 1996-2019. *Tomb Raider* (video game series). Eidos Interactive and Square Enix. All major platforms.
- Free Lives. 2023. *Terra Nil*. Netflix, Free Lives, and Devolver Digital. Android OS, iOS, Windows, Mac, and Linux.
- Guerrilla Games. 2017-2022. *Horizon* (video game series). Sony Interactive Entertainment. PS4, PS5, and Windows.
- iD Software. 1993-2020. *Doom* (video game series). Microsoft and Bethesda Game Studios. All major platforms.
- Kojima, Hideo, dir. 2019. *Death Stranding*. Performances by Norman Reedus, Lindsey Wagner, Troy Baker, Léa Seydoux, Margaret Qualley, Guillermo del Toro, Nicolas Winding Refn, and Mads Mikkelsen. Kojima Productions and Sony Interactive Entertainment America. PS4, PS5, Windows, and Xbox Game Pass.
- -----, dir. 1999-2015. *Metal Gear Solid* (video game series). Konami Digital Entertainment. PS1, PS2, PS3, PS4, PSP, and Windows.
- Naughty Dog. 2013-. The Last of Us. Sony Interactive Entertainment. PS3 and PS4.
- -----. 2020. The Last of Us Part II. Sony Interactive Entertainment. PS4, PS5, and Windows.
- -----. 2007-2022. Uncharted (video game series). Sony Interactive Entertainment. PS3,

PS4, PS5, PSP, PS Vita, Windows.

Nintendo. 1986-2017. *The Legend of Zelda* (video game series). Nintendo. NES, SNES, N64, Gameboy, Gameboy Advance, Gamecube, DS, 3DS, Wii, WiiU, and Switch.

Taro, Yoko, dir. 2017. Nier: Automata. PlatinumGames. PS4, Xbox One, Switch, and Windows.

Filmography

- Cameron, James, dir. 1991. *Terminator 2: Judgment Day*. Carolco Pictures, Pacific Western, Lightstorm Entertainment.
- -----, dir. 2009. *Avatar*. Twentieth Century Studios, Dune Entertainment, Lightstorm Entertainment.
- -----, dir. 2022. *Avatar: The Way of Water*. Twentieth Century Studios, TSG Entertainment, Lightstorm Entertainment.
- Carpenter, John, dir. 1982. *The Thing*. Performance by Joel Polis. Universal Pictures, Turman-Foster Company.
- Costner, Kevin, dir. 1990. *Dances with Wolves*. Tig Productions, Majestic Films International, Allied Filmmakers.
- Cuarón, Alfonso, dir. 2013. Gravity. Warner Bros., Esperanto Filmoj, Heyday Films.
- Derrickson, Scott, dir. 2008. *The Day the Earth Stood Still*. Twentieth Century Fox, 3 Arts Entertainment.
- Eames, Charles and Ray, dir. 1977. Powers of Ten. IBM and Pyramid Films.
- Emmerich, Roland, dir. 2004. *The Day After Tomorrow*. Twentieth Century Fox, Centropolis Entertainment, Lions Gate Films.
- -----, dir. 2022. Moonfall. Centropolis Entertainment, AGC Studios.
- Garland, Alex, dir. 2014. Ex Machina. A24, Universal Pictures, Film4.
- -----, dir. 2018. *Annihilation*. Performances by Natalie Portman, Oscar Issacs, Jennifer Jason Lee, Tessa Thompson, Gina Rodriguez, and Tuva Novotny. Paramount Pictures, Skydance Media.
- Glazer, Jonathan. 2013. Under the Skin. Film4, British Film Institute (BFI), Silver Reel.
- Goldhaber, Daniel. 2023. *How to Blow Up a Pipeline*. Chrono, Lyrical Media, and Spacemaker Productions.
- Joon-ho, Bong, dir. 2013. Snowpiercer. SnowPiercer, Moho Film, Opus Pictures.
- Kaufman, Philip, dir. 1978. Invasion of the Body Snatchers. Solofilm.
- Kubrick, Stanley, dir. 1968. 2001: A Space Odyssey. Stanley Kubrick Productions, Metro-Goldwyn-Mayer Pictures.
- McKay, Adam, dir. 2021. Don't Look Up. Hyperobject Industries, Bluegrass Films.
- McTiernan, John. 1987. Predator. Twentieth Century Fox, Lawrence Gordon Productions, Silver

Pictures.

Miller, George, dir. 1979. Mad Max. Kennedy Miller Productions, Mad Max Films.

- -----, dir. 2006. *Happy Feet*. Warner Bros., Village Roadshow Pictures, Kennedy Miller Productions.
- Nolan, Christopher, dir. 2014. *Interstellar*. Paramount Pictures, Warner Bros., Legendary Entertainment.
- PlayStation, dir. 2019. *Death Stranding Release Date Reveal Trailer* | *PS4*. https://www.youtube.com/watch?v=piIgkJWDuQg.
- Proyas, John, dir. 1998. Dark City. Mystery Clock Cinema, New Line Cinema.
- Romero, George. dir. 1968. Night of the Living Dead. Image Ten.
- Schaffner, Franklin J., dir. 1968. *Planet of the Apes*. APJAC Productions, Twentieth Century Fox.
- Scott, Ridley, dir. 1979. *Alien*. Performance by Ian Holm. Brandywine Productions, Twentieth Century Fox.
- Siegel, Don. 1956. *Invasion of the Body Snatchers*. Allied Artists Pictures, Walter Wanger Productions.
- The Last of Us (TV series). 2023. Performances by Pedro Pascal and Bella Ramsey. HBO.
- -----. 2023. Season 1, Episode 9, "Look for the Light." Directed by Ali Abbasi. Performances by Pedro Pascal and Bella Ramsey. Aired March 12, 2023, HBO.
- *The Walking Dead* (TV series). 2010-2022. AMC Networks and Fox.
- Trier, Lars von, dir. 2011. Melancholia. Zentropa Entertainments, Memfis Film.
- Trumbull, Douglas, dir. 1972. *Silent Running*. Universal Pictures, Trumbell/Gruskoff Productions.

Discography

- King Gizzard and the Lizard Wizard. 2023. *Ice, Death, Planets, Lungs, Mushrooms and Lava*. KGLW, <u>https://open.spotify.com/album/2nPbslvl01lfELsFHTKp0s?si=</u>KmSuPQb8 QvGqcg9If1s3PQ.
- -----. 2023. *Omnium Gatherum*. KGLW, <u>https://open.spotify.com/album/4tuqA7qbVsPukqs</u> YPPrcF7?si=G66bCi9OR7mPwgN-hnFRpw.
- Low Roar. 2017. "Don't Be So Serious." *Once in a Long, Long While*..., Tonequake Records, <u>https://open.spotify.com/track/</u>27VxXIWKxPbcyinlY3SYc3?si=afbb252d932a4bb2.