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Extinction Anxiety as Zeitgeist: An Examination of the Cultural Anxiety Surrounding Extinction Threats

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Abstract

This thesis examines extinction anxiety as a zeitgeist that manifests through nuclear war anxiety and climate change anxiety. I define extinction anxiety as the cultural mood of anxiousness surrounding extinction threats in the past, present, and future. I use Monika Krause's sociological conception of zeitgeist to understand these anxieties as a cultural mood. I demonstrate using Jean-Paul Sartre's conceptualization of materially derived subjectivity, how these moods of anxiousness are internalized through material conditions. I build my concept of extinction anxiety by comparing and contrasting the mood of anxiousness surrounding nuclear war during the Cold War and the current mood of anxiousness surrounding climate change. Due to their similarities, I argue that both historical moods are manifestations of a greater cultural phenomenon: the zeitgeist of extinction anxiety. Further, I examine work on apocalypse by theorists such as Bruno Latour, Günther Anders, and Srećko Horvat. Using their work, I determine that the mood of apocalypse; the cultural mood surrounding the loss of a future, overlaps with my conceptualization of extinction anxiety. Thus, I bridge my understanding of extinction anxiety in the past (Cold War), present (climate crisis), and future (apocalypse). I conclude that in order to address the effects of extinction anxiety, we must radically transform our orientation to history and the future. Additionally, we must take care to be sensitive to how to educate future generations on the topic of extinction, so that they are equipped to deal with the realities of extinction.

Keywords

Zeitgeist; anxiety; climate change; apocalypse; extinction; nuclear war; Jean-Paul Sartre; C. Wright Mills; existentialism; ecology; critical theory.

Summary for Lay Audience

As noted by researchers such as Galway and Field, climate change is impairing peoples' mental well-being (1). To address this, in this thesis, I argue how climate change anxiety is an instance of a greater cultural phenomenon I call extinction anxiety. Rather than examining this anxiousness at the individual level, I believe that more should be done to study it at the cultural level. By comparing and contrasting climate change anxiety to nuclear war anxiety, I show how this mood of anxiousness was established through a historical example. Further, by looking at how theorists of apocalypse write about the loss of future, I can examine how climate change anxiety relates to our feelings of doom and gloom. I conclude that more should be done to reflect on our history and how we think about the future. Further, when educating future generations, we should pay careful attention to their anxiousness about climate change.

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0.1: Preface - My Encounter with the Apocalyptic Mood atop the Mer de Glace

Far, far above, piercing the infinite sky,
Mont Blanc appears—still, snowy, and serene;
Its subject mountains their unearthly forms
Pile around it, ice and rock; broad vales between
Of frozen floods, unfathomable deeps,
Blue as the overhanging heaven, that spread
And wind among the accumulated steeps;
A desert peopled by the storms alone,
(Shelley, "Mont Blanc: Lines Written in the Vale of Chamouni", part III lines 12-19).

I first began to understand the apocalyptic mood of the times when I visited the Mer de Glace (Sea of Ice) valley glacier, in the French Alps during the summer of 2022. After seeing the entire expanse of the French Alps atop Mont Blanc a mere hour before visiting the glacier, I was not expecting to experience anything as grand or awe-inspiring. The vista of the valleys, plains, and settlements atop the nearly five-kilometer-tall mountain did not prepare me for my visit to France's largest glacier. When the train dropped us off at the station, which only 33 years ago sat level with the glacier, the temperature was peaking at 34 degrees Celsius. As I stepped off, I looked down more than 700 meters to where the glacier currently rests. Cascading staircases

were flooded with people descending toward the ice cave at the bottom to take pictures. Initially, I had planned to do the same, but was filled with confusion, apathy, and a mood of seriousness. I felt a sense of mourning for a place that no longer exists and filled with a sense of nostalgia.

More strikingly, I began to sense myself, humanity, and life on Earth within this 700-meter-tall anthropogenic cavern. I experienced the 11,700 years of the Holocene, as the entire lifespan of this behemoth glacier. Its terminal illness over the last fifty years, but a flash in the pan, making up only ~0.004 percent of its total existence. The future was revealed to me in the present and I felt the scope of time beyond humanity. I felt the embrace of the cosmos and experienced the relative insignificance of our species to the universe. The collapsing glacier, which has stood since The Stone Age, paralleling human existence, has all but disappeared. My brief time in the Mer de Glace permanently transformed my understanding of climate change and left a significant imprint on my worldview. It is the only experience in my life, which I can say was a true revelation. This was my encounter with the apocalypse and acceptance of the end times. The cultural, political, and social baggage of what I knew about climate change began to fall apart slowly. I was no longer conceptualizing the phenomenon but experiencing it and living it.

Since my visit, the Mer de Glace has receded another 40 meters and will continue to do so, year after year, until it is completely gone. Travel blogs urge people to visit before it disappears. Current trends show that there is less than a decade until all that remains is a steep staircase to nowhere. Yet, none of these blogs list the melting of the glacier, the lack of glacier, as a spectacle to behold. It seems the appeal for visiting the glacier is the scarcity of the experience due to its inevitable disappearance. The tone of the visit was radically different amongst each group of tourists. Many began the descent without a second thought; others were

frustrated about the inconvenience of having to labour away in the heat; and still some of us somberly read the plaques which detailed the recent history of melting.

The space where the glacier was formerly pushed against the Earth looks like the resting place of a giant. Moguls in a river-like pattern appear like the imprint of a great spine that once rested in the terrain. The sides of the valley give way to striations that resemble markings left by an enormous ribcage. What is left of the glacier appears as a sarcophagus for an enormous otherworldly entity that once occupied and defined the land. The absence of the glacier, in contrast to the serene surroundings of Mont Blanc and Chamonix, seems unnatural and impossible. Yet, the melting glacier provides more truth than anything else one could find in the region. The melting is a catalyst of the apocalypse, one which allows us to see into the future by showing us the exception, which becomes the rule.

Percy Shelley's words contained new meaning for me after witnessing the carnage caused by climate change to the surroundings of Mont Blanc. 'Impenetrable depths' have given way to a deep chasm which reflects nothing divine. The pitiful amount of ice left at the bottom of the valley is the consequence of modern ambitions. The mountains now seem unearthly in a new way, as if I had been transported thousands of years ahead in time by the effects of snowless winters and scorching summers. The pride of the mountain is still there, but its presence in the human world seems somehow alien.

I wonder what will become of the Mer de Glace's resting place, will people still visit its grave decades from now? Or will it be forgotten completely, erased from the annals of history? Will the cavern which once housed this mighty sea be repurposed for other tourist activities? Or, will it be memorialized with plaques, like the Icelandic glacier Okjökull which finished melting in 2019? The epitaph of Okjökull reads:"A letter to the future. Ok is the first Icelandic glacier to

lose its status as a glacier. In the next 200 years, all our glaciers are expected to follow the same path. This monument is to acknowledge that we know what is happening and know what needs to be done. Only you know if we did it. August 2019. 415 ppm CO2" (Kim and Gerretsen).

My prediction, somewhat pessimistically, is that the Mer de Glace will be forgotten completely when it has finished melting. The spectacle of the lack, the absence of the glacier, will be neglected the instant it loses its status as a glacier. Perhaps a niche type of person will make the trip to where the glacier once stood proudly. Mont Blanc is likely to remain a popular tourist destination until it has fully eroded, or until there is no one left to visit. The last thirty years were the end times for a glacier in the final stages of life. I feel lucky I should have been born into a time and position of privilege so that I could at least visit the glacier before it disappears and gain a sense of its former grandiosity.

Percy Shelley wrote this poem about the Mer de Glace around 1816 amid the Industrial Revolution. He wrote of the permanence of the glacier far before we understood the human influence on global climate change. We can no longer count the majestic glaciers with those 'everlasting' things that make up the universe. The vast river has ceased, and the leap of the waterfalls dwindle as erosion displaces the landscape. While beautiful, the poem perfectly encapsulates the philosophy of 'domination over nature', which has pre-emptively doomed the glacier. Shelley assumes the permanence of the environment, just as we have assumed our environment can be extracted endlessly.

The everlasting universe persists infinitely in both temporal directions, preceding and surpassing history. Mont Blanc outlasted Shelley and it is so grand that it seems it will outlive all humanity. The mountain and its surroundings appear so beautiful and stupefying that the observer cannot imagine a point in time when they did not exist. Neither can the observer

imagine a time when the mountains will no longer exist. They appear so enormous and untouchable that their non-existence is unfathomable to the human imagination. The infinite is brought to the mind and our imagination fails to grasp the possibilities which our rationality demands.

The scenery reflects the gloom of the observer as they invariably fail to imagine this endless universe of things. The sight lends its power to us, inspiring us to imagine the infinite precedent which propels us forward. The sublime experience of Shelley is precisely what Mont Blanc was, and we desperately feel it should be. Yet, the mountains too, even if it were not for the threat of climate change would eventually erode and the glaciers would melt slowly. Our impact is not the initiation of change, but a powerful force that multiplies the intensity of change. We, as agents of the anthropogenic apocalypse, are also the agents of its fate and are thus struck by the sublimity of our infinite power to decide whether history continues or disappears.

The nature which surrounds Shelley, he describes as "The secret Strength of things / Which governs thought" (part V line 13-14). Shelley recognizes Mont Blanc and its all-encompassing beauty as a product of divine creation which beholds the "secret chasms" (part IV line 39), of human thought. Now, with the Mer de Glace in present time, we see the erasure of a scene which would allow us such experiences. The waterfalls no longer run "ceaselessly" (part I line 11), as Shelley writes.

In 2019, Mont Blanc had to be evacuated due to potential danger from shifting ice and melting snow (BBC). The mountains, valleys, and glaciers previously frozen in time by a permanent winter are exiting their stasis. The Holocene is disappearing, and the Ice Age is becoming a remnant that can only be observed through scientific analysis. Immanuel Kant wrote extensively on the experience of the sublime. For Kant, the sublime consists of feeling the

superiority of our power of reason over nature (78). More specifically, in the case of mathematical sublimity, feeling reason's superiority over the imagination. We experience mathematical sublimity when we encounter something beyond the comprehensive capabilities of the imagination. Reason demands that our imagination comprehends the object, and inevitably fails the task due to its constitutive limitations (Kant 79). The dynamic sublime is felt when one experiences nature as fearful, whilst recognizing we are in a position of safety and thus not fearing the danger itself (91). Kant's examples of dynamically sublime nature, include thunderclouds, hurricanes, and overhanging cliffs. While the sublime is often understood to be a feeling of pleasure, it also includes the simultaneous feeling of displeasure. For mathematical sublimity, the displeasure comes from recognizing the limits of one's imagination. For dynamic sublimity, the displeasure comes from the recognition of our relative powerlessness when compared to the power of nature.

The Mer de Glace, that was once capable of evoking an experience of sublimity, has been reduced to a thin layer of ice at the bottom of a valley. That which inspired such beautiful words from Shelley and evoked a comparison to the progenitor of human thought, has all but vanished. Shelley's experience of sublimity is a classic example of the modern attitude towards nature that impairs our capacity to understand the apocalypse. Our feelings of superiority over nature have come crashing down in our hubris. The sublimity of nature is disappearing as the spectacle deteriorates and diminishes before us, year after year.

Describing climate change as an aesthetic experience can dangerously undermine the real impact its effects have on people, especially in the global south. As Andreas Malm notes, it is easy for us in developed nations to speak about how we witness the effect of climate change (97). But the phenomenon is very different for those actively bearing the brunt of the economic,

social, material, and political consequences. Those who have lost their lives, their family, and their home to a hurricane are unlikely to philosophize about the spectacle of the phenomenon. Not simply because, as Kant writes, they are out of harm's way and thus cannot view the phenomenon impartially. Rather, for the people of nations that were formerly colonies, who are disproportionately affected by climate change, their end of the world has already happened.

We humans in 2023, are not in a position of safety, but we are made to feel as though we are, by the forces who seek to normalize climate change. When we see depictions of nature's wrath in the media there is a degree of separation between the observer and the phenomenon. For those of us who exist 'before the apocalypse', the spectacle is readily available but inaccessible due to its apparent distance. For them, capitalist progress or Christian doctrine provides an answer to the threat or pushes it further out of mind. For those who exist after the apocalypse, those whose way of life has been destroyed by modernity, the spectacle has passed. As Bruno Latour states, it makes little sense that an apocalypse could be followed by another as it constitutes the end of time itself (34).

0.2: Introduction

January 24th, 2023, the doomsday clock lurches forward only 90 seconds to midnight, with regards to Putin's repeated nuclear threats against the West's intervention into Russia's invasion of Ukraine (Mecklin). Five years prior in 2018, the clock moved from 150 seconds to midnight to 120, due to the Trump administration's decision to withdraw from the Paris Climate Accord. Over the past thirty-one years since the fall of the Berlin Wall, there have been eleven movements of the clock, ten of them moving the hand closer to midnight. Each one of these ten posts cite nuclear tensions and/or climate change as the primary cause behind the movement toward extinction. There is never a lack of extinction anxiety, as nuclear war and climate change fill each other's gaps.

Psychologists use terms such as climate anxiety, eco-anxiety, climate distress, and ecological grief to conceptualize the anxiety surrounding climate change. However, neither climate anxiety nor any other terms coined by psychologists are recognized as conditions or mental health disorders in any diagnostic manuals. According to The University of Queensland School of Public Health, many researchers and health professionals object to medicalizing a feeling that is "understandable and expected" (Charlson and Crandor). Unlike a mental health disorder, defined by the World Health Organization as a "clinically significant disturbance in an individual's cognition, emotional regulation, or behaviour" (Mental Disorders), climate anxiety is rational and healthy. Western medical institutions are beginning to see existential anxiety as a legitimate threat to the mental health of the public. Ecological grief is similar to experiences of loss, anxiety, trauma, and is akin to classic cases of grief such as losing one's job or the death of someone close to oneself. In this case, it is grieving the loss of a particular future which becomes

the object of grief. The patient is considered to be mourning the death of possibility, rather than the loss of an actuality.

In contrast, during the Cold War, people who were paranoid, anxious, and grieving the future could be viewed as either unpatriotic or generally neurotic. Propaganda films such as Nuclearosis (as seen in *Atomic Café*), portrayed those grieving the loss of a future or panicking about the threat of apocalypse as mistaken or medically unwell. Then Vice-President Richard Nixon rang a symbolic 'mental health bell' in response to the growing fear of nuclear war. Those who were anxious, paranoid, and dejected due to the threat of apocalypse in effect became mentally unhealthy. The inability to completely ignore and compartmentalize the threat of nuclear war made someone mentally unwell, unhealthy, and socially problematic.

Since human extinction is a phenomenon that necessarily affects all humans, I am not implying that extinction anxiety is a uniquely Western phenomenon. On the contrary, as I state later, often those who most deeply feel the impacts of climate change contribute the least to carbon emission and pollution. I focus on Western responses to the threats of climate change and nuclear war because (i) it enables me to write autoethnographically; and (ii) I believe that the ways in which people respond to distinctive extinction threats in the West is uniquely weighted. In other words, I am choosing to analyze responses in the US and Canada because there is both a fear of nuclear war and a fear of climate change. Further, people in metropolitan areas are both more likely to believe in climate science (due to the prevalence of progressive politics) and more likely to be targeted by nuclear weapons (due to population density and proximity to strategic targets).

As with any phenomena that produces powerful reactions, the ways in which people and groups respond to extinction threats are informed by extinction anxiety. Reactions such as

protest, violence, self-isolation, willful ignorance, and excessive hedonism are informed by instances of extinction anxiety such as guilt, anger, despair, dread, and sorrow. Using Sartre's theory of a materially derived subjectivity, I can examine this transformation from anxiety to action by looking at how the material surroundings of a particular attitude contribute to the actions taken in response to this feeling.

In this thesis, I will argue that the current cultural mood of anxiousness surrounding climate change is a manifestation of a zeitgeist of extinction anxiety. I demonstrate how extinction anxiety has evolved by examining the mood of anxiousness surrounding nuclear war, during the Cold War. I define extinction anxiety as the cultural mood of anxiousness surrounding extinction threats in the past, present, and future.

In Chapter 1.1, I examine a portion of literature on climate change anxiety and identify gaps in the literature that this project addresses. I determine that more research needs to be done on climate change anxiety as a cultural phenomenon. I also demonstrate how I use the existing literature to support my argument of climate change anxiety as a cultural phenomenon. In Chapter 1.2, I detail the theoretical backbone of this project through Monika Krause's sociological understanding of zeitgeist and Jean-Paul Sartre's analysis of materially derived subjectivity. Krause's understanding of zeitgeist allows me to frame the cultural mood of anxiousness as a cultural-material force. Sartre's theory of subjectivity allows me to demonstrate how cultural mood is internalized into subjectivity through material conditions. In Chapter 1.3, I compare and contrast the threats of the present climate crisis and nuclear war, during the Cold War. Further, I compare and contrast the moods of anxiousness in both periods and how they were internalized into peoples' subjectivities. I argue that the present mood of anxiousness is a continuation of the Cold War mood of anxiousness, as both are manifestations of a greater

cultural phenomenon: extinction anxiety. This is reinforced by Srecko Horvat's claim that the nuclear age has 'collided' with the climate crisis (121).

In Chapter 2.1, I examine apocalyptic thinking from theorists such as Bruno Latour, Gunther Anders, and Srecko Horvat. After defining and comparing extinction and apocalypse, I examine how apocalyptic mood intersects with the moods of anxiousness surrounding climate change and nuclear war. I argue that the mood of apocalypse, as a cultural force that disrupts our orientation towards the future, aligns with the mood of extinction. Thus, a sense of apocalypse is a characteristic of the zeitgeist of extinction anxiety. In Chapter 2.2, I examine four behavioural responses towards this mood of anxiousness: fatalism, protest, guilt, and optimism. I argue that these four responses come about through different ways of internalizing the cultural mood of anxiousness into one's subjectivity.

In Chapter 3.1, I outline how the previous two chapters cumulate into my theory of extinction anxiety. I argue that extinction anxiety is a cultural phenomenon best understood as a zeitgeist that extends from the beginning of the Cold War to the present day. Extinction anxiety encompasses the mood of anxiousness presently surrounding the climate crisis, the mood of anxiousness surrounding nuclear war, during the Cold War, and the mood of apocalypse that affects our orientation towards the future. I outline my argument of how we should orientate ourselves in regard to extinction anxiety. I argue that our orientation must abandon a linear Eurocentric understanding of history in favour of an inclusive and multiplicitous understanding of history. Further, we must orient towards the future in such a way that respects the realities of climate change. This includes transforming the education of future generations to acknowledge and address extinction anxiety.

Chapter 1.1: Literature Review

Whether it is referred to as climate anxiety, eco-anxiety, or environmental anxiety, studies by scholars such as Galway and Field have determined that anthropogenic climate change is impacting our mental well-being (1). In this subsection, I explicate a small portion of the literature surrounding the phenomenon I refer to as climate change anxiety. In order to conceptualize climate change anxiety for further analysis, I summarize the results of the six studies I deem most pertinent to my use of the phenomenon. Synthesizing the findings of these studies, I define climate change anxiety as a societal mood impacting large numbers of people derived from the physical, spiritual, and psychological impacts of the climate crisis and characterized by symptoms of depression, restlessness, and nervousness, and feelings of hopelessness, powerlessness, and guilt. I identify gaps in this body of literature surrounding climate change anxiety that I am addressing in this paper. Further, I detail how this body of literature aids my analysis of extinction anxiety. Climate change, as one of two extinction threats that I examine in my case study is unique because we are currently experiencing its effects.

A study by Galway and Field was conducted to determine how climate change impacts the mental well-being of youth in Canada. The five questions, weighted to improve representation, asked about "(i) climate emotions and their impacts; (ii) perspectives on the future due to climate change; (iii) perspectives and feelings about government (in)action; (iv) perspectives on supports, programs, and resources needed to cope with climate emotions and anxiety; and (v) perspectives on climate change education" (Galway and Field 1). They found that found that 78% of the 1000 young Canadians surveyed feel that climate change has impacted their mental health (1). Of these 1000 participants, 56% reported feeling "afraid, sad,

anxious, and powerless"; 37% reported an impact on their daily functioning; 39% hesitate to have children due to climate change; 73% report that they find the future "frightening"; and 76% report that they believe people have failed to take care of the planet (Galway and Field 1). Galway and Field conclude that more research into the impact of climate change on youth well-being is needed urgently (7).

A similar study by Charlotte A. Jones surveyed 1943 Australians aged 15 to 19 on their emotional experiences, perceptions, and knowledge of climate change, and how these factors influence their decision-making and views regarding the future (1). The study determined that 91.1% of respondents were worried about the impacts of climate change on the generations to come after me; 55.1% of respondents agreed that climate change has impacted their decision to have children; 67.5% believe that climate change is going to reduce their quality of life in the future; and 53.8% of respondents stated that climate change affects where they plan on living in the future (Jones 4). Jones determines that the knowledge, perceptions, and emotional experiences of climate change impact how young people orient towards the future (11). Young people will live with and must anticipate and adapt to the impacts of climate change for their entire lives (Jones 11).

A review by Tara J. Crandon et al. examines the influences on climate anxiety for young people using a social-ecological framework (123). They define climate anxiety as "how humans perceive, fear and dread the impacts of climate change" (Crandon et al 123). Anxiety, as an adaptive response to a threat, can become maladaptive and lead to "chronic worry, restlessness, irritability, panic and sleep disturbance" (Crandon et al 123). Climate anxiety has also been shown to negatively impact study, work, and family relationships (Crandon et al 123). Crandon et al. note that there is some evidence that climate anxiety, as a rational response to a real threat,

may “facilitate problem-solving and pro-environmental behaviour” (123). However, this anxiety can overwhelm and lead to “fear, helplessness, hopelessness, powerlessness and avoidance” (Crandon et al 123). Crandon et al conclude that future research on climate anxiety should examine the relationships between climate anxiety and contrasting levels of analysis such as individual characteristics (example, childhood development); the microsystem (example, impacts on family); the mesosystem (example, school and community action); the exosystem (example, policy); and the macrosystem (example, loss of cultural connection to land) (123).

These studies by Galway and Field, Jones, and Crandon et al., provide a background and evidence for the effects that the climate crisis has on the mental well-being of young people. These studies show support the idea that the climate crisis impacts the way people imagine and plan for the future. Young people are impacted by this more than any other group since they will have to spend the most time in a future threatened by climate change. Climate change anxiety has not only affected people’s emotions in the present time but how they *expect* to feel in the future. This has material implications too, with this anxiety seemingly influencing where young people are going to live and whether they decide to have children. Climate change anxiety, as an adaptive response to the physical, psychological, and spiritual threat of climate change is impacting the material world by influencing how people orient towards the future. These studies conclude that more research is needed to determine the precise effects of climate change on the mental well-being of young people, and specifically, how they orient towards the future. I address this gap in the literature by examining climate change anxiety as a manifestation of extinction anxiety. By examining extinction anxiety, and thus climate change anxiety, as a zeitgeist I can evaluate the effects of climate change on young peoples’ well-being at the cultural level.

Synthesizing existing literature of climate anxiety with their research in Australia's Wheatbelt and Northern Canada, Ashlee Cunsolo and Neville R. Ellis produce their theory of ecological grief (275). They identify three pathways of ecological grief: (i) grief associated with physical ecological loss and attendant ways of life and culture; (ii) grief associated with disruptions to environmental knowledge systems and resulting feelings of loss of identity; and (iii) grief associated with anticipated future losses of place, land, species, and culture (Cunsolo and Ellis 276). While grief is an important and healthy response to loss, Cunsolo and Ellis find ecological grief to be a form of "disenfranchised grief" (275). As such, ecological grief and the mourning experienced in response to ecological losses "are often left unconsidered, or entirely absent, in climate change narratives, policy and research" (Cunsolo and Ellis 275). Cunsolo and Ellis conclude that given the trajectory of the sixth mass extinction and predictions about the future of climate change, ecological grief will become an "increasingly common response" (279). To witness the ecological losses personally or through the suffering of others reminds us that climate change is not an "abstract scientific concept" but a source of real unacknowledged "emotional and psychological pain" (Cunsolo and Ellis 279).

Cunsolo and Ellis examine these forms of grief at the individual emotional level. Anxiety, as an anticipatory adaption is rooted in the future and grief as a reflective capacity is rooted in the past. The third pathway of ecological grief are attributed to anticipation while the first and second pathway of ecological grief are attributed to reflection. Cunsolo and Ellis show how past ecological (material) losses impact our anticipation of future ecological losses. When analyzing climate change anxiety, it important to remember that climate change is a phenomenon currently disproportionately felt across the globe. They show how current and past material losses impact the way we imagine a future under climate change. By witnessing how the loss of

land, biodiversity, and ecology has impacted people in the present we can better understand how it will affect us in the future. Cunsolo and Ellis show how material losses such as biodiversity influence cultural aspects such as attendant ways of life. I use this in my formulation of extinction anxiety as a zeitgeist as thus a cultural force.

Panu Pihkala constructs a comparative analysis of eco-anxiety from the perspective of diverging disciplines such as sociology, political science, psychosocial theory, existentialism, ecology, and affect theory (1). Pihkala found that unpredictability, uncontrollability, overwhelm, and uncertainty are important factors in defining eco-anxiety across all disciplines (1). Despite these symptoms conforming to classic understandings of anxiety, Pihkala states that most forms of eco-anxiety are non-pathological (3). As such, we should be careful when prescribing "treatments" for eco-anxiety so that it is not deemed "irrational" (12). Rather than an anxiety disorder, Pihkala suggests that eco-anxiety is moral in nature because "it is based on an accurate appraisal of the severity of the ecological crisis" (14). Pihkala concludes that an important theme for future research on the topic of eco-anxiety is related to "social contexts and cultural factors" (14). Due to the "multiplying crises of the 2020s" Pihkala suggests that "eco-anxiety will become intertwined with other anxieties" (14).

From Panu Pihkala's study, I follow their suggestion that "eco-anxiety" has already become linked with other kinds of anxiety. Anxiety surrounding climate change is tangible with anxiety surrounding other existential risks such as nuclear war, disease, and genocide. Each of these threats are a unique manifestation of extinction anxiety, but they are not cleanly distinguishable. I am in agreement with Pihkala that eco-anxiety is not an irrational state of mind due to the realities of the climate crisis. Climate change anxiety at the individual level is a moral response because it shows how much one *cares* for the lives of themselves, others, and future

generations. My analysis of climate change anxiety at the cultural level understands this response in the same way. This is why, in accordance with Pihkala's suggestion, I am analyzing how eco-anxiety (climate change anxiety) is related to greater social contexts and cultural factors. This is a gap in the literature surrounding climate change anxiety that I seek to address through this project.

Extinction Risk and Apocalyptic Risk

Divergent theories have emerged about how we ought to understand and cope with the idea that climate change is on track to render humanity extinct. Due to government inaction, corporate apathy, and the increased prevalence of climate change anxiety, more people are becoming convinced that climate change *will* be the threat that takes humanity out. Here, I review a body of literature that examines the potentiality of climate change (and other extinction threats) to extinguish or severely regress humanity. I detail how this body of work reinforces my argument that extinction anxiety surrounding climate change is a phenomenon that has bridged from nuclear anxiety during the Cold War. Further, I explain how my project fills in gaps within this body of literature.

Srećko Horvat in *After the Apocalypse* argues that extinction is 'supraliminal', meaning that extinction "goes beyond the limits of our understanding, and even our imagination" (31). The collision of the nuclear age and the climate crisis means that the threat of extinction is becoming too big for us to understand (Horvat 31). Horvat examines the Marshall Islands, where the collision of the nuclear age and the climate crisis is observable (111). Sea levels have already risen in the Marshall Islands three times faster than the global average (Horvat 111). Further, the

"tombs" from nuclear testing in the Marshall Islands now threaten to capsize under rising sea levels and weather anomalies (Horvat 113). Horvat argues that the leaking tombs of nuclear testing represent a blurring of inside and outside, toxic radioactivity on one side and rising sea levels on the other (117). In 2018, the US Department of Defence published a commission that confirmed that islands are to be fully submerged underwater, at least once, by 2035 (Horvat 117). However, their primary concern is not for the people of the Islands, nor how the radioactive waste will affect nearby populations, but for the multibillion-dollar military installation on the islands developed since 1947, that is used to conduct missile tests (Horvat 117). In December 2019, one year after the commission was published, Majuro, the capital of the Marshall Islands was flooded and "its population witnessed the largest recorded outbreak of dengue fever on the islands" (Horvat 118). This marked the second time the population of the Marshall Islands were forced to evacuate since their forced relocation by the US government during the initial nuclear testing following World War 2 (Horvat 118). This leads Horvat to conclude that the Marshall Islands are the "ground zero" of the collisions between the nuclear age and the climate crisis (118).

Lecturing in 1965, shortly after the Cuban Missile Crisis and the assassination of President Kennedy, British literary critic Frank Kermode wrote that "it seems doubtful that our crisis is one of the important differences between us and our predecessors. Many of them felt as we do" (95). Horvat, in agreement with Kermode, insists that we, as humans tend to think that our "present crisis is more worrying than any other moment in human history" because "it is through crisis that we make sense of our world" (120). Even if we believe our 'end times' to be unique, "it is not the first time that humanity has lived through an Apocalyptic Zeitgeist" (120). Horvat points out, our collision of extinction threats makes us question whether we "really feel

like our predecessors and whether they really feel like us" (120). This is because, Horvat writes, the collision of the nuclear age and the climate crisis represents not an 'end of the world' but an "end that will end all other possible ends of the world" (121). Citing Déborah Danowski and Eduardo Batalha Viveiros De Castro, Horvat reminds us that is important to remember that due to colonial violence and genocide, for many peoples the 'end of the world' has already come and passed (104).

My analysis of extinction anxiety draws on the same phenomenon of threat collision that Horvat outlines in *After the Apocalypse*. As with Horvat, I examine the relationship between the anthropogenic extinction threats of climate change and nuclear war. However, instead of arguing from a specifically eschatological perspective, I analyze the collision as a cultural phenomenon. Horvat's description of this collision as an "Apocalyptic Zeitgeist" provides a framework for my analysis of extinction anxiety as a zeitgeist (120). I also use his theorization of 'collision' when considering how the threats of climate change and nuclear war interact in the material world. His example of the Marshall Islands provides a focal point for analyzing how the two threats have merged together. Further, his placement of the apocalypse in the past and present enables me to discuss how our present understanding of the end times are rooted in the past. In other words, Horvat's analysis provides a bridge between the anthropogenic threats of nuclear war and climate change. I use this bridge to support my analysis of extinction anxiety as a cultural phenomenon that manifested as nuclear war anxiety in the past and climate change anxiety in the present.

In *Human Extinction: A History of the Science and Ethics of Annihilation*, Émile P. Torres examines how humans have theorized about their own extinction, spanning from the Pre-Socratics to contemporary work on existential risk (1). In chapter 1, Torres describes how an

existential mood "provides the organizing principle behind the periodization outlined in the first half of this book" (7). In this case, 'mood' refers to a collective or public mood (more specifically, a 'mood of the times') rather than an individual sense (7). Torres elaborates by defining a public mood as something "akin to an 'atmosphere' that imbues society (or some segment of society)", thereby coating everything in a certain "hue" (7). The mood of the times during the 1950's was one of "optimism and anxiety" while the mood of the 1960's was one of "liberation, rebellion, and experimentation" (Torres 7). Thus, an existential mood "arises from the situation in which people find themselves given some set of epistemologically robust answers to the questions above about the possibility, probability, etc. of our extinction" (Torres 7). The existential mood results in a "general outlook" on our collective future, coating everything we see and our imaginations of the future in a certain "hue" (Torres 7). The "atmosphere" of the existential mood influences the expectations and thoughts of "large numbers of people in the same general way, leading them to similar beliefs about where humanity is and might be going" (Torres 8).

Torres's analysis of public moods provides insight into my analysis of extinction anxiety as a zeitgeist. Like Torres, I understand our experience of extinctions threats such as the climate crisis and nuclear war as inherently existential. Additionally, as with Torres, my examination of extinction threats is focused at the cultural level rather than at the individual level. Their use of 'mood' to describe a societal atmosphere resonates with my use of Monika Krause's sociological understanding of zeitgeist. Their analysis of the 'mood of the times' informs my discussion of similarities and differences between climate change anxiety and nuclear war anxiety. I also incorporate Torres's metaphor of the collective "hue that coats our society" into my

understanding of cultural perspective. From Torres I gain a theory of how large groups of people come to view society and the future in the same way.

Unlike Torres who dissociates from the existentialist thinking of Simone de Beauvoir and Jean-Paul Sartre, I believe that existentialism can provide key insights into the issue of existential mood. This difference marks the key difference between Torres's analysis of 'existential mood' and my analysis of extinction anxiety. My analysis, deliberately following the existentialists mentioned by Torres, understands the core issues raised by the existentialists to be at the heart of extinction. Problems such as becoming oneself, the finitude of mortality, creating meaning, and oppression first raised by the existentialists are still relevant to our discussions of extinction. Further, I understand extinction anxiety as a cultural phenomenon rooted in the material world. I propose that through existentialist texts such as Simone de Beauvoir's *Ethics of Ambiguity* and Jean-Paul Sartre's *What is Subjectivity?* we can learn more about the issue of extinction and how we come to understand it.

In his work *Existential Risks: Analyzing Human Extinction Scenarios and Related Hazards,* Nick Bostrom defines an existential risk as "one where an adverse outcome would either annihilate Earth-originating intelligent life or permanently and drastically curtail its potential" (2). Bostrom lists the following existential risks in order of most to least likely: "misuse of nanotechnology, nuclear holocaust, we are in a simulation… and it gets shut down, we create a superintelligence (that becomes misanthropic), a genetically engineered bioagent, an unforeseen physics disaster of our own creation, a naturally occurring pandemic, an asteroid impact, and runaway global warming" (2). In Bostrom's typology of risk, in order for a risk to be considered "existential" it needs to be both terminal and global (2). For Bostrom, a "terminal existential event" is one that prevents humans from reaching their collective potential through

total annihilation or irreversible structural change (2). As such, "global endurable risks" such as historically violent events that create mass suffering do not constitute true existential risks and are instead categorized as "catastrophic" (Bostrom 2). This includes genocide, World Wars, colonialism, and viral epidemics since the risk is at the level of "genos" (a kind of human life) not the entirety of humanity (Bostrom 2). This is because Bostrom's typology of risk is based on a transhuman and utilitarian principle that if humanity were to go extinct before colonizing other planets and galaxies, it would be a loss of potential (Bostrom 5).

Joshua Schuster and Derek Woods in *Calamity Theory: Three Critiques of Existential Risk* launch a critique of utilitarian existential risk thinking forwarded primarily by analytic philosopher Nick Bostrom (3). Using methodologies from science and technology studies and the environmental humanities, Schuster and Woods develop a sustained critique of Bostrom's theory of existential risk by challenging its core assumptions, arguments, and rise in popularity (3). Schuster and Woods (rightfully) criticize this understanding of genocide as "dangerously close to rationalizing epochal histories of the suffering of minoritized and oppressed peoples for the sake of purported definitional consistency since something of 'humanity' would survive" (24). The "logic" of genocide is extinctionary because through showing that humans can intentionally "declare that some lives are worth less than others" we learn that humans are capable of "destroying each other's humanity" (24). Simply because the "results of genocide" are incomplete, does not mean that the intentionality behind genocide is any less oriented towards extinction (Schuster and Woods). By focusing purely on consequence, Bostrom highlight the pitfalls of using a pure euro-centric utilitarian philosophy to analyze the issue of extinction and genocide. Additionally, as Schuster and Woods note, genocide is an existential threat according to Bostrom's own definition because in "permanently remaking" the human condition according

to new rules you constrain humanity's potential (25). Instead, Schuster and Woods argue that more must be learnt about extinction, apocalypse, and genocide from global indigenous communities. They cite Potawatomi scholar Kyle Powys White who writes that "the hardships many non-Indigenous people dread most of the climate crisis are ones that Indigenous peoples have endured already due to different forms of colonialism: ecosystem collapse, species loss, economic crash, drastic relocation, and cultural disintegration" (226). Finding resonance with Déborah Danowski and Eduardo Batalha Viveiros De Castro, White states that most Indigenous peoples already place themselves in the post-apocalypse and have incorporated threats such as the climate crisis and nuclear war into a longer history of colonial violence (226).

One solution that Schuster and Woods put forward in *Calamity Theory* is to "[expand] the possibility and accessibility of world-making and world-sharing across the space of existences" through a re-examination of extinction using existentialist thought (14). Rather than Bostrom who believes that mortality is "among the problems of existential risk", existential thought considers mortality (along with culture) "not as reductive determinations but 'conditions' of existence that require interpretation and engagement" (Schuster and Woods 82). They note (as I will reinforce later through Sartre's *What is Subjectivity?*) that "each subject is unique as well as socially mediated and reliant on objective material reality" (Schuster and Woods 82). By reaffirming the "existential condition for expanding ways of flourishing together and sharing existence on Earth" we can expand the space of existence towards the goals of environmental justice (Schuster and Woods 14). The expanded space of existence allows room for diverse ways of life on a planet that must be shared. Schuster and Woods specify four ways that expanding the space of existence is relevant to existential risk: (i) "existential condition is the ecological condition because they are intertwined phenomena"; (ii) "all decisions regarding the permanent

change of the existential condition for humans or nonhuman animals should involve consultation and consent of all species' existences"; (iii) "Bostrom's theorizations and remedies for existential risk divide up the present and future of humanity along the restrictive lines of a hierarchical valuation of intelligence"; and (iv) "The existential condition is the basis of our elementary commonalities with all other life on Earth" (15-16).

As with Schuster and Woods, I examine existentialist thought to gain a better understanding of how we respond to extinction threats. Using *Calamity Theory*, I examine how existentialist thought translates into issues of extinction. The four ways that detail how expanding the space of existence is relevant to existential risk support my argument for extinction anxiety. I agree with Schuster and Woods that the ecological condition is inextricable from the existential condition since extinction is a natural phenomenon. Their critique of Bostrom's utilitarian risk analysis guided my focus towards the experiential side of the phenomenon. This critique of utilitarian risk analysis also provides me with an insight into the pitfalls of an overly categorical approach to analysis of existential risk. It is easy to overlook how genocide and colonial violence (not that these are mutually exclusive) have impacted people's understanding of extinction anxiety. Using existentialist philosophy to analyze extinction anxiety I hope to (in some small way) answer the call by Schuster and Woods for future researchers to help expand the accessibility and possibility of world-sharing and world-making.

Chapter 1.2: Conceptualizing Zeitgeist, Culture, and Subjectivity

This section is the theoretical backbone of my thesis that underpins my analysis of larger social and cultural phenomena. I explain how zeitgeist as a 'mood of the times' becomes internalized through the material conditions of society. First, I must note that my analysis is undertaken from a kind of cultural materialism that understands culture as a material force. I argue that the material conditions of society such as technology, the economy, and social organization are the primary force behind social change. As such, culture is a primary determinant of social behaviour and a material force that manifests through outlets such as artistic expression. I outline Monika Krause's sociological conceptualization of zeitgeist as a way to frame these social and cultural phenomena and analyze them at the meso level. Next, I outline Jean-Paul Sartre's analysis of materially derived subjectivity to explain how the material conditions of culture manifest at the individual level. I use Sartre's theory to explain how the cultural phenomena work at the micro level of analysis. Finally, I demonstrate how combining Krause's theory of zeitgeist (meso) and Sartre's analysis of materially derived subjectivity (micro) allows me to detail how greater social and cultural phenomena impact individuals.

Krause's Sociological Zeitgeist

Zeitgeist, literally translating to the spirit of the times, is traditionally used to describe the mood of a historical era. Monika Krause proposes that we understand zeitgeist as "a pattern in meaningful practices that is specific to a particular historical time-period, links different realms of social life and social groups, and extends across geographical contexts" (1). By meaningful

practices, Krause is referring to actions, movements, and expression with cultural and historical significance, where culture is understood "as a constitutive aspect of all social phenomena and demands a sensitivity towards meanings and meaningful practices for the analysis of all aspects of social life" (2). In other words, meaningful practices are Krause's understanding of what people do and why they do it. Meaningful practices are actions informed by culture that in turn change or reinforce the culture that is able to inform future actions. Meaningful practices are the instances or actualization of culture understood materially. Practices are meaningful because they demonstrate the influence of culture in the things people do and why they do them. As the product and perpetuator of culture, these practices *produce meaning* across distinct levels of social life. It is from meaningful practices that one can draw conclusions about cultural phenomena and identify zeitgeists.

Zeitgeists "*link different realms* of social life and social groups" (Krause 1). For a phenomenon to qualify as part of a zeitgeist it must be interwoven between several distinct areas of social life and "linked to patterns of meaning production in several distinct realms" (Krause 3). The uniformity in meaningful practices create the identity of the zeitgeist. The *extension* of these patterns in meaningful practices are measured in both time and space. The spatial extension of zeitgeists are the *geographical contexts* identified with the patterns in meaningful practices: the identifiable space where the patterns emerged, ended, or mutated and the geographical limits of where these patterns can be or were found. The temporal extension, the *particular historical time period*, measures when these patterns first emerged, had a notable effect, ended, or mutated. Zeitgeists, as temporally defined phenomena, stand in contrast to group-specific patterns and enduring cultural patterns (Krause 2). A zeitgeist is firmly bound and thus defined by when it emerges, disappears, or mutates. *Social life* refers to the social space within a given geographical

context and historical time frame. The measurement of social life considers the context of human geography and societal organization for patterns in meaningful practices. Our social lives are layered by our relation to others and our memberships to social groups that individuals come to belong to, either innately or intentionally.

Krause uses '1968' to demonstrate the substance of zeitgeist and the thought process behind her definition. 1968 has become an encompassing term for "broader political and cultural phenomena" such as the counter-culture, green movements, student protests, and challenges to authoritarian rule in Eastern Europe. Krause asserts that to describe "a set of events, an explicit ideology, a social movement, [a style of music, or a set of clothes]" is not enough to capture the idea of "1968" in sociological terms (2). Instead, Krause proposes that "'1968' describes a set of practices that combine meanings and objects in certain ways [that] we can recognise when we are confronted with material from that period even if we may debate the boundaries of the phenomenon and the relative importance of different components of it" (2). 1968 is a zeitgeist because it describes a mood of the times that bind these cultural and political phenomena together. The cultural mood is expressed through meaningful practices undertaken in the 1960s such as green activism, student protest demonstrations against the Vietnam War, artistic expression, and revolution against authoritarian regimes in Eastern Europe. In the case of 1968, the zeitgeist is counter-cultural, an opposition to the establishment that emerged at the end of World War II. The mood of the times manifested materially in new forms of fashion, media outlets, political organizations, and ideologies. These material manifestations of 1968 help to identify when the zeitgeist emerged, mutated, and where it existed geographically. The Woodstock Music Festival of 1969 is an example of when the mood of the times manifested

materially through several layers of social organization. Protest music, peace activism, communal living, environmentalism all existed in practice simultaneously.

I use Krause's concept of zeitgeist because it is useful for studying larger social forces that have a 'feel' to them. I conduct my analysis around a wider cultural mood that is rooted in the material conditions of existence (i.e., the environment and the world around us) rather than at an individual emotional level. Thus, I use zeitgeist to frame the greater social and cultural forces as a 'mood of the times' that permeates throughout the material conditions of society. In other words, since my object of contemplation is a cultural and societal phenomenon based on our existence in the world, it is more effective to analyze it as a zeitgeist rather than an emotion felt by individuals. This paper examines a movement of analysis from the macro level, to meso level, to micro level and back to the macro/meso level. Zeitgeist, as a meso level analysis, bridges the macro level of analysis examining society's structures as a result of past actions and the micro level of analysis examining subjectivity and one's sense of self.

I use zeitgeist to examine larger social and cultural forces because it allows me to frame the phenomena in a specific historical time-period. This allows me to examine the development of these cultural forces in the past and map them onto the future. By framing these forces as a zeitgeist, I can look into historical moods (for example, the 1960s) and contrast them with the current mood of the times. Further, because zeitgeists encompass multiple facets of larger sociocultural forces such as social organization, fashion, and ideology, I am able to incorporate all aspects of the phenomenon into my analysis. Instead of focusing on one cultural phenomenon I am able to see how these various cultural phenomena interact to produce a general cultural mood. Through this general cultural mood, I am able to examine why groups of people tend to perceive society in the same way. By examining how people act in similar ways, I am able to

identify what factors lead to the 'general cultural mood' and the implications of these collective societal practices.

Zeitgeists emerge as a response to large changes in the material conditions of society. Large-scale material change such as an economic depression or a large-scale conflict change the material conditions of life for individuals. In response, individuals must respond to these changes and reorient towards the material conditions of their lives. Large groups of people, responding to the same changes, tend to reorient in similar ways, thus leading to social cohesion. For example, during the 1960s, young men who has spent their adolescence planning what to do with their lives (for example, school, starting a family, or starting a business) were suddenly drafted en mass to fight in the Vietnam War[1]. For those who already held progressive attitudes, this radical change led to sentiments of resentment against the establishment. Individuals close to these young men were also forced to respond to their absence and the possibility of their death. As a result, these young people reoriented towards their material conditions in a similar way, and thus, viewed society in a similar way. Individuals 'feel' this cultural mood through the relationship between greater social and cultural forces and their own lives. An individual's immediate material conditions become 'tinted' by the cultural mood they are part of. Larger phenomena such as war and economic depression, due to their vast consequences, layer over their interactions with objects and other subjects.

Sartre and Materially-Derived Subjectivity

[1] I must note that I am not implying that the Vietnam War was the sole determining factor for the counterculture of the 1960s. Instead, I use the Vietnam War as an example of (one of many) large scale changes in the material conditions that led to the countercultural mood of the 1960s.

The *Oxford Dictionary of Sociology* defines subjectivity as "the self-conscious perspective of the person or subject" (Scott 1014). The self-conscious subject is one that is "aware of themselves *as themselves*; it is manifest to them that they themselves are the object of awareness" (Smith). In the theory of mind, to recognize one's subjectivity is to realize that one is not an object but rather means to recognize not only what one *is* but how one exists in relation to the material world of objects and social world of subjects. One's idea or concept of oneself, however incomplete, is the process of self-consciousness. Identity, as something that changes and evolves throughout one's life, is created through the processes of subjectivity. Who one thinks that one is, is influenced by one's material conditions (objects) and social conditions (others).

Now I turn to Jean-Paul Sartre's version of the formation of subjectivity to understand how zeitgeist become internalized. In *What is Subjectivity*, Sartre focuses on the link between not-knowing and having-to-be when intending to "define the materialist status of subjectivity" (Introduction, ¶ 14). Subjectivity, as interiority, is a condition that is conditioned by the material world around us. Sartre proposes that interiority is a "conditioned-condition" because "interiority is a condition" and "the whole has to be" (Introduction, ¶ 15). Sartre stresses that consciousness is necessarily self-consciousness "and therefore a nonreflective self-consciousness" and thus "self-consciousness is not self-knowledge" (Introduction, ¶ 12). While the subject is borne by a being, consciousness is an absolute of existence and having-to be is "the mode of being of consciousness" (Sartre, Introduction, ¶ 12). Sartre emphasizes that "consciousness is not the consciousness of a subject" since "consciousness is substituted for the concept of a subject" (Introduction, ¶ 12). He writes that "[this is] the first essential characteristic of subjectivity: if subjectivity is, by definition, non-knowledge, even at the level of consciousness, it is because the individual – the organism – has to be his being" (Sartre, Introduction, ¶ 14).

This leaves only two possible conditions: the first is "being one's material being, as in the (extreme) case of a pure material system" and the second is "modifying the whole in order to ensure one's own maintenance" (Sartre, Introduction, ¶ 14). Between these two is the "condition of interiority" where the whole must always be preserved because it is never conclusively given (Sartre, Introduction, ¶ 14). This conditioning of interiority does not suppose that the "whole is definite" and "confers content on interiority" (Sartre, Introduction, ¶ 17). Instead, Sartre argues that the conditioning of interiority ought to be understood as drawing on the "interiorization process with a view to its own continuation as a totalization in process" (Introduction, ¶ 17). This understanding of the conditioning of interiority is based on the idea that each organism is trying to reproduce themselves materially. In order to maintain our status as an organism we must draw upon two forms of exteriority: "the exteriority of within" and the "exteriority of 'beyond'" (Sartre, Jean-Paul Sartre's Rome Lecture, ¶ 11). This dialectic with three terms requires us to "describe interiorization of the exterior by the organism, in order to understand its capacity to re-exteriorise in transcendent being" (Sartre, Jean-Paul Sartre's Rome Lecture, ¶ 11). Thus, there is one moment referred to as "interiority [that is a] mediation between two moments of transcendent being" (Sartre, Jean-Paul Sartre's Rome Lecture, ¶11). However, other than for temporal clarification, these two moments are not necessarily distinct (Sartre, Jean-Paul Sartre's Rome Lecture, ¶12). It is the same being between both moments, the being in exteriority that mediates with itself (Sartre, Jean-Paul Sartre's Rome Lecture, ¶12). Since this mediation "defines the space in which the unity of two types of exteriority will occur it is necessarily immediate to itself [such that] it does not it does not contain its own knowledge" (Sartre, Jean-Paul Sartre's Rome Lecture, ¶12). At this level of mediation "which is itself not mediated" we

encounter what Sartre refers to as "pure subjectivity" (Sartre, Jean-Paul Sartre's Rome Lecture, ¶12).

Our consciousness internalizes the material conditions of our social life (Sartre 69). Sartre proposes that because existence precedes essence, we must utilize material conditions to develop our projects, or in other words, sense of self. In every moment we perform our subjectivity based on the immediate and peripheral context we are situated in. This context includes our relationship with our material surroundings, other individuals, groups we belong to, and groups that other individuals belong to. These form the basis of how we understand ourselves, how we understand others, and how we are *expected* to act according to the norms and mores. Since "will comes second to freedom" I am responsible for what I do with my project (Sartre, Introduction, ¶23). One's project meets others' projects, and both impact the world around us materially. Since we are the creators of our own projects, it is up to us collectively to sort out the tensions and conflicts between projects. As such, depending on where I am and who I am interacting with, different aspects of my situatedness will determine how I perform my subjectivity. One may believe that one's profession, upbringing, and hobbies do not define them, but these factors determine how others expect one to act (and vice versa).

Through our praxis (knowledge plus action) in our interactions with others, as we perform our subjectivity, we shape the material world that informs the subjectivity of others. This is best exemplified by Merleau-Ponty in *Humanism and Terror* when he writes that "we are not spectators in a closed history; we are actors in an open history, our *praxis introduces* the element of construction rather than knowledge as an ingredient of the world, making the world not simply an object of contemplation but something to be transformed" (107). I am responsible both for representing my personhood, and for what I portray in the performance of my

subjectivity. A person, pursuing their own project and constructing the material world will necessarily come into conflict with another. In these cases, people and groups conflict with another because their freedom and personal goals are blocked or thwarted somehow (even if unintentionally) by the others' ambition. Since we are always already in the world, always already in social groups, and always forced to pursue our projects, conflict between people and groups is inevitable. Conversely, this situatedness also places us in concert with others whose projects are aided by the completion of our own (for example, two candidates running for the same political party in adjacent districts).

In summary, subjectivity is the result and the process of interiorizing the external material world into one's sense of self. The subject's material conditions, in determining what is possible and necessary, create the possibilities for subjectivity. Each individual forms a project out of their existence that necessarily puts them in concert with some and conflict with others. Since freedom precedes the will; we are forced to continue developing our projects even if we achieve our goals. How we perform our subjectivity impacts the material world that other use to develop their own projects. We have (near) complete freedom to choose to develop our projects however we wish. In developing one's project, they must take care when it appears that further development may impede the development of another's project (and vice versa). If one disregards this and slights the other person, one reduces the other person into an object.

Bringing Together Zeitgeist and Materially Derived Subjectivity

Now I bring together Krause's sociological understanding of zeitgeist and Sartre's analysis of materially-derived subjectivity. Sartre's analysis explains how individuals incorporate

zeitgeist allowing me to examine greater social and cultural phenomenon at the micro level of analysis. The 'mood of the times' becomes internalized into one's subjectivity through one's material conditions. Greater phenomena such as war and economic downturn change the material conditions of one's life by enhancing or negating one's ability to reproduce oneself. In other words, these greater phenomena enhance or impede the development of one's project through material changes. The mood of the times can thus influence who we think we are (in relation to greater sociocultural forces) and who we are striving to become. It influences how one shape's one's surroundings and what one chooses to do with one's power of freedom. The mood shapes how we orient to society, how others orient toward society, and thus how we orient towards each other.

Large groups of people are forced to respond to material changes in similar ways, resulting in a (relatively) unified large-scale reorientation towards society. This creates a 'general public mood' that informs how people 'perform' their subjectivity. This mood re-introduces meaning into the world creating attitudes towards institutions and other social groups. The actions taken by individuals that are informed by this mood have material consequences for others. These material changes can enhance the existing mood, mutate into another mood, or splinter into distinct cultural moods by influencing how people interact with objects and other subjects. In other words, by shaping the material conditions of life, the mood of the times shapes the mood of the (future) times.

Chapter 1.3: Contrasting Nuclear War Anxiety and Climate Change Anxiety

In this subchapter, I compare and contrast nuclear war anxiety and climate change anxiety. For each threat, I will examine what they look like and the sense of anxiousness surrounding them. I treat both threats as material circumstances and internalized aspects of subjectivity. When speaking about the Cold War, I am referring generally to the period of geopolitical tensions between 1947 and 1991. I argue that the mood of anxiousness surrounding nuclear war during the Cold War is similar to the current cultural mood of anxiousness surrounding climate change. During the Cold War people understood the globe to be on track to experience nuclear conflict, just as today we view the globe to be directed toward climate catastrophe. As such, anxiousness surrounding both threats are due to perceived inaction; inaction from those in political power to prevent a nuclear war, and a similar inaction by humans to care for the planet.

While my use of existential anxiety draws inspiration from critical work on existential risk, it differs in three ways. First, as noted by Joshua Schuster and Derek Woods in *Calamity Theory: Three Critiques of Existential Risk*, theorists of existential risk such as Nick Bostrom tend to make analytical predictions about the likelihood of various existential threats (5). Instead, I focus my discussion on the societal and philosophical impacts of people experiencing threats to human existence. Second, rather than framing threats such as nuclear war, climate change, and super viruses as independent risks, I write in agreement with Srećko Horvat that the boundaries between anthropogenic threats to human existence are inextricably linked (121). For example, there is no measuring the relative threat of nuclear war and climate change because the

expansion of one impacts the likelihood of the other (Horvat 80). Third, unlike risk theorists, I do not consider climate change or nuclear war a "risk" as it implies that these threats are in a state of potentiality. While it is true that humanity has not yet gone extinct due to nuclear war, climate change, or disease, people suffer and die as a result of these threats every year. The risk is that nothing will be done to change this, and the conditions we face continue to accelerate to a breaking point where the Earth becomes inhospitable for human life and civilization collapses.

The threats of climate change and nuclear war, while treated as distinct problems predominantly felt in separate time frames, have overlapping patterns of feeling and action. The material world is physically, politically, and socially influenced by the threats of nuclear war and climate change. In response, when people integrate the material world into their subjectivity, they inherit the influence of these threats and enact this anxiety back into the world for others. The particular historical time period of my analysis extends from World War II to the present day. As for the spatial extension, I examine responses to these threats in the western world, specifically, the United States and Canada. Although I am also examining nuclear war anxiety, climate change is the primary threat examined in literature today surrounding the topics of extinction and apocalypse. Thus, I (in part) draw my definition of nuclear war anxiety from theorists such as Naomi Klein and Dipesh Chakrabarty who directly contrast the threats of nuclear war and climate change.

First, I will talk about anxiousness during the Cold War and how this mood as a cultural force was internalized into people's subjectivities. The Cold War was characterized by periods of escalation and de-escalation between two main nuclear powers, the United States and the Soviet Union. Both powers sought to expand their respective ideologies of free market capitalism and socialism across the globe. The two superpowers competed for global influence by waging proxy

wars between governments and rebel groups, that aligned with their ideologies. Mutually assured destruction ensured that neither superpower would wage war directly on the other out of fear that the ensuing conflict would destroy the world. Both superpowers expanded and maintained their enormous nuclear arsenals to deter the other from escalating the conflict. Additionally, not wanting to appear weak, both superpowers conducted nuclear warhead tests and made idle threats. With thousands of nuclear warheads primed and aimed at strategic locations across the globe, humanity's survival depended on politicians and military leaders maintaining diplomacy and cooling the tensions between the superpowers.

Consequentially, people were forced to live their lives under the constant threat of nuclear war. A public mood of anxiety and despair emerged as people listened to news about escalating tensions such as the Vietnam War and Cuban Missile Crisis. I will elaborate later through C. W. Mills's writing on fatalistic resignation; the average person felt that they had very little influence on the potentiality of global nuclear war. As a response to this growing fear, the government built public fallout shelters and issued duck and cover drills in schools. However, the film Atomic Café shows through official government documents and interviews with former scientists that these precautions would do little to prevent physical harm to people in the case of nuclear war. Instead, precautions such as fallout shelters and duck and cover drills were designed to ease the mood of anxiety and despair surrounding nuclear war. Citizens could not be physically protected in the case of nuclear war between the United States and the Soviet Union (Atomic Café). Even if one were to survive the initial heat blast of the nuclear bomb, one would have to remain sealed underground to survive the radiation poisoning (Atomic Café). Further, the devastating effects of total nuclear war would permanently disrupt the food chain and supply

chains resulting in societal collapse. The United States Government knew this was the case but needed to sell a solution to alleviate the mood of anxiousness before it led to widespread panic.

Following Krause's conception of zeitgeist and Sartre's conception of subjectivity, this public anxiousness manifested into the material conditions of American citizens and was internalized into the subjectivity of those who felt it. The mood of the times affects one's conception of oneself, how one acts towards others, and the development of one's project. The looming threat that one could be eradicated in an instant impacted the way one oriented oneself towards others and the future. The mood of anxiousness influenced where one decided to live, who one associated with, what one valued, and who one wanted to be. Some sought security by building their own fallout shelters and stocking it with supplies. Some protested for peace, attempting to organize and influence the government and military to deescalate the conflict. Others accepted the possibility of their fate and relied on a hope that the tensions would be solved peacefully. In all cases, the greater cultural mood of anxiousness during the Cold War impacted the decisions the public made and reinforced the material conditions we see presently.

The realization of both unmitigated climate change and global nuclear war threaten the future of humanity and nearly all terrestrial life on Earth. Climate change and nuclear war evoke existential anxieties for the future of the individual and the species. Theorists of extinction consistently rank nuclear war and climate change, as amongst the greatest threats to the prosperity of humanity (Bostrom 2). An inextricable link between these two threats is that the effects of climate change can exacerbate or directly cause nuclear accidents. For example, Srećko Horvat writes in his work, *After the Apocalypse*, that rising sea levels threaten to destabilize tombs of nuclear waste in the South Pacific (16). Dozens of buried and sealed coffins of nuclear waste threaten to produce catastrophic levels of radiation in the oceans (Horvat 16).

Another example is the Fukushima Nuclear Disaster which was caused by the 2011 Tōhoku earthquake and tsunami. This disaster is responsible for the permanent relocation of nearly half a million people and unknown radiation damage amongst the population (World Nuclear Association). Countless nuclear facilities are threatened by unknown climate change-induced weather anomalies. Nuclear waste containment sites ironically referred to as tombs, are now coming back to haunt us as sea levels rise and tsunamis, earthquakes, hurricanes, and heatwaves become commonplace.

Conversely, the depletion of natural resources, the destruction of natural drinking water, and the drying up of fossil fuels threaten to create tension amongst nuclear powers due to scarcity of resources. Thus, the continuation of climate change brings back the threat of nuclear war as nations compete to control what remains of the world's non-renewable supplies. For example, this can already be seen in the struggle for Ukraine between The West and Russia. The areas Russia has invaded (Crimea, Sea of Azov, Kherson, Zaporizhia, Donetsk, and Luhansk) happen to align perfectly with Ukraine's pipelines and their natural resource reserves (Lavelle). Putin has threatened to use nuclear weapons multiple times since the beginning of the invasion, as the West continues to send armaments, munitions, and supplies to the Ukrainian military (Pennington et al.). Russia is reliant on its former control of Ukraine's vast mineral and fossil fuel resources and is laying a stake before the natural resources are consumed by its main competitor, the European Union.

Now I will outline some disparities between nuclear war anxiety and climate change anxiety suggested by Naomi Klein and Dipesh Chakrabarty. Both theorists imply that nuclear war anxiety differs from climate change anxiety, as the latter comes about from inaction rather than deliberation. To counter this claim, I instead argue that both climate change anxiety and

nuclear war anxiety come from inaction. Similar to how climate change is understood now, people believed that if action was not taken to avoid the nuclear arms race it would lead to global catastrophe (Atomic Café). Srećko Horvat's claim is that the nuclear age has collided with the climate crisis (16). Both threats work to form a positive feedback loop that is exponentially increasing the likelihood of human extinction. This analysis contributes to the central argument of my thesis by demonstrating how nuclear war anxiety and climate change anxiety are manifestations of a greater cultural mood: extinction anxiety.

A difference between nuclear war anxiety and climate change anxiety is highlighted in Naomi Klein's work, *This Changes Everything: Capitalism vs. The Climate*, where she writes on the climate crisis that "the only historical precedent for a crisis of this depth and scale was the Cold War fear that we were heading toward nuclear holocaust, which would have made much of the planet uninhabitable" (16). However, Klein ascertains that the possibility for nuclear war "was (and remains) a threat; a slim possibility, should geopolitics spiral out of control" (16). Klein references climate scientists whom have told us that if people continue to live their lives without consideration for the environment we are headed for catastrophe. In contrast, she states, "the vast majority of nuclear scientists never told us that we were almost certainly going to put our civilization in peril if we kept going about our daily lives as usual, doing exactly what we were already doing" (16). Klein suggests that during the Cold War, the threat of extinction came from action, whereas during the present climate crisis, the threat of extinction comes from inaction. This implies that climate anxiety is active, present, and actual; while nuclear anxiety is passive, distant, and hypothetical. So, while nuclear extinction posed a very real threat, it existed in a state of potentiality that was never at hand the way climate change is at hand now. Thus,

climate anxiety is a fear of both ‘what is happening?’ and ‘what is going to happen?’ while nuclear anxiety is a fear of ‘what has happened?’ and ‘what could happen?’

I dispute Klein’s claim that “the majority of nuclear scientists” (16) told us we were not going to put our civilization in peril through inaction. The 1983 film Atomic Café reveals that nuclear scientists were censored from warning the public about the realities of nuclear weapons. Despite producing and developing the nuclear weapons program, nuclear scientists actively warned against the expansion of the program (Atomic Café). Klein makes the mistake of assuming that nuclear scientists had the opportunity to speak freely about the status quo (16). Nuclear scientists, as agents of the military-industrial complex in the age of McCarthyism, lacked the ability to express ethical concerns regarding nuclear weapons (Atomic Café). Further, Klein’s idea that nuclear war was seen as a mere possibility does not mirror public sentiments at the time. On this, former President John F. Kennedy wrote in 1961 that “today, every inhabitant of this planet must contemplate the day when this planet may no longer be habitable. Every man, woman and child live under the nuclear sword of Damocles, hanging by the slenderest of threads, capable of being cut at any moment by accident or miscalculation or by madness” (Plokhy 1).

Much like people today are strategically choosing how and where to live on a dying planet, during the Cold War, people had to consider where to live based on proximity to potential bombing zones. A segment in the film, Atomic Café, shows a couple stating that they choose to live close to a strategic bombing zone so that they will not have to suffer from radiation poisoning. Similarly, the film outlines that many homes in the West were sold with a bomb shelter and duck and cover drills were mandatory. With regards to these examples, it is not possible that nuclear war could be seen as a “slim possibility” (16), as Klein describes. The true

difference that Klein is attempting to identify has to do with how we 'feel' the extinction threat. What separates the threat of climate change from nuclear war is the amount of suffering we are bracing for. World War Three would last only hours and kill more people than the cumulation of all wars in human history. Climate change will continue to kill the same amount, slowly, until the withered end of humanity. What has changed is humanity's epilogue, the hurdle which we could not overcome. We are no longer killing each other collectively but killing ourselves collectively in an act of omnicide. Unlike total nuclear annihilation, climate change extinction is comparatively cruel, discriminatory, agonizing, and torturous. We cannot compartmentalize an issue that is always already happening, that no one wants to talk about, and that is becoming harder to ignore each year.

In agreement with Naomi Klein, Dipesh Chakrabarty writes in his work, "The Climate of History: Four Theses", "the anxiety global warming gives rise to is reminiscent of the days when many feared a global nuclear war. But there is a very important difference. A nuclear war would have been a conscious decision on the part of the powers that be. Climate change is an unintended consequence of human actions and shows, only through scientific analysis, the effects of our actions as a species" (122). Chakrabarty implies that what separates nuclear war from climate change is intentionality. To launch missiles requires deliberate action, while the mechanisms that induce climate change are coincidental with human action. According to Chakrabarty, nuclear war would have to be started by a person or group of people, while climate change is created through inaction.

As with Klein's analysis, Chakrabarty's position regarding climate change anxiety underestimates public anxiousness during the Cold War. Beyond this, he ignores the activism of scholars, diplomats, protestors, and scientists during the Cold War. This anti-nuclear activism

helped influence treaties of nuclear disarmament, open lines of communication between East and West, and promoting peace between nations (Decamous 200). Contrary to Chakrabarty, I believe that without the anti-nuclear protest, nuclear war was more likely to happen.

Chapter 2.1: Eschatology and the End Times

The anxiety of extinction goes beyond the realm of the fear of death. If the fear of nuclear war and climate change were merely about our own lives, we could prescribe everyone a book or lecture on the philosophy of death. We have far fewer tools from our social and physical evolution to deal with the possibility of human extinction. Other than the often-problematic Christian conception of Judgment Day, we lack the words, tools, language, and framework to conceptualize ourselves within extinction. Extinction is a far greater threat to meaning and purpose than individual death.

In this brief section, I will examine how the moods of anxiousness surrounding nuclear war and climate change relate to a sense of apocalypse. I will define apocalypse and discuss the term's use by theorists such as Bruno Latour, Günther Anders, and Srećko Horvat. I argue that apocalypse, understood as 'the end of time', aligns with how we perceive the cultural mood of today, that being extinction anxiety. Our sense of apocalypse, as with the anxieties surrounding nuclear war and climate change, influence how we orient to the future. In this chapter, I integrate these theorists' responses to the apocalypse into my greater understanding of extinction anxiety. This brief examination of apocalypse and extinction informs my analysis of the responses to apocalyptic anxiety in the next subchapter 2.2. As such, this sense of apocalypse contributes to the greater mood of extinction anxiety caused by climate change. I argue that this anxiousness impacts peoples' subjectivities through the internalization of their material conditions.

It is important to first define extinction and expand on my previous definition of apocalypse. As noted in the *Oxford English Dictionary*, the word extinction originates in late Middle English and is borrowed from extīnctus, the past participle of extinguere (to demolish, destroy, or put

out). Extinguere is itself derived from the Latin phrase ex stinguere which literally means to extinguish or to quench. Apocalypse originates from the Ancient Greek work apokálupsis (revelation or more literally uncovering). The word's association with cataclysm or 'world ending catastrophe' stems from the biblical Book of Revelations, in which the second coming of Jesus Christ signals the end of life on Earth and inevitable global destruction. Srećko Horvat defines the apocalypse "not as 'the end of the world', but as a revelation about the coming mass extinction" (16). Horvat asks "[what it means] in practice for the Apocalypse to be understood as 'revelation' and not 'the end of the world'" (16). He answers that "when we encounter a catastrophe it can and must be interpreted not only as a man-made catastrophe that is an 'exception' to the rule but rather as a 'revelation' that introduces a set of new eschatological rules that didn't exist either in the prophetic visions of the biblical prophets or human reality until the mid-twentieth century" (16).

Eschatology, the aspect of theology that deals with judgment, death, and the final events of the history of the world, is relevant even in a secular understanding of apocalypse. Religious conceptions of apocalypse are deeply entrenched in our cultural understanding of existential threats. In *Facing Gaia: Eight Lectures on the New Climatic Regime*, Bruno Latour writes that "all are trying to shift the eschatology of a too-remote future toward the present, without always being aware that those they are addressing believe themselves to be immune to any eschatology since they have moved to the other side. The last ends? Not really; they don't see what that means" (218). We place ourselves on either side of the apocalypse; either before or after. Horvat reminds us that "when we speak about 'progress' and Apocalypse, we should never forget that… the end(s) of the world already happened – for someone, somewhere, and usually for those who were less privileged to benefit from what is usually called 'progress' (gunpowder, paper,

religion, colonialism, capitalism)" (10). Déborah Danowski and Eduardo Viveiros de Castro state in their work, *The Ends of the World*, that there have been plenty of civilizations, mostly indigenous peoples, who have already experienced the end of their world (104). As such, climate change means something completely different to them than those of us in the West. The violence of colonialism, genocide, slavery, exploitation, and extraction perpetrated by the West in the last millennia were the major extinction events for their people, their way of life, and their worlds. For those indigenous peoples who are victims of genocide, the end of civilization does not represent the end of the world. For those of us in the majority in the West, the end of the world is the end of our civilization and our way of life.

Latour, as with Horvat are interested in how we would place ourselves within the apocalypse. To embrace the prophylactic apocalypse is to break the conditioning that encourages us to ignore the signs of the apocalypse. We must look beyond the capitalist faith in progress and the embrace of Judgement Day if we are to 'save the world' as Anders suggests (97). Similar to the ambiguity of the 'end of the world' the phrase 'saving the world' also requires elaboration. Saving the world could mean saving our civilization, saving our species, saving biodiversity, or avoiding an irreversible loss of quality of life. It could also mean, less obviously, saving a conception of the future that defines the present.

We humans in the 21st century, as Anders writes, have the power to decide whether our world should live or die. It seems absurd because we appear to be choosing death over life (97). After all, corporations and governments continue to avoid responsible action. Many of us feel powerless and dejected in the face of climate change, noting how protests are quashed and individual sustainable action is countered by others' selfishness. More sinisterly, others take the path of misanthropic ecofascism that seeks to fight climate change by supporting authoritarian

governments and genocide. Yet, we all belong to the collective which is tasked with choosing its fate and continuously picking the wrong option. It is the absurd condition of our species in the present moment which brings us to the apocalypse and reveals to us the future. Often, and especially in the case of climate change, it is not clear what people mean by the end of the world. It ranges from the extreme 'extinction of humanity' to the smaller scale collapse of one's society. In all probability, the direct effects of climate change will not render humanity extinct anytime soon. The effects are felt disproportionately by nations that contribute the least to global carbon emissions.

Rather than a ‘kingdom without Apocalypse’ Anders proposed that a ‘naked apocalypse’ is on the horizon (97). The naked apocalypse would be the end of history because there would be nothing to recall and no one to recall it. It would be the last epoch and thus the end of ‘epochality’, where one could only continue living in the End-Time (Anders 97). Horvat argues that to live after the ‘naked Apocalypse without kingdom’ would open up an ontological abyss (135). He writes that “To live 'after the Apocalypse' carries with it precisely this utter inability to communicate the 'revelation' because there won't be any new 'kingdom' after the Apocalypse and even the differences between theism and atheism will collapse. It is even possible that the very meaning of apokalyptein will be lost because there will simply be no one left to whom the secret could be ‘uncovered’” (Horvat 136). This apocalypse is naked because, in opposition to the capitalist faith in ‘progress’ it is an ‘apocalypse without kingdom’ with nothing but mere downfall awaiting us (Horvat 10). Since Anders first wrote this in 1959 the threat has only gotten worse as nuclear tensions are rising once again and the chains on capitalist productivity are loosened. The Doomsday Clock of the Bulletin of the Atomic Scientists encroaches closer to

midnight with every update. It was seven minutes to midnight in 1960 one year after Anders wrote his thesis in 1959; it is ninety to midnight while I write mine now (Mecklin).

The end of the world could mean 'the end of prosperity,' or the complete inability to constitute salient futures. Future-making is already becoming unreliable as the threat of climate change constantly tears apart our expectations. For example, the case of MOSE, a system that was designed to protect Venice from the effects of climate change. Ironically named after the biblical figure Moses, the project was designed to protect against the Adriatic Sea rising to a maximum of 22 centimetres (Poggioli). When construction began in 2003, those figures were quite optimistic. Today, after thousands of scientific reports and relays for the construction of MOSE, the figure of 22 centimetres would require a miracle. As Horvat writes, "the giant engineering project once intended to save Venice was planned for a world that no longer exists" (65).

Apocalypse, understood as the loss of future-making, overlaps with my examination of the mood of anxiousness surrounding climate change and nuclear war. As noted by Charlotte A. Jones, young people's conception of the future is marred by the threat of climate change (1). As such, the mood of apocalypse is inherently tied to the mood of anxiousness surrounding climate change. Apocalyptic mood can also be understood as a cultural force that is internalized into our subjectivity through our material conditions. Our sense of the end-times affects our behaviour as we internalize that our actions may be rendered meaningless by impending peril.

Chapter 2.2: Responses to Apocalypse

In this section I examine four responses to the apocalyptic mood identified in the last section. While there are many responses that would prove fruitful for this discussion, I focus on fatalism, protest, guilt, and toxic optimism. I break down fatalism by first examining C. W. Mills's conception of fatalistic resignation as a response to the threat of nuclear war during the Cold War. I examine Roy Scranton's climate change fatalism as outlined in his work *Learning to Die in the Anthropocene*. I also examine Andreas Malm's critique of Scranton's pessimism to show why this perspective on climate change negatively impacts climate change activism. Next, I examine protest as a response to apocalyptic climate change anxiety through the 2021 gallows protest in Cologne. I also examine guilt and toxic climate change optimism as outlying behavioural responses to apocalyptic climate change anxiety. Each of these behavioural responses demonstrate 'meaningful practices' taken in response to climate change anxiety. They serve as examples of how the mood of the times, as a material force, becomes integrated into our subjectivity.

Response 1: Fatalism

I first turn to the most obvious response: C. Wright Mills's ideas of the power elite and fatalistic resignation in the era of climate breakdown. Mills defines the power elite "as [a caste] composed of men whose positions enable them to transcend the ordinary environments of ordinary men and women; they are in positions to make decisions having major consequences" (*The Power Elite* 4). However, one key difference in our era is the dispersion of the economic,

political, and military superstructures beyond national borders and identities. These three pillars have steadily begun to blur national boundaries since the early years of the Cold War. This is not to posit the existence of a global ruling class which plots together, in a conspiracy of world dominance. Rather, similar to C. Wright Mills suggests with the American ruling class in the 1950s, the global ruling class today is relatively unorganized and atomized.

Mills uses the term fatalistic resignation to describe the existential emotional response to the drift and thrust toward World War Three. He defines fatalistic resignation as the emotional response to a popular, yet incorrect theory of historical inevitability based on elite default and incompetence (*The Causes of World War Three* 6). This is based on Mills' "sociological definition of fate [that] has to do with events in history that are beyond the control of any circles or groups of men [1] compact enough to be identifiable, [2] powerful enough to decide with consequence, and [3] in a position to foresee the consequences and so to be held accountable for historical events" (*The Causes of World War Three* 12). Climate change anxiety is the re-emergence of fatalistic resignation but shifted toward ecological rather than nuclear disaster. Most importantly, it reveals an explanation as to why people choose to ignore climate change. People during the Cold War, believing there was nothing that they could do to influence the possibility of escalation, would compartmentalize the possibility. If it did happen, they would die anyway, likely in their sleep without ever finding out. Similarly, people (rightly so in most cases) believe that they cannot influence the decisions of massive polluters or convince everyone to live sustainably.

C. Wright Mills writes in *The Causes of World War Three* that "the immediate cause of World War Three is the preparation for it" (47). For Mills, the cause of World War Three is a movement, a drift and a thrust towards the use of nuclear weapons. He defines these movements

as such: "Drift means that the consequences of innumerable decisions coalesce and collide to form the blind and overwhelming events of historical fate–in the present case, of war. Thrust means, first, such fate insofar as it operates because of explicit default; and second, the explicit decisions that are made for war" (Mills, *The Causes of World War Three* 42). Similarly, we can view the movement toward human extinction through climate change in a similar light. The drift towards climate extinction can be seen through the ignorance of collective action problems and the conflict between capital and prosperity. Climate change is exacerbated by the inability of mass organization and the distractions of matters that become framed as more pertinent. We are also thrust toward climate change extinction through governmental default and 'middle road' neoliberal policy. This includes explicit decisions that are made for preparing for a climate disaster instead of avoiding climate disaster.

Mills argues that what appears as historical inevitability is in fact constructed by "the rigidity of those who have access to the new means of history-making that has created and is creating the inevitability of World War III" (*The Causes of World War Three* 6). Thus, it is not fate leading humanity into the great trap but doctrinaire incompetence. For Mills, "ours is not so much a time of big decisions as a time for big decisions that are not being made… a lot of bad little decisions are crippling the chances for the appropriate big ones" (*The Causes of World War Three* 6). The system of power that started in the West has expanded internationally creating an omnipresent and hyper-integrated economic system. International political structures have become inextricable to the new universal economic system. even more than during the Cold War. During those times, there was still militaristic and economic tension among Western nations and threats of conflict between the Soviet Union and China. NATO has since expanded vastly with the Russian invasion of Ukraine reinforcing the alliance. Similarly, Russia's ties with China,

North Korea, Iran, and other countries have increased with each passing decade. Even compared to the height of the Cold War, when C. Wright Mills wrote *The Causes of World War Three*, the percentage of the national budget spent on the military was at an all-time high for national world powers.

The same thrust and pull that C. Wright Mills outlines have become encoded into the functioning of modern governments. This has created a global current of economic, political, and militaristic functioning which exponentially threatens extinction. The current organization of power in the West is speeding up the drift and thrust toward climate disaster. The elite default responsible for failing to address climate change is the same phenomena of elite default that Mills identifies. The mechanisms that are moving us towards climate disaster are the very same ones that could have led us to nuclear disaster. The state and its apparatuses may have shifted since Mills wrote in the 1950s, but they are the same entity that prevents us from addressing climate change.

Now I will examine the fatalism of Roy Scranton and Andreas Malm's critique that this behavior is actively impeding climate change activism. It is worth learning from Scranton's attitude as a work of description rather than a normative argument. In *Learning to Die in the Anthropocene,* Scranton writes that "the biggest problems the Anthropocene poses are precisely those that have always been at the root of humanistic and philosophical questioning: 'what does it mean to be human?' and 'what does it mean to live?' In the epoch of the Anthropocene, the question of individual mortality—'What does my life mean in the face of death?'—is universalized and framed in scales that boggle the imagination. What does human existence mean against 100,000 years of climate change? What does one life mean in the face of species

death or the collapse of global civilization? How do we make meaningful choices in the shadow of our inevitable end" (386)?

Scranton is describing is an existentialist renaissance as a response to the threat of extinction. The subject of the existential crisis is no longer the individual but the human species. The question 'what does my life mean in the face of death?' is expanded into 'what does the entirety of humanity mean in the face of extinction?' Instead of questioning the meaning of our accomplishments, decisions, and legacies, we now question the meaning of all human history and the legacy of our species. Climate change may render humanity forgotten against the infinite backdrop, with no one to remember us and all traces of our existence forgotten.

Scranton further adds that "Within 100 years—within three to five generations— we will face average temperatures 7 degrees Fahrenheit higher than today, rising seas at least 3 to 10 feet higher, and worldwide shifts in crop belts, growing seasons, and population centers. Within a thousand years, unless we stop emitting greenhouse gases wholesale right now, humans will be living in a climate the Earth hasn't seen since the Pliocene, three million years ago, when oceans were 75 feet higher than they are today. We face the imminent collapse of the agricultural, shipping, and energy networks upon which the global economy depends, a large-scale die-off in the biosphere that's already well on its way, and our possible extinction. If Homo sapiens (or some genetically modified variant) survives the next millennium, it will be survival in a world unrecognizably different from the one we have inhabited" (386).

Scranton argues that "if we want to learn to live in the Anthropocene, we must first learn how to die. The rub is that now we have to learn how to die not as individuals, but as a civilization" (387-388). How exactly does a species learn collectively, let alone learn something that we have not even figured out as individuals? My argument is that if we learned to ignore and

compartmentalize existential threats during the Cold War, a new attitude toward extinction could take its place. First, however, we must rethink our attitude towards nuclear war, so we may better understand what it means to be a subject of extinction.

"In a memorable section of We're Doomed… Morton illuminates for Scranton how the climate crisis is an epiphany of 'OMG, I am the destruction. I'm part of it and I'm in it and I'm on it. It's an aesthetic experience, I'm inside it, I'm involved, I'm implicated.' The trick is to find enjoyment in this moment. 'I think that's how we get to smile, eventually, by fully inhabiting catastrophe space, in the same way, that eventually a nightmare can become so horrible you start laughing.' You won't hear anything like that in Dominica. You won't hear poor people who today are actually at risk of dying in the catastrophe - in the Philippines, in Mozambique, in Peru say, 'I am the destruction. It's an aesthetic experience I may as well laugh at it.' Where climate death is a reality, not a philosophical chic programmable fatalism of the Scranton-Franzen school has zero traction" (Malm 152).

Malm argues that climate fatalism has very real detrimental effects on the climate justice movement. Additionally, Malm makes excellent points as to why a complete climate fatalism is unwarranted, cowardly, and ineffective. Thus, I would like to clarify my use of Roy Scranton's ideas as to why I believe that my position does not constitute one of fatalism. In doing so, I hope to avoid Malm's category of the "despicable white man of the North who says, 'we are doomed [so we should] fall in peace'" (Malm 152). The fatalism of Roy Scranton, despite being a privileged position is still extremely culturally relevant. While Andreas Malm makes excellent counterpoints on the consequences of this fatalistic rhetoric, it should not discount another person's experience. Simply because others are so preoccupied with survival that they have no time for fatalism, does not delegitimize the effects of climate change on those in the West.

Scranton's fatalism, even if problematic, is an excellent account of how climate change impacts the mental well-being of many people. His words struck a nerve with people in the West and perfectly illustrate the cultural mood towards climate change. Even if this mood is problematic, toxic, destructive, and discriminatory, one must fully understand and study the problem one seeks to address.

Forgetting the figure of Scranton, a middle-aged privileged white man, his sentiments of despair, helplessness, and doom are shared by all kinds of people across the West, including disenfranchised peoples. Even if Malm finds Scranton's philosophy despicable and problematic as a person, the sentiments he describes are true. Climate change is disturbing young people's mental well-being across the West as more people find themselves without a future (Crandon et al.). Even if Scranton's suggestions for the future are counter-productive, his skepticism about green energy is false, and his philosophy of doom is a self-fulfilling prophecy, his fatalistic effects are true for those who share them. The best way to avoid and move past climate fatalism is not to ignore its immense presence and criticize the people who explore it.

Malm suggests that it is only by people subscribing and believing in fatalism that the world will end as they suggest it will (142). For Malm, people succumbing to fatalism is another facet of climate change-induced extinction (142). However, this view of fatalism from an individualist perspective does not look at the full problem. Instead, climate fatalism must be understood beyond the individual level as a sociocultural response to a zeitgeist of extinction anxiety. It is an attitude which is continuously perpetuated through socialization and reinforced by the atomization of Western society. Scranton's fatalism, even if normatively incorrect as Malm suggests, is a dominant and rapidly evolving attitude towards climate change in the West.

Response 2: Protest

On July 1st, 2021, a group of students from Cologne, Germany stand on blocks of ice with nooses wrapped around their necks (Outlook India). In a scene from the gallows, the students perfectly illustrate the impact of climate change anxiety. The struggle runs deeper than merely fearing one's death in the wake of an inevitable climate catastrophe. The most compelling aspect of this protest is how it seemed to blend in with the passing crowds. The way the bustling crowd of workers, those with places to be and with no time to observe, funnel around the demonstration. These students represented the physical manifestation of the existential corners of the observers' minds. A reminder of climate change in a fractured and distracted society that rejects the existential. Those students standing at the gallows were acting, channeling death itself to greet any observers. In them, we see ourselves, our partners, friends, children, neighbors, grandparents, grandchildren, the person who may cure cancer, and worst of all, the person who could untie the noose if their hands were not tied behind their backs.

There is a fundamental divide between the observers and the protestors that is emblematic of the cultural effects of climate change. It is a clash of worlds, internal and external, to the anthropocentric human condition. The world outside the protest represents a falsity, an ignorance of realities that would bring the cosmos present at hand. The observing pedestrians crash into the spectacle that forces an inward turn to their feelings on the existential paradigm of climate change. The hanging students are internal, explicative of the reality that the outside is designed to ignore. They are an alley of the mind, dark and obscured, which threatens to topple the facade of everyday importance.

It is the encounter with mortality and extinction that we have been trained to ignore, suppress, and deny. The climate gallows are not a simple demonstration, threat, or warning, those students embody real people dying every single second the protesters spend observing. The students are living representations of the senselessly dead, displaced and dispossessed by the ravages of anthropogenic climate change. They are no longer making a statement about the future, the death which they represent is in the present. The ice melting under their feet symbolizes not only melting glaciers but the passing of time without progressive action. Behind them are untold numbers of rows which feature bodies hanging, long dead. The people watching are only still alive because they may witness the student who exists within the potentiality of hanging.

Regardless of the emotional response and the consequences it may have had on observers, we must harness any possibility to bring the truth of that protest to the forefront. We must disrupt daily life as often as possible and break the routine ignorance of daily falsities. It is no longer permissible nor healthy to ignore the realities of climate change in an attempt to form a way of life during the Anthropocene. The present inherited attitude in the West towards death and extinction protects climate change denial and accelerationism. At present, how people confront extinction reinforces climate grief and removes the possibility of healing. I must note here that I am not implying that we should constantly mope at the thought of climate change. Rather, I am arguing that we should allow ourselves to grieve the loss of a future before accepting the realities of climate change. A healthy adaption to climate change should involve acknowledging the material realities of the times.

Response 3: Guilt

Another response to climate change anxiety is carbon guilt. Even if we understand the destruction of climate change and the urgency for action, some mechanisms block us from living sustainably. Many people must commute to work every day, purchase single-use plastics, cannot afford to be vegan, take a flight for a business conference, purchase from Amazon rather than more expensive local businesses, and sell their labour to companies that cause enormous pollution. It manifests as a cognitive dissonance between their feelings and beliefs about climate change and the actions that are necessary for them to survive.

> "carbon guilt leads one to think it is professional, middle-class consumers themselves who are most privileged in a climate-changing world. Carbon guilt confuses material privilege—a level of comfort and security—with the power to control the material organization of energy production. You might feel privileged to fly on a plane, but the airline industry gains the profit from your privilege" (Huber 113).

People feel guilty that they do not shop locally, boycott large emitters, take public transportation, avoid consuming animal products, purchase an electric vehicle, install solar panels, and forego purchasing plastics. The relative weight of their contributions to global carbon emissions is inflated in their head as they are forced to commit to a lifestyle that contradicts their values. They may have dependents who rely on them for provisions, taking personal priority over a total transformation towards sustainability. The cycle of guilt and anxiety builds from this internal conflict until they must change either their actions or seek bias and adjust their beliefs.

Carbon guilt is tragic because the average person's contribution to global emissions is proportionately tiny compared to that of major emitters. The overwhelming majority of carbon emissions come from corporations and the governments that enable them. Climate change must

be understood in terms of higher-order social mechanisms. Climate change is a collective action problem, it is a concept which is broken by focusing on the individual level. The unprofitability of sustainability is a concept as synthetic as the products created by the industries that peddle it. We should all, if given the opportunity, choose to act sustainably as appropriate to our means. Eat as little meat, use as little plastic, and emit as little as possible without going beyond one's means. That is a sustainable lifestyle that avoids the artificial guilt that which industry has used to poison the movement of environmentalism. It is not up to the individual to become sustainable at a cost to their way of life. If living sustainably comes at the cost of one's livelihood, it is necessary to understand that the associating guilt comes from industry trying to distribute the blame across the population instead assigning the blame entirely to themselves.

Response 4: Toxic Climate Change Optimism

Another facet of extinction anxiety is the increase of toxic climate change optimism (TCCO). Toxic climate change optimism is an optimistic attitude and behaviour towards addressing climate change that impairs activism by denying the realities of climate change. It is possible for good news on the front of climate progressivism to build a hope that is reliant on the outcome. Inevitably, every step toward a better future comes with an equal step backwards. We are then in a constant cycle of hope and despair, a bipolar worldview that has consequences on our collective psyche. Looking at the breadcrumbs of positive news as a trend denies the truth about the projection of our species. Instating toxic climate optimism harms attempts to organize and protest against climate injustice. Toxic climate change optimism can dissuade people from organizing against the mechanisms that enable the sixth mass extinction. It can also be hijacked

by guilty industrialists for cover-ups, misinformation, and distractions. Extreme examples of TCCO are indistinguishable from propaganda disseminated by industrialists and their lobbyists. The truth must be sought no matter what, even if it appears wholly pessimistic and depressing. There is no way to heal from climate grief without accepting the realities of the world around us and the trend towards extinction. By choosing to focus solely on positive news in the movement to address climate change, those who exhibit TCCO deny the negative news. In doing so, these people aid climate change denial by circulating naivety back into their material and social environments. Major emitters such as oil companies benefit from this by denial because it shifts the blame away from their actions.

This does not mean that an optimistic attitude towards mitigating and reversing climate change is inherently wrong. It is important to focus on small victories in the effort to create a sustainable, prosperous, habitable, just, and peaceful global environment. If we deny the wins of the climate movement it will lose steam, fail to attract new members, and create space for the opponents of climate justice. The party that strives to include everyone and save the Earth lacks a certain aesthetic appeal if it only espouses doomsdayisms. Yet, this optimism must be tethered to the global realities of climate change or else risk losing its vision and ultimate purpose. Groups of people gathering to clean up oil spills and major polluters being held accountable is not the truth. Even if these events occurred and the media were to have all the facts correct, the amount of damage and suffering that occurs daily would require its very own library. We must allow these optimistic stories to inspire us, but not inform or guide us. We must accept and be inspired by the precariousness of life on Earth to properly adjust and reorient our consciousness in the climate change era.

A study by Brandi S. Morris et al. determined that climate change appeal with pessimistic affective endings "increase risk perception and outcome efficacy, which is the result of heightened emotional arousal (1). Conversely, climate change appeals with optimistic affective endings provided comfort to participants and made them more complacent with climate science reports (Morris et al. 1). These results are especially true for those with "individualistic or hierarchical world views" because they "generally exhibit lower risk perception and outcome efficacy in relation to climate change" (Morris et al. 1). They show that climate change engagement is strongly associated with sadness, worry, fear, hope, anger, and anxiety (Morris et al. 2). Morris et al conclude that climate change scholars should "test segmentation strategies to assess the optimal degree of negativity in messaging designed for ideologically and culturally diverse audiences," especially in Europe and the United States where public engagement with climate change is low (6).

Chapter 3.1: Extinction Anxiety and its Implications

In this section I begin by explaining my thought process when conceptualizing extinction anxiety. This autoethnographic expansion of my thought process highlights how I perceive the cultural mood of extinction anxiety. In this expansion, I will detail what we have done to create the mood of extinction anxiety and how we have failed to address it. Next, I define extinction anxiety and detail the substance of the concept. Finally, I address how we should orient towards extinction anxiety and the implications of extinction anxiety for the future.

(i) The future is foreboding - what we have done and what we have failed to do.

In the year 70,000 BCE, a supervolcano named Toba erupted, sending 650 miles of volcanic rock into the air. It is the largest known volcano eruption in history, 2800 times larger in volume than Mt. St. Helens (Krulwich). It dimmed the sun for an estimated six years, covering the environment of early humans in ash. Food became scarce, the ice age became even cooler, water sources were blocked, and massive groups of life began starving. The human population would not again exceed ten thousand for thousands of years. It is estimated by one study by Hawks et al. that at one point, less than one thousand adults capable of reproduction remained (2).

Did the early Homo Sapiens who lived through the eruption of Toba despair about the possibility of their extinction? Did they resent their suffering as they perished through drought and famine? Was their way of life so intolerable that would have rather been wiped out entirely by the volcanic eruption? When they banded together for the survival of themselves, their

families, clans, and the entire species, were they aware of the obstacle that they overcame? If they had all died, would the last family on Earth celebrate the history of their species and what they were able to accomplish?

It seems hard to think of humanity in terms of only thousands of people in total. We now live in an age where billions of people are connected virtually simultaneously so it seems the global population is infinite. It seems unfathomable that it could all disappear, leaving behind all material evidence to eventually erode in the winds of the distant future. However, this outcome is highly likely regardless of the outcome of our struggle against global climate change. Whether from disease, nuclear war, climate change, asteroids, the death of the sun, or the heat death of the universe, there is a finitude to the existence of humanity in our precarious spatial and temporal placement. Our constitution does not allow us to comprehend infinity, let alone become infinite, even in legacy.

Just as an Olympic high-jump athlete is defined by the bar, so too will we come to be judged (by whom I cannot say) by the collective problems that we fail to address. We have a tendency to define our species by our accomplishments: discovering the principles of the natural world, identifying the cosmos, taking flight, landing on the moon, erecting monuments, etc. Harvesting the power of the sun, turning it into a weapon of unfathomable power, and industrializing the entire globe; are the accomplishments that initiate our ultimate test. Our ability to organize and use these developments responsibly will be the greatest human accomplishment to date. If we can mitigate and reverse climate change, denuclearize towards peace, and harvest nuclear fission purely for power (if at all) it will prove our worthiness to wield the powers of industry and nuclear fission. If we complete our current trajectory, ending life on Earth through atomic warfare and climate disaster we will come to be defined by this lack. Our global

civilization, the embodiment of our species, will come to be defined (by anything or anyone that may) as incapable of peace and sustainability.

The failure of the human project is a principal cause of extinction anxiety and why it seems hard to understand. When we conceptualize our mortality, the finitude of our lives, we may be struck by an anxiety that we will never fulfill our goals. We may never publish a book, make a million dollars, see the Northern Lights, become the president, or whatever it may be that would fulfill us and complete the project of our lives. However, many take solace in knowing that humanity will persist and continue to accomplish great things. Our offspring, and their offspring may accomplish their own goals. You can assist in helping others fulfill their project, even if you cannot complete your own. However, this point is moot if everyone were to die and/or if there is no sustainable environment left for human flourishing. To avoid this fate, people must remain attentive to the signs of extinction surrounding them. Rather than attempting and inevitably failing to control the mechanisms of resource wars, global conflict, and climate change, we must try to gain a new understanding of the world around us. We must accept the inevitability of death and extinction, and climate change or nuclear war as a possible route to such a conclusion.

This does not mean that we are to roll over and enable polluters and warmongers. On the contrary, my suggested reorientation is a renewed call for organization, protest, resistance, and unity. We must resist and find fulfilling ways to live despite the realities of climate change. Nuclear war is comparatively instant and painless compared to climate change. In the 1982 film *Atomic Café,* respondents are interviewed on what they would do in the case of total nuclear war. Similar to contemporary sentiments, many simply hope to be caught in primary blast zones so they can avoid suffering from tissue damage and radiation poisoning. It is an event that they see

as out of their control and thus not worth worrying about. Conversely, climate catastrophe seems to imply that a large degree of suffering is inevitable. It would make sense then, that people would be more likely to scramble against the coming suffering of climate catastrophe. Instead, because we are already within the state of climate grief, the threat of future climate catastrophe is mitigated. The relative impact of next year's wildfire is diminished by the struggle against last year's drought and this year's hurricane.

The way of life for the individual and species that we are trying to maintain from the past will never be actualized by future conditions. The threat of war, austerity measures, inflation, climate change, the rise of dictatorships, genocide, and disease guarantee unimaginable conditions for life. Those of us who have grown up in the information age know that no hospitable future awaits us. Both individually and as a species, the conditions to live out our parent's lives will have disappeared and that way of life now seems alien. Yet, many of us starting our lives still grasp onto the former understanding of the future and get caught in a cycle of pain when the realities of the world surface into our daily fantasies. It will only get harder each passing year to ignore the unraveling apocalypse and only those who embrace those realities will find a new way of life.

It is often said (despite being false) that when boiling a frog, if you incrementally increase the heat it will boil to death without a fight, failing to recognize the threat to its own life. If you drop the same frog into a pot of already boiling water, it will thrash against death with all its being. This offers an analogy to explain the different responses to the existential threats of global warming and nuclear war. We cannot recognize our situation as perilous because we are already acclimated to the death and suffering of our times. We see climate change not as our position within the pot but as the time when the water begins to boil over, and it is already too

late. Imagine that climate catastrophe had been an anomaly until one instant when hurricanes, heatwaves, droughts, and forest fires all started simultaneously across the globe. Perhaps then, there is a chance that we could gain some semblance of universal perspective and act. Such an event might make us thrash against the boiling water rather than sit idly waiting for the bubbles to appear.

We know it is possible, but we compartmentalize the possibility so that it becomes mere fantasy. In reality, many broadcasting stations such as the CNN have pre-recorded segments that will air in the case of nuclear war (Robertson). These pre-recorded clips can be accessed online and seem otherworldly, as if from an alternate universe. It is important to remember, however, that those clips were made in our world, even if they have never aired live. We can treat our reality as if it were the footage from a film in an alternate reality, which depicts a disaster that never happened. The realities and absurdities of climate change seem more like fiction than the world we inhabit. Just as the broadcast footage sits in a state of potential, our reality represents a kind of fantasy to present ignorance. Warnings from climate scientists blend with depictions of doomsday prophets and old men wearing tattered clothes and tinfoil hats. The observed reality becomes coded into our culture as fantastical due to the similarities with the fantastical, that which points intently to the outside, the alternate, and the bygone.

For people to bear the burden of climate anxiety they must accept that the solution to their problems is impossible without radical change. The social, economic, and political barriers to the decisions that are necessary to mitigate, and reverse climate change are too high to overcome without reform. However, they must also accept that systems of oppression can prevent the formation of a movement that would topple industrialism. Instead, as with our projects, political optimism must not be tied to an expected outcome. We must continue to

protest even if we see it as fruitless and impossible and embrace the absurdity. We must identify with the flame, the agent that destroys and manages our capacities. There is no reverting to pre-industrialism or forming a society outside of global capitalism. There is no outside or externality from the present system and we must persist despite the suffering that this realization causes.

It is important to isolate the fear of extinction from the fear of death. The latter may be eased by accepting mortality and the inevitability of death. The fear of climate change and nuclear war I speak of is not based on an individual's fear for their own life. However, we may use the fear of individual mortality as a basis for understanding the relationship between 'the individual and death', and 'the species and extinction.' In our own lives, death lurks in every corner and threatens to cut short the project that is our own life. There is no specific form of death which defies the absurdity of the universe. Similarly, there is no extinction event which allows us to escape the absurdity of the human condition.

Even in an act of suicide, the person who commits the action does not get to define the consequences of their choice. Nor, are others who bear witness, obligated to accept the intentions of the action. The condemnation of freedom is a problem for the legacy of our species as we struggle to find the meaning of our existence. Just as we cannot escape ultimate freedom as individuals, nor can we escape this freedom through extinction. Thus, we should not look to any form of legacy as the justification for saving humanity from extinction threats. Since we will have no ultimate cosmic legacy, we should strive to create a prosperous future for the express purpose of creating a progressive, just, peaceful, prosperous, dignified, and educated way of life. There will be no records, legacy, or vindication in our struggles in the heat death of the universe billions of years from now.

(ii) Defining extinction anxiety and its substance.

I define extinction anxiety as the cultural mood of anxiousness surrounding extinction threats in the past, present, and future. Extinction anxiety is rooted in the fact that we do not have the power to influence the outcome of extinction threats. We are not members of that group which C. Wright Mills refers to as the Power Elite, those people who control or represent the triumvirate power dynamic centralized in the economic, political, and military branches (*The Power Elite*, 1). In other words, "within American society, major national power now resides in the economic, the political, and the military domains. Other institutions seem off to the side of modern history, and, on occasion, duly subordinated to these. No family is as directly powerful in national affairs as any major corporation; no church is as directly powerful in the external biographies of young men in America today as the military establishment; no college is as powerful in the shaping of momentous events as the National Security Council" (Mills, *The Power Elite* 13).

For many people extinction anxiety is not about the total loss of life but instead about the loss of prosperity and progress. For some, the idea of nuclear war may be unfrightening and benign. Most people would not suffer as a result of nuclear war, vaporized instantly, perhaps even in their sleep. In such case, it is akin to any other form of death which threatens to strike at every moment of every day. It is instead the prolonged suffering under the conditions of climate change that provokes this anxiety. Droughts cause a global food shortage and thus a global famine for those who cannot afford the inflated food prices. Rising sea levels submerge entire cities drowning and displacing more people each year. The mortality rate during heat waves increases each year until a home without an air conditioner is uninhabitable. The movement of

climate and war refugees are never given asylum and die on the doorsteps of the West. The middle class has permanently evaporated, and the working class is suppressed by increasingly authoritarian governments. Pollution and smog render the air unbreathable in every major metropolitan area without supplemented air canisters. Globally, child mortality drops to pre-industrial levels and the human population plateaus. These visions are merely a logical continuation of what we see in the media presently; our current world is taken to its extreme. The natural conclusion if no change is made to our current system and processes of living. These visions seem dramatic, pessimistic, nihilistic, unrealistic and depressing. The person who sees the world around them as the second act in a tragic play with these visions as the finale is often called a bummer, a doomer, a drag, or simply incorrect. They are told things will improve, there have always been people incorrectly predicting the end times, look at all the progress, the grass is greener, etc.

Those who believe these visions break Apollo's curse and hear Cassandra of Troy, fated to tell accurate prophesies of impending disaster which no one will believe (Rahim). Cassandra speaks the truth of disaster to believers of climate science and we must heed her words (Rahim). The voice of reason which urges sustainability, denuclearization, equality, and justice is ignored. There is no argument for optimism that soothes the mind of those trapped with the words of Cassandra. The solution to extinction anxiety is borne outside of consequence and progress. It is true that if things continue as they are without progressive change (of which there is currently little), these visions will become a reality. Thus, there is no logical argument or emotional appeal, that will break the spell of those convinced by the apocalypse.

(iii) How we should foster extinction anxiety and how this will help.

I suggest that we reorient towards extinction by re-evaluating our current Eurocentric linear understanding of history. Instead, I argue that we should work to build an inclusive multiplicitous understanding of history that incorporates ideas from marginalized communities who have already experiences some form of apocalypse. Further, it is imperative that we show sensitivity towards extinction anxiety when educating future generations. The cultural reorientation toward extinction, if it is possible, will be gradual. This reorientation does not need to be guided, dogmatic, religious, or coded into practice. We must look for every opportunity to bring the realities of climate change extinction to the functions of everyday life. In doing so, the confrontation with the apocalypse will no longer become a disruption which brings anxiety and despair. The only healthy way to deal with the realities of mass death and suffering that await us is to accept them in every moment until they are no longer feared. We must see in our surroundings, the heat, winds, and floods which the future may hold. Then, we may create a way of life that escapes the cultural attitude towards death that perverts our ability to conceptualize our absurd lives. This will not be an easy task, constantly thinking of death and destruction may seem to contradict the idea of finding a more peaceful way of life. This is also by no means an attempt to normalize and encourage this future of unmitigated climate change. If it is possible, we must rebel in every instance against the forces which threaten to destroy life on Earth.

We must begin the education of this generation immediately with a full and robust knowledge of our failed history. Our history, as a precursor to the current world which they are inheriting must be taught as other to themselves so that they avoid the shame of failed ambitions. However, future students must also be taught of their capabilities as physical relics of a failed history so that they are not too restless from rage to find a fulfilling way of life. The proper

education of children during the sixth mass extinction is an essential aspect of reorienting in regard to extinction anxiety. The best way for our species to reorient towards extinction is to begin with children who have not yet learned the inherited Cold War attitude. They must be taught a way to effectively conceptualize that allows them to thrive in their apocalyptic environment. Each passing generation of children will have to deal with an increasingly inhospitable global climate. Our current attitude towards death and extinction has not only failed to make us act in time but also failed to equip us with the emotional strength needed to endure the actualization of climate change.

Future students must be taught to remove hope from consequence and accept their place in end-history. They must be taught to explore and study the realities of extinction with attachment. Extinction must not be referred to in hypotheticals or an alternate reality, this would fail them and doom them to the same attitude which we have inherited. The human, as a subject of the sixth mass extinction, must be returned to the animal so that they may better understand their place within global and natural forces. The conception of humanity's divine right and domination of the material and natural world has been proven false. The ease with which we can remove ourselves shows that we are no better than the wolf, which hunts the rabbit population down until its population begins to starve. Other animals, which practice sustainability and cooperation so that they do not burn through themselves, set a standard that humans appear incapable of meeting. If we fail to teach the future generation that humanity has failed in its attempt to dominate nature and transcend ourselves above other life on Earth, they are doomed to repeat the same mistake. The grand human narrative and Euro-centric conception of history must be left behind. This is not to say that we should forget history and ignore the literature, philosophy, and religions of the past. On the contrary, they must be memorialized and never

forgotten so that people not return to the same habits that threaten to doom us. Instead, the history, religions, literature, and philosophy of humanity must be externalized and read disinterestedly as if it were another species altogether. A species which is doomed to extinction, collapsing in its hubris.

The history and legacy of humans can also be understood as the euro-centric homogenous linear history characterized by colonial violence. This modernist understanding of history and humanity is crumbling under a future that cannot support its vision. Indigenous peoples and victims of colonialism everywhere already feel alienated and oppressed by this dying modernist history. Thus, in my suggestion of othering and detaching from the linear European understanding of history, I am not suggesting that Western nations be relieved from the history of colonialism. Nor am I suggesting that we conflate the history of humanity with the linear Eurocentric modernist history. Rather, we must recognize and put an end to both the history and legacies of the linear Eurocentric history so we may learn from them. It is merely the final chapter in the history of humanity that due to its artificial prolongation and refusal to die. We must raise future students outside the goals and legacies of this history so they may find a way of life out of the current way of death. The linear Eurocentric conception of history tantalizes us every time we are reminded of the world which we have created. The culture of the West sits in shame, its earnings from millennia of injustice irrelevant and meaningless against the threat of extinction. Former colonial states are unstable and are the most immediately susceptible to the threats of climate change. The linear narrative of humanity must be put to rest as a failure to reach its ambitions. If we fail to separate ourselves from this story, our ambitions will always be tied to the ends that caused the present crisis. The environment and civilizations that await us in the twenty-first and twenty-second centuries will be so far from this story, that it is best to

remove ourselves altogether. The sting of failed ambition need not be inherited by future generations. Especially considering they did not participate in the conquest which now dooms them. Future humans are victims of mankind's pursuit to surpass the laws of nature.

My intention is not to normalize, accept, or encourage climate accelerationism, nor is it to deny the responsibility of those in positions of power to address climate change and make progress toward peace. Rather, to understand the realities of climate change, we must reorient ourselves within the precarious life that we are failing to protect. We must deny an appeal to human nature to those leaders of industry and politicians who fail to accept their existential responsibility. If we can face ourselves as agents of extinction, we may become able to bear the weight of extinction anxiety.

We must seek prosperity that extends beyond survival and the promotion of the capitalist system that has proven to lead to destruction. Ultimately the political goals of the movement tackling climate change must coalesce into a proletarian resistance. The political ends of the climate movement have the utmost importance for the study of climate anxiety. The fear of climate change, as I have already shown, is inherently existential. There is a mortal fear in which all that our species has ever known will disappear. We must understand that the fundamental principles of capitalism contradict the principles of environmentalism. Thus, the solution to solving the climate crisis will not be found internally in the global capitalist system.

For humanity, all that exists is a hope disconnected from the future and past. We are a dying species amongst tens of millions of other dying species. The way forward is to recognize this fact and always have it in mind presently. This is how to avoid becoming paralyzed and neurotic in response to climate change. Complacency in everyday social ignorance is drenched with toxic optimism and must be rejected at every step. To counter the common toxic attitude

towards extinction we must contradict it completely. Reject any hope that is not in the present and allow oneself to go through the healthy stages of climate grief.

It is not my prerogative to predict the outcome of the struggle against climate change. My suggested reorientation still stands regardless of the outcome of the struggle against extinction threats. Even if protests against climate change and nuclear armament are effective, the world goes carbon neutral, factory farming becomes obsolete, exploitative capitalism is transcended, nuclear bombs are decommissioned, and we band together as a species, Our encounter with extinction has profoundly altered our species ontology. It does not matter how the world ends, my contention is with grand realization that the world is inevitably going to, and already in the process of, ending. As such, my reorientation may also be understood as the postmodern attitude toward extinction which is simultaneously mourning our extinguished modern species. The detachment of expectations and consequences from hope means that one may protest while also accepting that the end of the world is inevitable. One does not need to believe in ultimate success to maintain meaning in the process of protest and activism. The concept of meaning that currently motivates protest is the same conceptualization of meaning that informs and promotes the industry that is being protested.

The matter of addressing climate change, if it is to be accomplished, must inquire beyond how to achieve the proposed end. What is the ultimate goal of decarbonization and pollution mitigation? Is achieving a global carbon-neutral infrastructure intrinsically valuable? Are we doing this to create a sustainable form of capitalism and go no further? Will change come about in a full swing of revolution which sees the end of industrialism altogether? Are we to recover the environment enough for us to survive but stop short of creating the conditions to thrive? What are the true goals of combating climate change beyond mere survival?

Postface – Sympathizing with Fire

On the surface, it would be reasonable to accuse my ideas of being misanthropic or promoting a unique brand of climate fatalism. Just as Andreas Malm accuses Roy Scranton, one may interpret my ideas as the promotion of a blasé attitude towards protest, activism, and organization against climate change. Initially, accepting the actualization of our extinction is an inherently harmful practice for creating meaningful and lifesaving progress. Does one purchase or build a shelter with the intention of using it? If so, do they feel like they are not getting their money's worth every passing day without disaster? Or, is it purely for peace of mind, where they would truly be happy if they never have to use it? Preparing for the apocalypse, mentally or physically, is a cathartic activity that disrupts our routines and opens up the future. Media depicting post-apocalyptic landscapes intrigues our imagination and evokes the thrill of pure survival. Perhaps some people dream of the apocalypse as an escape from the mundanity of their lives even if it is brutal, violent, and disturbing.

There is an undeniable cultural fascination with the breakdown and decay of society. The small bands of survivors in zombie apocalypses remind us of a sense of community that we crave. The freedom to live without selling one's labour is so fantastical we forget every moment is life or death. The reliance on instinct and intuition over social conditioning and programming somehow seems desirable even if it threatens our mortality. Fantasizing about the freedoms that would come from the end of civilization does not make someone an ecofascist or an accelerationist. We are living through dystopia and apocalypse and it is not nearly as entertaining as AMC's hit show The Walking Dead or Bethesda's post-nuclear apocalyptic video game series Fallout. The idea of nuclear war is equally frightening as it is fascinating. It is an opportunity to

theorize about a way of life which mirrors our beginnings. It would put to rest those hundreds of years philosophers debated on the first social contract by allowing us to create a new one. Or, perhaps we should refuse to do so if we believe that to be the first step towards disaster. Regardless, for many people 'playing' apocalypse allows them to recoil from the cosmic absurdity which enables existential crises. What if they no longer had to listen to their boss, drive their daily hour-long traffic-filled commute, toil at their inherently meaningless labour, and sell themselves to survive?

Climate disaster films such as *2012* and *The Day After Tomorrow* dramatize our reality to appeal to this cultural fascination. Additionally, these films soothe our anxieties by providing an avenue to visualize the worst aspects of our future. Seeing the suffering and disaster portrayed is perhaps better than continually wondering 'what if?'. We are currently witnessing the gradual breakdown of a society that can no longer pretend to ignore the existential threats that face us. Perhaps if we use the same imagination that inspires climate disaster post-apocalyptic films, we can create 'a way of life in the Anthropocene' for Scranton. Now more than ever, we are reliant on fiction and fantasy to find answers to existential problems. The society we have inherited does not come equipped with its solutions and we will continue to fumble to solve its problems. We can no longer merely cope with the fact that we are castaways in our own homes. We must form a new identity around thriving in an alien environment of deterioration, suffering, destruction, disaster, and corruption. The climate crisis reveals to us the hostility of modern society toward human and non-human animal life and the need for a reorientation towards the global artificial jungle.

If we see a fire in a burning building, we may begin to personify the flame and attribute unkind characteristics to it. Firefighters are heralded; they put out those agents who seek to

destroy the lives of our neighbours, their possessions, and their livelihoods. Yet, we do not blame the irreplaceable quilted blanket that falls on the electric outlet, nor the person who left it dangling on the bedside. The frame containing wedding flowers which falls and tips over the radiator, is the victim of the flames which erase, eliminate, and destroy. The blame game seems oddly pedantic, trivial, and fruitless when placed into this context. People see themselves (and whatever non-human animal life they find aesthetically pleasing) as the victims of destruction. People instinctively personify and relate to the objects which they find desirable, valuable, and useful. Instead, we must ponder our relation to those objects and concepts that are destructive precisely because they describe our position and thus emotion. In short, we must sympathize with the flame so we may understand our relation to that which is quenched and extinguished. But how does one enter the ontology of a flame? Fire seems amorphous and ambiguous, something which cannot be captured with the hands. It is destructive, dangerous, and painful, but also useful, natural, and productive. Wildfires, in relatively controlled bursts, are essential for the process of regrowth. However, fire can be exacerbated easily, misused maliciously, and used for erasure. The transformation of organic products into carbon through combustion results in a product that cannot be transformed back. We have the same ability, the ability to create irreversible tipping points both socially, economically, politically, meteorologically, geographically, and emotionally.

People can create permanent change intentionally and define the parameters of the consequences of irreversible change. Our industry seems as though it cannot be self-contained, relying on the surrounding natural environment and people as resources. For global capitalism, colonial nations and their 'developing economies' are the kindling at the base of the flame. These are the embers and dense flames at the bottom of the bonfire of our combusted ontology. The

smoke that chokes out the oxygen of a room represents the economic apparatus that fills its social, economic, and geographic container. Consumer nations fan the flame and feed the coals, ripping apart any surface that would suffocate the base. Fire can neither be said good nor evil; it is a force that is simultaneously uncontrollable and judged based on the intention of those who create it. Such is our condition as organisms with a relatively uncontrollable collective organization. We must think through our capabilities as we would with a flame that has gone out of control. Our environment is a setting that naturally promotes the creation of industry and must be viewed with the same sympathy as the charred family room. We must take care to identify the arsonists and resist blaming the flame itself.

Humans are the flame that threatens to burn its environment entirely such that no kindling may remain to prolong combustion. The fire itself cannot control the rate at which it eats up its environment and ensures its death. In our present circumstances, our productive and consumptive abilities do not allow us to preserve our surroundings. It requires an external controlling aspect of industry to reorient ourselves towards sustainability. Nor do we wish to smother or drown the flame to preserve the environment in which it finds itself. We must recognize ourselves as kin to the force of combustion and sympathize with its plight. We are threatened with a future of uncontrollable wildfires which reduce all they touch into the incontrovertible by-product of carbon until all that is left is a whisper of smoke and lifeless embers.

The acceptance of the role of 'agent of extinction' and 'provoker of destruction' is a principal definition of climate change-conditioned humans. As a human, I must embody the role of the destroyer, armed with nuclear weapons and flamethrower-like industrial sectors aimed principally at those forces that sustain life on Earth. The capacity and responsibility for destruction must be accepted as a feature of 'life on Earth' and not a divine or natural right. The

return of humans to the animal is an essential step towards coping with extinction anxiety and therefore, addressing climate change.

If the world ends up as a hellscape as in my description, the massive amounts of suffering cannot deny or lay to rest the human project. Ultimately our accomplishments will be weighted equal to our failures and we will never leave a legacy. The human legacy, as with life on Earth will always be in the present moment. If we must face unprecedented suffering as a species, and as an appendage of all life on Earth, this will simply become our new project. Perhaps this task will prove more fulfilling, valorizing, and unifying than the task of mitigating and reversing the threat itself.

Works Cited

Anders, Günther. “Apocalypse without kingdom.” *e-flux Journal.* Issue 97, Feb. 2019. https://www.e-flux.com/journal/97/251199/apocalypse-without-kingdom/.

“Apocalypse, N., Additional sense.” Oxford English Dictionary, Oxford UP, September 2023, https://doi.org/10.1093/OED/1200073148.

BBC. “Mont Blanc: Glacier Collapse Risk Forces Italy Alps Evacuation.” BBC News, 7 Aug.2020, https://www.bbc.com/news/world-europe-53692476.

Beauvoir, Simone de. The Ethics of Ambiguity. Open Road Integrated Media, 2018.

Bostrom, Nick. “Existential Risks: Analyzing Human Extinction Scenarios and Related Hazards.” *Journal of Evolution and Technology* 9, no. 1, 2002, https://nickbostrom.com/.

Chakrabarty, Dipesh. “The Climate of History: Four Theses.” *Critical Inquiry*, vol. 35, no. 2, 2009, pp. 197–222. *JSTOR*, https://doi.org/10.1086/596640. Accessed 28 Jan. 2024.

Charlson, Fiona, and Tara Crandor. “Is ‘climate anxiety’ a clinical diagnosis? Should it be?” *The University of Queensland Australia,* School of Public Health, 28 Mar. 2023, https://public-health.uq.edu.au/article/2023/03/%E2%80%98climate-anxiety%E2%80%99-clinical-diagnosis-should-it-be#:~:text=However%2C%20climate%20anxiety%20is%20not,this%20understandable%20and%20expected%20response,

Crandon, Tara J., et al. “A social–ecological perspective on climate anxiety in children and adolescents.” *Nature Climate Change*, vol. 12, no. 2, 2022, pp. 123–131, https://doi.org/10.1038/s41558-021-01251-y.

Cunsolo, Ashlee, and Neville R. Ellis. “Ecological grief as a mental health response to climate change-related loss.” *Nature Climate Change*, vol. 8, no. 4, 2018, pp. 275–281, https://doi.org/10.1038/s41558-018-0092-2.

Danowski, Déborah, and Eduardo Batalha Viveiros De Castro. *The Ends of the World*. Polity Press, 2017.

Decamous, Gabrielle. “Nuclear warfare.” Edited by Lester R. Kurtz. *Encyclopedia of Violence, Peace, & Conflict*, vol. 2, 2022, pp. 200–209, https://doi.org/10.1016/b978-0-12-820195-4.00269-7.

“Extinction, N., Sense 4.” *Oxford English Dictionary*, Oxford UP, July 2023, https://doi.org/10.1093/OED/4787178137.

Galway, Lindsay P., and Ellen Field. “Climate emotions and anxiety among young people in Canada: A national survey and call to action.” *The Journal of Climate Change and Health*, vol. 9, Feb. 2023, p. 100204, https://doi.org/10.1016/j.joclim.2023.100204.

“Germany: Students Stand on Ice with Noose around Necks to Draw Attention to Climate Change.” *Https://Www.Outlookindia.Com/*, 4 July 2021, www.outlookindia.com/website/story/world-news-germany-students-stand-on-ice-with-noose-around-necks-to-draw-attention-to-climate-change/387017#:~:text=and%20climate%20change.-,A%20trio%20of%20students%20enrolled%20at%20Ecosign%2DAcademy%20in%20Cologne,of%20hanging%20from%20the%20gallows.

Hawks, John, et al. “Population bottlenecks and pleistocene human evolution.” *Molecular Biology and Evolution*, vol. 17, no. 1, 2000, pp. 2–22, https://doi.org/10.1093/oxfordjournals.molbev.a026233.

Huber, Matthew T. *Climate Change as Class War: Building Socialism on a Warming Planet*. Verso, 2022.

Horvat Srećko. “Marshall Islands Are Everywhere.” *After the Apocalypse*, Polity, 2021.

Jones, Charlotte A. “Life in the shadows: Young people’s experiences of climate change futures.” *Futures*, vol. 154, 2023, https://doi.org/10.1016/j.futures.2023.103264.

Kant, Immanuel. *The Critique of Judgement in Kant, Immanuel, 1724-1804: The Critque of Pure Reason*. Encyclopedia Britannica, 1955.

Kermode, Frank. *The Sense of an Ending*. Oxford University Press, 2000.

Kim, Allen, and Isabelle Gerretsen. “Scientists Memorialize the First Glacier Lost to Climate Change in Iceland.” CNN, Cable News Network, 22 July. 2019.

Klein, Naomi. This Changes Everything: Capitalism vs. the Climate. Simon & Schuster Paperbacks, 2015.

Krause, Monika. “What is Zeitgeist? examining period-specific cultural patterns.” *Poetics*, vol. 76, Oct. 2019, https://doi.org/10.1016/j.poetic.2019.02.003.

Krulwich, Robert. “How Human Beings Almost Vanished from Earth in 70,000 B.C.” *NPR*, NPR, 22 Oct. 2012, www.npr.org/sections/krulwich/2012/10/22/163397584/how-human- beings-almost-vanished-from-earth-in-70-000-b-c.

Latour, Bruno, and Catherine Porter. Facing Gaia: Eight Lectures on the New Climatic Regime. Polity Press, 2021.

Lavelle, Marianne. “Whatever His Motives, Putin’s War in Ukraine Is Fueled by Oil and Gas.” *Inside Climate News*, 6 Mar. 2022, https://insideclimatenews.org/news/06032022/putin-russia-ukraine-oil-gas-petrostate/

Malm, Andreas. *How to Blow up a Pipeline.* Verso Books, 2021.

Mecklin, John. “A time of unprecedented danger: It is 90 seconds to midnight.” Science and Security Board, *Bulletin of the Atomic Scientists*, 24 Jan. 2023, https://thebulletin.org/doomsday-clock/2023-doomsday-clock-statement/.

“Mental Disorders.” World Health Organization. 8 June. 2022, https://www.who.int/news-room/fact-sheets/detail/mental-disorders.

Merleau-Ponty, Maurice. *Humanism and Terror.* Beacon Press, 1969.

Mills, C. Wright. The Causes of World War Three: (2. Print.). Simon and Schuster, 1958.

Mills, C. Wright. *The Power Elite*. Oxford University Press, 1976.

Morris, Brandi S., et al. “Optimistic vs. Pessimistic Endings in Climate Change Appeals.” *Nature News*, Nature Publishing Group, 3 Sept. 2020, www.nature.com/articles/s41599-020-00574-z.

Penznington, Josh, et al. “Medvedev Says Russia Could Use Nuclear Weapon If Ukraine’s Fightback Succeeds in Latest Threat.” *CNN*, Cable News Network, 31 July 2023, www.cnn.com/2023/07/31/europe/medvedev-russia-nuclear-weapons-intl-hnk/index.html.

Pihkala, Panu. “Anxiety and the ecological crisis: An analysis of eco-anxiety and climate anxiety.” *Sustainability*, vol. 12, no. 19, 2020, p. 7836, https://doi.org/10.3390/su12197836.

Plokhy, Serhil. Nuclear Folly: A New History of the Cuban Missile Crisis. Penguin Books, 2022.

Poggioli, Sylvia. "MOSE Project Aims to Part Venice Floods." *NPR*, NPR, 7 Jan. 2008, www.npr.org/2008/01/07/17855145/mose-project-aims-to-part-venice-floods.

Rafferty, Kevin, et al., directors. *The Atomic Café*. Libra Films, 1982.

Rahim, Raisa. "Cassandra's Prophecy Revisited: A Call for Environmental Justice." Edited by Sydney Wyatt and Mary Madera, *Science Says*, 16 July 2021, davissciencesays.ucdavis.edu/blog/cassandras-prophecy-revisited-call-environmental-justice.

Robertson, Adi. "A Former Intern Found the Video CNN Planned to Play at the End of the World." *The Verge*, 5 Jan. 2015, www.theverge.com/2015/1/5/7494947/cnn-final-broadcast-doomsday-video.

Sartre, Jean-Paul. *Being and Nothingness: An Essay on Phenomenological Ontology*. Translated by Sarah Richmond, Routledge, 2022.

Sartre, Jean-Paul. *What Is Subjectivity?* Translated by David Broder and Trista Selous, Kindle ed., Verso, 2016.

Schaffer, Scott. *Resisting Ethics*. Palgrave Macmillan, 2004.

Schuster, Joshua, and Derek Woods. *Calamity Theory: Three Critiques of Existential Risk.* University of Minnesota Press, 2021.

Scott, John. *Dictionary of Sociology*. Oxford University Press, 2014.

Scranton, Roy. "Learning How to Die in the Anthropocene." *Energy Humanities: An Anthology*. John Hopkins University Press, 2017.

Servigne, Pablo, et al. *Another End of the World Is Possible: Living the Collapse (and Not Merely Surviving It)*. Polity, 2021.

Shelley, Percy Bysshe. "Mont Blanc: Lines Written in the Vale of Chamouni." The Norton Anthology of English Literature 10th edition: The Romantic Period, edited by Stephen Greenblatt. W.W Norton & Company, 2018, pp. 1784-788.

Smith, Joel, "Self-Consciousness", *The Stanford Encyclopedia of Philosophy*, Metaphysics Research Lab, Stanford University, 2020, https://plato.stanford.edu/archives/sum2020/entries/self-consciousness/.

Torres, Émile P. *Human Extinction: A History of the Science and Ethics of Annihilation*. Routledge, 2024.

Vaughan, Adam. "Special Report: How Climate Change Is Melting France's Largest Glacier". New Scientist, 18 Sept. 2019, https://www.newscientist.com/article/mg24332483-600-special-report-how-climate-change-is-melting-frances-largest-glacier/

Whyte, Kyle P. "Indigenous Science (fiction) for the Anthropocene: Ancestral Dystopias and Fantasies of Climate Change Crises." *Environment and Planning E: Nature and Space*, vol. 1, no. 1–2, 2018, pp. 224–242, https://doi.org/10.1177/2514848618777621.

World Nuclear Association. "Fukushima Daiichi Accident." World Nuclear Association, 2023, https://world-nuclear.org/information-library/safety-and-security/safety-of-plants/fukushima-daiichi-accident.aspx. Accessed 11 Jan. 2023.

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