

The Rhetoric of Environmental Change Narratives

by

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## Dedication

This thesis is dedicated to my family friends, professors, mentors, and teachers who made this work possible. Thank you for supporting me in all of my passions and endeavors.

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### **Abstract**

For many, ‘pure environmental science’ is inaccessible. Arduous content has created a divide between environmental researchers and their beneficiaries, leading audiences to seek secondary source interpretations, rather than primary research publications. This choice between science and science interpretation is a false dichotomy. Climate change dialogue is not merely a translation of research; rather, it is an ongoing conversation between individuals that seek to quantify biosphere change and authors that describe the qualities of this phenomenon and its wider implications. Measurable characteristics are coupled with affective attributes that blur the lines between ‘objective science’ and ‘subjective reporting’. Climate change dialogue has transitioned from being primarily data-driven to encompassing a diverse range of written commentaries, movies, art, podcasts, literature, movements, and more. Authors bring unique observations, interpretations, and perspectives inspired by anthropocentric change. Modern environmentalist rhetoric is not a colloquial understanding of scientific research, but instead, an entirely new branch of communication spurred by the common desire to document, comment on, and change the trajectory of human interaction with biosphere processes. This thesis examines the rhetoric strategies behind effective climate change commentaries, their relations to our current geologic and ideologic epochs, and mechanisms driving (in)action. This thesis attempts to answer: (1) What is the responsibility of modern authors in presenting current



perspectives on climate change dialogue? and (2) How can authors best create accessible models for systematic environmental remediation and public responses?

## **Introduction**

Over the course of several decades, increasing attention has been given to environmental change and its plausible effects on human function and the larger biosphere. Intensifying anthropogenic pressures and heterogeneous societal responses highlight the necessity for continuous dialogue to improve ecological management and consumption reductions. There is an evident and present call for effective environmental rhetoric styles and models to deter current resource exploitation and unsustainable biosphere policies.

Anthropogenic environmental destruction is an observable and concrete concept. The planet has changed since the arrival of humans; this conclusion is easy to arrive upon. Unfortunately, for many, 'pure environmental science' dialogues are inaccessible. Discussing biosphere destruction requires terminology, language, and interdisciplinary knowledge. A clear divide, between environmental researchers and their beneficiaries, has developed. The audiences that choose to stay involved in climate science seek secondary source interpretations, rather than primary research publications. This decision, between terminology-intensive science and colloquial science interpretation, has created a false dichotomy. Some science is data-intensive, requires objective thought, and assumes a level of prior content knowledge. Other forms of science are easily interpretable. Both categories describe current climate dialogue.

Environmental narratives are not translations of research; they are ongoing discourses between individuals that collect observations and data and authors that interpret global change and its wider implications. Climate change dialogue has transitioned from being primarily data-driven to encompassing a diverse range of mediums and rhetoric forms. Authors contribute new ideas and perspectives on the environment through their chosen rhetoric styles. Modern environmentalist rhetoric represents an entirely new branch of communication spurred by the common desire to document, comment on, and change the trajectory of anthropogenic biosphere interactions. This thesis examines the rhetoric strategies behind effective climate change commentaries, their relations to our current geologic and ideologic epochs, and mechanisms driving (in)action.

Why are rhetoric styles successful and unsuccessful at facilitating environmental action? To answer this question, I must first clarify its components. I will define rhetoric as the art of effective or persuasive communication, especially language designed to make an impressive effect on its audience. Environmental rhetoric styles encompass a range of communication modalities. This thesis investigates traditional methods of reporting, such as news reports and dialogues, in combination with mediums less often referred to as rhetoric. In the following chapters, I will scrutinize current theory, mathematical relationships, psychological reports, scientific papers, maps, visual art, a disaster novel, a political cartoon, a short story, a graphic novel, a documentary, and installation art

pieces. These pieces will be evaluated as rhetoric mediums through which authors can advocate and undermine environmental (in)action. Several overarching concepts govern this analysis. These subjects include the rhetoric of capitalism, the objectivity of dialogues, and the mediums used to convey environmental change. In the following three sections, I provide an overview of each of these topics.

**The Rhetoric of Capitalism.** Communicating climate change has become an inherently consumerist practice. Capitalist exchange demands that authors create narratives that are appealing, understandable, and consumable. To be viewed, a rhetoric form must attract an audience's attention, communicate comprehensible information to the consumer, and make sufficient profit to sustain the author and the rhetoric form. Unfortunately, these requirements create a paradoxical relationship: narrative consumption is necessary for information receipt. For example, to gain documentary viewers, producers create engaging narratives that are informationally accessible and widely viewed. To learn about current environmental change and possible mitigation efforts, individuals must consume current dialogue in the rhetoric forms available to them. This rapid and repeated consumption of environmentalist rhetoric perpetuates the consumerist mentality.

Consumption of resources, which are required to produce narratives, lead to emissions and consequent environmental change. In Chapter 2, I examine a scene from *Climate Changed*, during which a consumerist robot duals against a minimalist samurai for claim over the remaining biosphere<sup>1</sup>. While the fantastical segment draws amusement from the audience, the graphic novel strays from informational reporting towards profitable entertainment. This strategy, although appealing, embraces the consumerist culture of customer selectivity. As consumers of climate narratives, audiences can choose what rhetoric pieces they view. This choice is problematic because some narratives are composed to appeal, reaffirm, and profit from consumers' views of environmental change<sup>2</sup>. These narratives perpetuate capitalism. The less appealing narratives, which often include informational sections and requests for eco-friendly action, receive less attention<sup>3</sup>.

Narratives rely on rhetoric and diction. Modern language is tied to its originary systems and common usages. Words, phrases, styles, and communication strategies carry connotations and bias with them. Environmental change rhetoric is rooted within period concepts and ideologies, many of which are tied to capitalism. The phrase "global warming" carries liberal undertones despite its intention to describe a global environmental phenomenon. "Climate change" is

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<sup>1</sup> Squarzoni 373-374

<sup>2</sup> Molek-Kozakowska 73-81

<sup>3</sup> Molek-Kozakowska 79-81

caught within a psychological association between ‘change’ and negative outcomes. Even our terminology for environmental destruction is tied to the economic field: “(Over)consumption”, “ecological footprint”, “carbon sequestration”, and “per-capita emissions” derive connotations from capitalist terminology.

To evaluate the efficacy of current and former environmental change dialogues, we must first acknowledge the rich history that accompanies this conversation. Environmental change is a fluid concept that engulfs a plethora of seemingly unrelated dialogues. While daunting, evaluation of environmental change, and its accompanying rhetoric, in isolation is erroneous. In this thesis, I will argue that through more thorough understandings of environmental change rhetoric origins, biases, and efficacy, authors can better motivate their audiences without perpetuating systematic power structures and capitalist ideologies. I will document this abstraction through the narrower lens of capitalist consumerism as it appeals within current environmental communication.

The success of a climate change rhetoric form can be judged based upon its (dis)engagement with capitalism. Some narratives are created to appeal to consumers, rather than to communicate current environmental change. Other rhetoric forms separate themselves from consumerism but rely on unsustainable economic models that reach few people. Authors are tasked with the challenge of creating entertaining environmentalist dialogues that will dismantle consumerism

and the larger capitalist-driven enterprise. In Chapter 1, I examine *Animal's People*, a disaster novel that captivates readers and simultaneously critiques its own reliance on consumers and capitalism<sup>4</sup>. This novel serves as an example of a successful environmental change narrative that appeals to audiences, communicates current environmental dialogues, and subverts consumerism.

**Objectivity of rhetoric.** Consumption of rhetoric is driven by appeal and anticipated information. Rhetoric styles come with stereotyped assumptions of credibility. As a novel, consumers expect *Animal's People* to provide primarily entertainment; deviation from entertainment to environmental philosophy is unanticipated. Society often associates data-driven mediums with objectivity and non-data mediums with subjective interpretations. These notions are inaccurate. “Objective science” against “subjective reporting” is a false dichotomy. Scientific studies rely on author interests, funding categories, and public requests to receive money and permission for research<sup>5</sup>. The drivers of data collection, and how data is processed and distributed, is inherently subjective. Likewise, environmental reporting, assuming factuality, cannot be entirely subjective. Rhetoric requires data, theory, and current dialogue to be placed within publications. Without these elements, mediums are viewed as imaginative works, as opposed to dialogue.

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<sup>4</sup> Sinha 1-374

<sup>5</sup> Oreskes

**Overview of Argument Mediums.** Environmental change dialogues rely on a variety of mediums that carry their own observations and interpretations. Authors do not simply communicate recently published data; they include their own observations, perspectives, and knowledge within their narratives.

This thesis examines environmental change rhetoric, through the scope of its consumerist nature, utilizing several categories of rhetoric. In this thesis, I explore the current theory behind environmental change dialogues. The introduction and theory overview will be proceeded by three chapters, each focusing on analysis of rhetoric efficacy: In Chapter 1, I will examine *Animal's People* as an example of a novel that engages in a fictional disaster narrative based on global trauma created by multinational corporations in economically underprivileged areas. Chapters 2 and 3 include visual media, which is gaining popularity in environmentalist dialogues. Chapter 2 focuses on visual art and is centered around two examples: *Climate Changed*, an experiential climate narrative set within a graphic novel, and "Forces of Change," a futuristic painting of capitalism's dominance in the Great Lakes. In contrast, Chapter 3 is dedicated to more interactive visual pieces including a climate change documentary, *An Inconvenient Truth*, and a reforestation installation piece, "One Beat, One Tree." Each chapter will include a critical view of efficacious and ineffective elements within current narratives and an analysis of what these rhetoric styles can tell us



about modern environmental change dialogue. The thesis will conclude with a summary of the primary arguments and findings.

**Chapter 1:**  
**An Exposé of Current Knowledge & Theory**

“It matters what thoughts think thoughts”  
[and where their influence is derived from]<sup>6</sup>.  
~Jason Moore, *Anthropocene or Capitalocene*

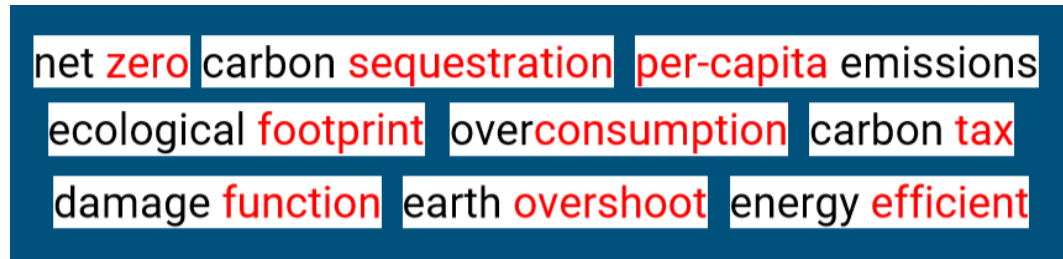
**Capitalism and Environmental Change.** Jason Moore is a climate theorist who argues that capitalism is the driver of environmental change. While his argument focuses on exchanges of power and work, which are tied to environmental preservation and destruction<sup>7</sup>, my argument begins with language and diction. The words authors use, the ideologies that rhetoric types are entangled within, and the identities of authors themselves, influence meaning and dialogue.

Rhetoric has various types of bias: economic terminology and capitalist ideologies are embedded within environmental change dialogues. Environmentalist terminology is largely composed of compound words. Often one syllable or word part is rooted in ecology content and the other is borrowed from economic terminology.

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<sup>6</sup> Moore, 6, 38, 39, 42

<sup>7</sup> Moore 79-80



**Figure 1.** Commonly used environmental terminology. The black portions of the compound words represent words with scientific origins. The red portions are connected to capitalist economic terminology.

The words authors use influence their narrative's meaning and connotations. The environmental terminological bias towards capitalism is problematic because capitalism drives climate change. To address environmental change, authors must critique capitalism and rethink the ways in which they use terminology. The words presented in Figure 1 not only carry capitalist connotations, but also reward and penalize monetary actions connected to the environment. For example, 'carbon taxes' incentivize emissions reductions by charging individuals for the carbon they utilize. Since money is being taken away, a negative association is formed between the taxpayer and the environment that is being monetarily compensated. In contrast, 'energy efficiency' rewards consumers for using less energy in the form of cash. When consumers save energy, they save money and the environment. While these economic associations may seem beneficial, they are undermined by an inconsistent and competitive capitalist system. In some areas, economic incentives help to protect environments, in others, there are no carbon taxes or energy efficient metrics.

Competition for money and resources lead people to desire unrestricted consumption, without monetary penalty.

To better understand environmental change, we must acknowledge the associations between capitalism and the environment. These connections begin with diction and span broad categories like data correlations, psychology, policy, and narration. The following sections will explore associations between capitalism, the environment, and factors that influence environmental (in)action.

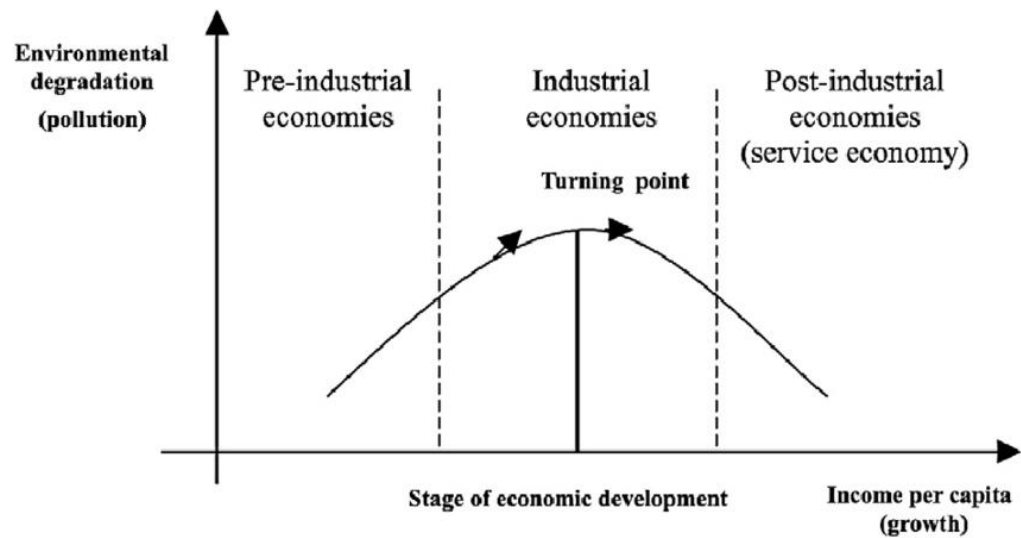
**Economic Welfare & Environmental Impact.** Climate narratives come in many forms. Correlational studies, mathematical narratives that examine the likelihood of outcomes based on preexisting qualities, are becoming increasingly prevalent in climate research. Economic welfare is one of the main correlative predictors of a country's power to create environmental impacts: the more money a country has, the larger its potential to change the environment.

At the population level, there are immense datasets that document the potential for environmental impact based on economic demographics. The Environmental Kuznets Curve (EKC) provides a model for predicting economically-driven human impacts on the environment. Mariano Torras describes the EKC as “[the] relationship between per-capita income... the environment follows an inverted U, [a parabola], where environmental conditions

worsen with income increases early in a country's development, after which, beyond a certain turning point, environmental quality improves as income continues to increase"<sup>8</sup>. This parabolic function may be explained by several economic tendencies: as countries develop, there is an advantageous market for producing cheap goods to sell at higher margin prices. Increased production leads to higher risks of environmental pollution and chemically enabled disasters. In contrast, well established countries often export their production lines to underdeveloped areas where labor and resources are cheaper. Instead, value is placed on property, real estate, location, and travel. People are willing to pay more to live in aesthetically pleasing areas. Money is increasingly invested in moving away from production centers and towards markets or destinations. The environment gains value as a scarce commodity.

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<sup>8</sup> Torras 3



**Figure 2.** The EKC adopted from Panayotou, 1993. As countries develop, increased production leads to higher environmental pollution and anthropogenic disasters. In well-established countries, money is invested in markets and destinations.

The EKC provides a simplified curve for relating industrialization to environmental health. The mathematical model emphasizes narratives formed by capitalism and the environment in tandem. If environmental health was considered in isolation, the cause of its cyclical decline and recovery would go unaddressed.

## **The Psychology of Consumerism**

While the previous EKC economic predictors of environmental impact potential created a well-correlated relationship, psychological mentalities and their interactions with economic decisions, make environmental impacts less predictable. In this introduction subsection, I will argue that the rhetoric and content of climate change discussions are embedded within long-standing political and class divides. People are predisposed to align with ideologies that are intuitive, convenient, and relevant for them. It is easier for individuals to find information that agrees with their current belief systems, such as acknowledging environmental change or denying it, than to embrace new perspectives. Perceived risk, psychological bias, and capitalist mentalities can change how people think about the environment and which rhetoric styles they accept. To transform climate rhetoric, and by extension, people's attitudes, we must challenge and dismantle current psychological misconceptions driving inaction.

**Conceptualizing Climate Change.** When people realize there is no easy solution for climate change, they stop paying attention to it<sup>9</sup>. Climate rhetoric attempts to prolong information consumption by providing appealing narratives paired with possible solutions. In the last decade, the dichotomy between climate

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<sup>9</sup> Marshall 79

knowledge and ignorance has changed. George Marshall, a prominent environmentalist, suggests that the sphere of climate change processing has widened: “There is “ignorance (not knowing), denial (the refusal to know), and disavowal (the active choice not to notice)”<sup>10</sup>. While Marshall adequately summarizes some climate change conceptions, Timothy Morton, an object-oriented philosopher, better expresses the multitude of associations encompassed within environmental change, using the term “hyperobject”<sup>11</sup>. Hyperobjects are entities that encompass vast temporal and spatial dimensions that overturn colloquial ideas of what subjects are. Climate change is a silent issue, but a reoccurring omnipresent subject. It is commonly understood, yet diversely defined: Climate change has become the perfect cognitive challenge because it is so multivalent. It is an immense topic, open to multiple meanings and interpretations, that no one can fully comprehend<sup>12</sup>. The vast scope of climate change and its unresolved nature cause it to be “*uncanny*, creating a discomfort and unease that we seek to resolve by framing it in ways that give it a familiar shape and form”<sup>13</sup>. The pressure to address climate change sets environmental desires and consumption habits against one another in a series of internalized psychological negotiations. Through these subconscious conversations, individuals actively shape the trajectory of climate change, its internalized

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<sup>10</sup> Marshall 85

<sup>11</sup> Morton 1

<sup>12</sup> Morton 94

<sup>13</sup> Morton 95



definition, extent, and urgency in ways that enable individuals to avoid, consume, and ignore it altogether<sup>14</sup>.

**Conceptualizing Natural Disasters.** Long term environmental change is difficult to detect, and by extension, hard to mentally conceptualize<sup>15</sup>. Its effects are often gradual and occur over long-time spans. In contrast, environmental disasters are rapid, often destructive, events. The effects of environmental disasters are memorable and difficult to overcome. The disparity between long-term environmental change and short-term environmental disaster creates several psychological misconceptions. The American Psychological Association highlights these misinterpretations, using climate change as an example of long-term environmental transformation:

Long-term climate is a phenomenon not easily detected by personal experience, yet one that invites personal observation and evaluation. Concern about adverse consequences of climate change (e.g., extreme weather events like droughts or floods) is low on average in places such as the United States, in part because small probability events tend to be underestimated in decisions based on personal experience, unless they have recently occurred, in which case they are vastly overestimated. Many think of climate change risks (and thus of the benefits of mitigating them) as both considerably uncertain and as being mostly in the future and geographically distant, all factors that lead people to discount them. The costs of mitigation, on the other hand, will be incurred with certainty in the present or near future<sup>16</sup>.

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<sup>14</sup> Morton 228

<sup>15</sup> Swim et al. 1-7

<sup>16</sup> Swim et al. 3

Perception of environmental change is confounded by extraneous factors. People place unmerited weight on whether they have been recently impacted by disasters, if mitigation costs will benefit them, and how they emotionally respond to ideas of environmental change. Humans are unable to differentiate between global observation-based decisions and externally biased responses. Environmental change interpretations cannot be separated from the psychology of their interpreters.

**Perceptions of Risk.** Belief and denial in environmental change and disaster is highly tied to perceived risk<sup>17</sup>. Lower demographic individuals are more vulnerable to environmental change because they lack the financial resources to adapt to destruction. For example, after a flood, economically privileged people can rebuild and fix their homes using personal finances. For people without savings, there are severe lifestyle consequences. In these low-income areas, after an environmental disaster, the trauma and its impacts are discussed for longer than in areas with quick recovery times. Privileged individuals have the luxury to flee disaster and repair damages when they return.

Economic privilege allows people to navigate natural disasters using their finances, rather than proactively taking steps to reduce climate change. From this

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<sup>17</sup> Swim et al. 3-4

standpoint, perceived risk should align with demographic class. Impoverished populations should fear natural disasters because they can't financially compensate for damages, but differences in intrinsic valuation and materialism change this schema. Some things are so fundamentally valuable that consumers would rather prevent damage to these items than replace them after trauma. Sentimental places and objects cannot be exchanged financially. When they are destroyed, money will not restore the intrinsic worth that they once carried. The priceless valuation that accompanies sentimentality, inadvertently, protects the planet from damage. The higher people value objects, the more willing they are to monetarily protect them from the environment.

With the risk of a flood, proactive protection may include waterproofing a house, or it may be more abstract, like reducing emissions to decrease glacial melt. In a proactive search to protect their belongings, some people choose to protect the environment, hoping that their efforts will reduce the likelihood of natural disasters, and others choose to protect their items from environmental risks. After conceptualizing the risk of environmental disasters, people align their ideologies based on feared consequences. Proactive environmental precautions and protection policies seem more significant when there are imminent dangers.

In contrast, psychological research shows that “people who survive climate disasters... are prone to have a false sense of their own future

invulnerability”<sup>18</sup>. These individuals may have a harder time participating in environmental solutions, having already survived what these policies hope to protect them from.

**The Psychology of Consumerism.** Psychological biases work similarly to perceptions of risk, but they rely on consumption of information, as opposed to economic risks associated with environmental disasters. People have an abundant selection of environmental change narratives to view. There is a much higher supply of rhetoric than could possibly be consumed by one person. This disbalance between supply and demand provides people with choices. Consumers can decide what they consume, how they interact with the piece, and when they prefer to engage in rhetoric. Consumers can intentionally, or unintentionally, bias their own environmental awareness through choosing works that interest them.

Consumers’ selective bias towards chosen information is furthered by the nature of information recall: people are more likely to “make up their minds on the basis of the evidence that is most readily at hand”<sup>19</sup>. The most readily consumed climate media is not always true, but it usually is appealing, easy to understand, and readily converted to memory. In one study, voters heard repeated evidence on the basis of climate change truth and fiction. When given a ballot,

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<sup>18</sup> Marshall 9

<sup>19</sup> Marshall 15

voters were more likely to recall prior environmental rhetoric and make decisions based on it, even in the presence of new or more accurate information. To change people's positions on environmental issues, climate authors must not only compete for audience attention, but also recognize the knowledge and misconceptions that consumers bring with them. Consumerism perpetuates the acquisition of desirable and convenient knowledge. When faced with environmental policy, consumers will continue to vote based on desirable, memorable narratives, instead of the most-current, accurate, and relevant information.

**The Capitalist Mentality.** Despite the difficulties accompanying psychological biases, the capitalist mentality is perhaps the most troublesome influence on environmental policy<sup>20</sup>. Many of the psychological responses driving global exploitation, originate from capitalism. We need narratives, like Sinha's novel, to show us constructive modes of resistance.

Capitalism influences human decision-making and over time, executive functioning<sup>21</sup>. The current economic model creates an unceasing demand for low production costs and competitive market prices. These criteria drive a globalist economy that relies on supplies meeting high consumer demands. To decrease

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<sup>20</sup> Moore 78-115

<sup>21</sup> Marshall

production costs, companies are incentivized to find areas with cheap resources, inexpensive labor, and few regulations<sup>22</sup>. Buyers are trained to purchase cheap products and sellers are rewarded for making cost-cutting decisions.

While most environmentalist narratives capture the multifaceted drivers of capitalism, few comment on the ideological transformation that capitalism inflicts on its beneficiaries. Capitalism initiates economic competition and valuation<sup>23</sup>, allowing consumers to determine what is worth paying for and what is not. With a limited amount of money to spend, people habitually look for deals to stretch the number of items they can buy. The items that they can't afford, or don't care to pay for, are left for others to purchase. This mentality has infiltrated environmentalism.

Humanity's valuation of environments, organisms, spaces, identity groups, and populations has become intertwined within the capitalist system. The capitalist mentality robs things of their intrinsic values, instead asking how much they are monetarily worth. If there is no financial price point on environment and its inhabitants, then in the eyes of capitalism, they are expendable. Ecological economists, in an effort to preserve nature, have coined terms like "ecosystem functions," "ecosystem goods," and "ecosystem services" to refer to natural subjects with identified monetary value<sup>24</sup>. Placing systems of valuation within

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<sup>22</sup> Arvidsson 1-2

<sup>23</sup> Jones 905-938

<sup>24</sup> Groot 393

nature has further complicated anthropocentric economic debates. People are given autonomy to determine whether office buildings are more valuable than the environments they destroy. The juxtaposition between scarce, undervalued natural spaces and abundant, expensive urban metropolises, has led people to internalize anthropocentrism. Capitalist consumer culture has created a societal misconception: humanity is not, and should not be, valued more than the biosphere.

**Consumption or Reduction: A Binary Decision?** In *Don't Even Think About It*, George Marshall navigates between the rational and emotional brain in an effort to synthesize people's reluctance to acknowledge, interpret, and mitigate climate change. While Marshall places the primary onus on individuals' carbon consumption, capitalist ideologies are at the base of pervading environmental destruction.

Human cognition is highly dependent upon temporal scales. People struggle to choose between guaranteed, instantaneous gratification and uncertain futurity. The consumerist mentality predisposes people to make decisions that elicit quick, positive feedback. Convincing consumers to proactively reduce (their impacts on the environment) is difficult: the immediate cost is usually high, and benefits occur in an indeterminate future.

To supersede consumerist ideologies, we need to provide our brains with a stimulus for necessary, immediate environmental action. Climate change is a temporally and physically daunting challenge. Rather than fathoming the issue in its entirety, people should be enticed to take intermediary steps that will additively form a solution. Climate narratives need to incorporate appropriate plans and motivations to animate their audiences.

In attempt to appeal to humans' cognitive functions, Marshall identifies a binary division between our brain systems: "The analytical system is slow and deliberative, rationally weighing the evidence and probabilities, [while] the emotional system is automatic, impulsive, and quick to apply mental shortcuts so that it can quickly reach conclusions"<sup>25</sup>. In this model, the emotional brain is the main contributor to the consumerist mentality. It allows impulsive decisions without immediately processing their global impacts.

The consumer mentality is poorly suited to rectify uncertain climate change's long-term threats, but the rational brain excels with abstractions. It focuses on planning and forward thinking; yet counterintuitively, Marshall suggests that these tasks hinder the conservation mentality<sup>26</sup>. Instead, the rational brain allows people make issues more distant in order to see them through a rational perspective. If societies only focuses on the scope and magnitude of the

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<sup>25</sup> Marshall 49

<sup>26</sup> Marshall 50



global warming, people will be unwilling to make proactive environmental decisions individually. The problem's far-off consequences coupled with immediate and direct resource reductions, lead people to shy away from climate-conscious actions. Instead of cutting back entirely, some people develop short-term goals that give climate change emotional proximity. They vow to reduce consumption of plastic straws and to turn off the water while shampooing their hair. Both decisions will help the environment, but not enough. People are enticed to make small, easy choices, to feel better about their lifestyles. Consumers label their sacrifices the same, regardless of their magnitudes and, having made their contribution to the environment, they feel no responsibility to make further lifestyle reductions. The choice to eliminate one good or service from their list is viewed as equivalent to any other reduction in products. Unfortunately, the biosphere requires much stronger commitment to slow the trajectory of climate impacts.

### **Capitalist Systems of Power vs. the Environment**

**Capitalism Creates Systems of Power.** Capitalism creates economic inequalities that privilege and underprivilege people in modern society. Societal structures of power influence which environmental opinions are heard and what policies are enacted. The (un)popularity of environmental policy drives its discussion, but opinions carry inequitable values. Legislators and financial elites have more clout than average individuals. When developing policy and business models, they may consult experts in the field, ranging from scientists to economists, or they may opt not to. An environmental decision hierarchy monopolizes discussions of policy changes and efficacy<sup>27</sup>. For some, this system carries a false sense of security: They believe that experts will develop environmental solutions. Others disengage from environmental discussions and debates, arguing that their viewpoints are undervalued. Through the valuation hierarchy imposed by societal structures of power, coupled with people's disengagement, popular environmental opinions are diluted and surpassed by government and business leaders' policies.

In "Inequality as a cause of environmental degradation", James K. Boyce argues that systems of power determine the level of environmental destruction through winners and losers:

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<sup>27</sup> Carson

The extent of an environmentally degrading activity depends on the balance of power between the winners, who derive net benefits from the activity, and the losers, who bear net costs. When the winners are powerful relative to the losers, more environmental degradation occurs than in the reverse situation. This reflects the operation of what [he] terms a power-weighted social decision rule... Greater inequalities of power and wealth lead to more environmental degradation for three reasons: (a) The excess environmental degradation driven by powerful winners is not offset by the environmental degradation prevented by powerful losers; (b) inequality raises the valuation of benefits reaped by rich and powerful winners relative to costs imposed on poor and less powerful losers; and (c) inequality raises the rate of time preference applied to environmental resources by both the poor and rich, by increasing their poverty and political insecurity, respectively<sup>28</sup>.

Boyce suggests that environmental situations are driven towards cyclic staticity. If powerful winners exploit environmental resources, they profit, and those gains keep them in power. If powerful winners opt for aesthetic preservation of spaces, they usually remain preserved. If unpowerful people begin winning, their chances of remaining in power will be slightly higher. Unfortunately, if unprivileged people are without power, it will be extremely difficult for them to gain power and by extension, nearly impossible for them to drive environmental conditions.

**Systems of Power Influence Environmental Narratives.** In the previous section, I highlighted several power structures created by capitalism. In this

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<sup>28</sup> Boyce 177

section, I will examine how capitalist CEOs have exploited environmental uncertainties to maximize consumption.

Uncertainties drive the environmental debate. People are inclined to consume resources until given reasons to reduce. Capitalist-incentivized systems perpetuate environmental disregard and devastation; climate change uncertainties and misconceptions (such as climate change's inevitability) facilitate further environmental destruction. In *Merchants of Doubt*, Naomi Oreskes and Erik Conway suggest that increased government regulations and economic constraints led opposing market sharks to fight legislation by capitalizing on scientific uncertainties and faulty journalism<sup>29</sup>. The gap between scientific rhetoric and science popularization allows opportunists to expand the population of climate denier constituents through a variety of journalism techniques. Using a basic understanding of semiotics, lexicon, and apposition, Oreskes and Conway demonstrate how climate studies are converted into evidence for contrarian narratives with implicit biases.

Environmental narratives are often met with irritation from businesses. The issue is usually not free speech, but instead, the uncertainty of free markets<sup>30</sup>. Proponents of deregulation see climate change acceptance as a road to increased legislation and economic scrutiny. Environmental narratives often document

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<sup>29</sup> Oreskes and Conway 1-10

<sup>30</sup> Oreskes and Conway 248

“external costs that markets have failed to account for—w pollution is the clearest example. Regulation is needed to address external costs, either by preventing them or by compensating those who are saddled with them”<sup>31</sup>. In the current capitalist system, a market-wide pollution reduction would require attaching added value to goods and services without increasing the demand for them. New prices would not only reflect the resources and labor required for production, but also the energy, emissions, and waste mitigation costs associated with the product. Without a rising demand and consumer willingness to pay for these added costs, industries would be expected to absorb losses which would decrease their margins. Oreskes and Conway assert, “the basic tenet of laissez-faire, that ‘free and competitive markets bring supply and demand into equilibrium and thereby ensure the best allocation of resources,’ is an axiom that turns out not to be true. Prices can be displaced from their ‘equilibrium ideal’ for long periods of time”<sup>32</sup>. I argue that current prices are already displaced and have been since the industrial revolution.

The capitalist system exploits resources at unsustainable rates for prolonged durations of time<sup>33</sup>. Consumers are not only removed from the geographic areas of exploitation, but also from the environmental data that supports claims of overuse, ecosystem damage, and global implications: “The

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<sup>31</sup> Oreskes and Conway 250

<sup>32</sup> Oreskes and Conway 249

<sup>33</sup> Moore 141

idea that free markets produce optimum allocation of resources depends on participants having perfect information. But our protagonists [free market advocates] did [and continue to do] everything in their power to ensure that the American people did [and do] not have good (much less perfect) information on crucial issues”<sup>34</sup>. By disassociating people from their environments and the study of them, climate change deniers and reporters demobilize consumer-driven environmentalist movements and pollution economies: “One can believe in the superiority of the capitalist system and advocate for market-based solutions to pollution— as many people do— but it does not follow that one should doubt [or obscure] the science that demonstrates the need for such solutions”<sup>35</sup>.

Corporations, economists, journalists, and others have underrepresented the climate change debate, suggesting it was a natural and unpreventable phenomenon<sup>36</sup>. Others discount anthropogenic environmental change altogether. Don Young, a representative of the oil companies after the Horizon oil spill, said the event was “not an environmental disaster... it [was] a natural phenomenon. Oil has seeped into this ocean for centuries, it will continue to do it... We will lose some birds, we will lose some fixed sea-life, but overall it will recover”<sup>37</sup>. The withholding and falsification of information from capitalist participants represents

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<sup>34</sup> Oreskes and Conway 250

<sup>35</sup> Oreskes and Conway 254

<sup>36</sup> *An Inconvenient Truth*; Oreskes and Conway; Klein

<sup>37</sup> Nixon 21

a novel form of censorship and neglect. Rob Nixon, an environmentalist, coins the term “slow violence,” to refer to such obstructions:

By slow violence I mean a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all. Violence is customarily conceived as an event or action that is immediate in time, explosive and spectacular in space, and as erupting into instant sensational visibility. We need, I believe, to engage a different kind of violence, a violence that is neither spectacular nor instantaneous, but rather incremental and accretive, its calamitous repercussions playing out across a range of temporal scales. In so doing, we also need to engage the representational, narrative, and strategic challenges posed by the relative invisibility of slow violence. Climate change, the thawing cryosphere, toxic drift... and a host of other slowly unfolding environmental catastrophes present formidable representational obstacles that can hinder our efforts to mobilize and act decisively <sup>38</sup>.

Nixon associates withheld information with aggression against society. The ecological content has gone unsaid, causing destruction of the environment without acknowledgement of the environmental change. The effects are widely dispersed across ecosystems and the biosphere. This lack of conversation has caused consequent debates over environmental change validity, environmentalist credibility, and ecological recommendation potential, further delaying action. Climate change, and its prolongers, have created obstacles that hinder current and future actions to protect planetary health. Without knowledge of ecosystem damage and its causes, people cannot make informed decisions to mitigate or cease participation in the culpable action. The violence is gradual, slow, and

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<sup>38</sup> Nixon 2

sustained in comparison to traditional instances, but its impacts are more destructive.

**Systems of Power Control the Climate.** *This Changes Everything: Capitalism vs the Climate*, Naomi Klein proposes that climate change is a direct consequence of the free-market globalism that is demanded by the westernized, consumer-driven capitalist system. In this section, I will highlight how humanity's internalized, capitalist-derived, superiority complex and hierarchical valuation system further contribute to environmental depredation and climate stress. To overcome the most severe global warming consequences, society must determine a sufficient reason to abandon its capitalist roots and create a new collective narrative of interdependence and response-ability<sup>39</sup>.

Klein begins her narrative with a group of passengers aboard Flight 3935 and a mucilaginous, melted, semblance of plane wheels stuck below their feet<sup>40</sup>. The scene becomes a satire, as Klein points out: “the irony— the fact that the burning of fossil fuels is so radically changing our climate [to be warm enough to melt plane tires] that it is getting in the way of our capacity to burn fossil fuels”<sup>41</sup>. The passengers, as if part of an environmentalist political cartoon, exit the plane,

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<sup>39</sup> Haraway 38

<sup>40</sup> Klein 1

<sup>41</sup> Klein 2



allow a large fossil-fuel burning truck to drag the plane away, board another flight which will expel equally large amounts of carbon dioxide, and increase earth's temperature so that more aircraft wheels will melt. Given extra time, a chance to deplane, and ample exposure to global warming, all of the Flight 3935 passengers chose to maintain their carbon emissions. Klein's caption aptly summarizes this finding: "All of us who live high consumer lifestyles, wherever we happen to reside, are, metaphorically passengers on Flight 3935"<sup>42</sup>.

The opening satire illustrates a stark disconnect between causality and environmental change. Evidently, climate change narratives are not eliciting necessary and urgent change in consumer practices. Perhaps this disconnect arose from the capitalist system, which simplifies situations into a series of losses and gains. In the case of Flight 3935, passengers lost time deplaning, the airline company accrued additional costs to procure a functional aircraft, and the planet gained additional carbon emissions. Had some of the passengers chosen not to go on the second flight, they would have lost flight ticket money and time. In contrast, the airline would have accrued equal losses to the previous situation and the planet would experience about the same warming effects. Within the capitalist view, there was no profit for canceling carbon emissions. To circumvent this narrative, resistors may have refused to take another flight, encouraged others not to fly, or communicated carbon-concerns to surrounding individuals. While most

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<sup>42</sup> Klein 2

people would call these objectors environmentalists, Brad Werner, a prominent geophysicist defines this group as ‘resistors.’ Werner argues that environmentalists advocate climate change solutions within the current dominant structures and systems, whereas resistors propose actions that dismantle current anthropologic dominance structures and capitalist models in an effort to reduce climate stressors that have been perpetuated by prevalent hierarchical models<sup>43</sup>:

Resistors “have not only located various choke points to slow the expansion plans of the fossil fuel companies, but the economic alternatives these movements are proposing and building are mapping ways of living within planetary boundaries, ones based on intricate reciprocal relationships rather than brute extraction. This is the ‘friction’ to which Werner referred, the kind that is needed to put the brakes on the forces of destruction and destabilization”<sup>44</sup>.

Flight 3935’s melted wheels led to a momentary halt in emissions progress, but they were not significant enough to put the brakes on all hedonistic notions of travel. To break the entitlement streak and invoke alternative action, Donna Haraway, a climate theorist and author of *Staying with the Trouble*, encourages her audience to consider a future fatalist scenario: “What happens when human exceptionalism and methodological individualism, those old saws of Western philosophy and political economics, become unthinkable in the best sciences, whether natural or social?”<sup>45</sup>. When humanity and individuals become undifferentiated from their peers and surrounding organisms, their self-

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<sup>43</sup> Klein 450

<sup>44</sup> Klein, Werner 451

<sup>45</sup> Haraway 34

rationalizations, of emissions and other privileges, appear faulty, egocentric, and flawed. The vacation traveler, business man, and flight attendant are diminished into systemically compliant carbon emitters. Their privilege and gains enable other beings' suffering. Thom Van Dooren, an extinction scholar in conversation with Haraway, describes this phenomenon of privileged survivors and the extinction: Nobody lives everywhere; everybody lives somewhere. Nothing is connected to everything; everything is connected to something"<sup>46</sup>. Van Dooren's statement describes a criteria for restructuring climate narratives and their allocations of subject autonomy. Flight 3935 has direct connections to the human passengers, economic losses and gains, and environmental impacts. Consequently, the scenario and its interpretation could focus on three blame candidates and effectors. An Anthropocene perspective would place blame on the human passengers, who had a choice to either travel, and increase carbon consumption, or abstain, and protect fellow humans from carbon-induced climate change. The Capitalocene targets the economic system as the culprit. If financial losses and gains were less influential on people's decision making, perhaps the passengers would not have boarded the second flight. In this perspective, the capitalist system leads individuals to ascribe to materialist viewpoints and decision-making processes that instigate global warming, which respectively leads companies and consumers to incur higher costs to offset increasingly scarce resources.

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<sup>46</sup> Van Dooren, Haraway 35

Haraway proposes the Chthulucene as an alternative posthuman age to describe “a name for an elsewhere and elsewhere that was, still is, and might yet be”<sup>47</sup>. The Chthulucene relies on a myriad of connections that create a network between abiotic and biotic things: its “appendages make string figures; they entwine me in the poesis—the making—of speculative fabulation, science fiction, science fact, speculative feminism...SF is storytelling and fact telling; it is the patterning of possible worlds and possible times, material-semiotic worlds, gone, here, and yet to come”<sup>48</sup>. Speculative Feminism provides a dialogue and space for individuals to create narratives that acknowledge and explore the roles of systemic structures, pervasive ideologies, and individual decisions on a network of organisms and abiotic subjects that have capabilities to react or be affected by change. The capitalist and anthropocentric narratives have the potential to impact more than their acknowledged subjects and likewise, to be influenced by organisms, climate phenomena, and things outside of their traditional scope. The Chthulucene attempts to recognize the cyclic nature of Flight 3935 by taking agency from positions of power and redistributing it amongst a cohesive narrative. While capitalism and humans are often placed at the top of the decision-making hierarchy, in an alternative perspective, they could be depicted with minimal authority. If Klein had written this narrative as a new materialist, the narrative would place more emphasis on the heat and tires and less

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<sup>47</sup> Haraway 35

<sup>48</sup> Haraway 36

on humans within the capitalist structure: the high temperatures, caused by increasing warming of the earth, led the tires of the plane to melt. Without working wheels, the passengers could not fly, and the airline incurred additional cost. Heat-resistant tires and a new vehicle provided the airline and passengers with an alternative travel solution, but their decision to release additional carbon emissions led to higher average temperatures, more melted tires, and further delayed flights. The passengers are dependent on functional tires and the airline is reliant on low temperatures, to avoid melted wheels, and the resources used to make, transport, and ready additional wheels and aircrafts in the case of melt. There are a myriad of effectors beyond those acknowledged. The Chthulucene model recognizes the multiplicity of agents that have the potential to be influenced by any situation, depending on the scope of the problem and its connections.

While the Chthulucene emphasizes the connectivity and implications of our intersectional lifestyles, it makes blame-placing difficult. Interconnectivity facilitates blame distribution, rather than targeting problematic catalysts. From this perspective, attributing blame to the capitalist system is easier than engaging with a posthuman network of blame. Yet, the Capitalocene incriminates consumption ineffectively. People do not stop engaging with capitalism despite observing its effects on the environment. Perhaps calling the entire system unsustainable, leads to complacency, or maybe dismantling societal systems is

daunting. Capitalism may appear too large of a problem to undertake as individuals: “all of this [blame distributing] is why any attempt to rise to the climate challenge will be fruitless unless it is understood as part of a much broader battle of world-views”<sup>49</sup>. Rather than focus on the source of the problem, Haraway and Klein both point to “a process of rebuilding and reinventing the very idea of the collective, the communal, the commons, the civil, and the civic after so many decades of attack and neglect”<sup>50</sup>. Despite sharing similar viewpoints for perspective reconstruction, Klein and Haraway take opposing routes. Haraway argues that to behave as equals, humans must recognize their place in the biological and geological narratives. Humans need to change the way we conceptualize ourselves and our legacy. Haraway phrases this as “compost instead of posthuman(ism)”<sup>51</sup>. While this phrase seems humbling, people are unlikely to engage in this type of dialogue. Our current capitalist system and our adopted ideologies center around superiority hierarchies. Individuals strive to be better than one another. We compete economically, socially, and linguistically. To combat competitive ideologies, narratives of posthumanism are switching to discussions of defeat, compost, and demise. The current capitalist system has not adopted languages of equality, but texts like *Animal's People*, gesture to a period

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<sup>49</sup> Klein 460

<sup>50</sup> Klein 460

<sup>51</sup> Haraway 36

in which Haraway's proposal for self and societally-deprecating language are embraced.

Like Haraway, Thom van Dooren also explores the complex compost narrative, but he examines the "layered complexities of living in times of extinction, extermination, and partial recuperation [and]... what it means to hold open space for another"<sup>52</sup>. Concepts of space and resource utility are closer to the capitalist narrative and may foster better thought transition. Space is given value in capitalism and contrastingly, the absence of material, when it is intended to be present, is considered a loss. A vacant housing lot is often worth more than a plot with a poorly kept structure. The empty space has potential, and therefore it demands a higher price than the lot with a fallen structure, which must undergo a decision before the lot can be used. The preexisting structure is either saved, added on to, ignored, or demolished before it can be used. In contrast, a well-kept house often garners a higher sale price than an open plot; the existing structure can be used and in the empty lot, builders must start from scratch. A similar phenomenon occurs with natural resource and space allocation. When species go extinct, humans move into their previous habitats. If a species takes up space in a desired location, people must make a conscious decision: the species may be relocated, exterminated, ignored, protected, or utilized for resources. Species are quantified and given value. In the capitalist system, humans see them as

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<sup>52</sup> Haraway, Van Dooren 41

organisms that hold space for us. When they reach a low enough valuation or quantity, humans take species' space for themselves. Van Dooren asks his audience to consider a concept that they already know well; people are familiar with space constraints and expansion. The challenge then, is ideological: What happens when humans save space for others?

**Facing Climate Change.** When faced with imminent extinction, humans overdose on the capitalist system. The prospect of their demise leads them to ignore all aspects of interspecies “tentacularity”<sup>53</sup>; humans do what they know when asked to react:

How can we think in times of urgencies without the self-indulgent and self-fulfilling myths of apocalypse, when every fiber of our being is interlaced, even complicit, in the webs of processes that must somehow be engaged and repatterned?<sup>54</sup>.

Haraway argues that in these instances, humans must “think”<sup>55</sup>. In an idealistic period, conscious thoughts provide a voice of reason to combat self-indulgent carbon-consuming pre-extinction splurges, but Marilyn Strathern, a social anthropologist, cautions against this type of contemplation: “it matters what ideas we use to think about other ideas”<sup>56</sup>. Mental instability and anxiety for the

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<sup>53</sup> Haraway 36

<sup>54</sup> Moore 39

<sup>55</sup> Haraway 39

<sup>56</sup> Strathern, Moore 38



posthumanist period will not lead to conscious carbon-mitigating strategies; instead, cynical states encourage humanity to take risks prior to demise. In a fatalist perspective, in which, regardless of action, the planet will deteriorate, the capitalist drive to consume may be overwhelming. Humans may overconsume in an effort to compensate for their distressed emotional states.

Environmental narratives must communicate urgency in a way that overwhelms human desires to remain loyal to the capitalist system but precedes moments of panic and free-for-all: “It matters what thoughts think thoughts” and where their influence is derived from<sup>57</sup>. While current narratives draw influence from a capitalist-driven social hierarchy, interdependence is often reinforced through moments of collectivity. Group struggles and triumphs provide individuals with proven success outside of the competition-based system. To undermine the capitalist ideology, people must have proof that the system is flawed and they must be provided with an available alternative: “The Capitalocene must be relationally unmade in order to compose in material-semiotic string figure patterns and stories something more livable”<sup>58</sup>. Narratives of competition must be replaced by a new and collective tale of commonality and united change. The current established disorder is not necessary; another narrative is “not only urgently needed, it is possible, but not if we are ensorcelled in

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<sup>57</sup> Moore 38

<sup>58</sup> Haraway 54

despair, cynicism, or optimism, and the belief/disbelief discourse of progress”<sup>59</sup>. The ideology switch must come from collective narration and action, rather than emotion and discourse. To overcome systemic barriers, we must surrender known consumption philosophies, and instead utilize “sympoiesis” to make collective solutions with one another<sup>60</sup>. Interdependence should lay the foundation for sustainable group practices and pollution-mitigating strategies. To combat global warming, narrators and their consumers must accept responsibility for collective damage, knowledge, and the actions necessary to mitigate global stressors.

To break the capitalist, individualistic train of thought, we must acknowledge damages and losses as more than financial and materialistic entities. Losses represent abused parts within the interdependent unit and constitute different group effects. The extinction of a species is not equivalent to, in value or consequence, the omission of a resource or individual. Through the interdependent structure, we recognize the collective impact that the damage has on the individual, community, and surrounding system: “The only real possibility for peace lies in the tale of the respected enemy”<sup>61</sup>. The group must not only grieve losses collectively, but also take united actions to stop or mitigate the common issue leading to losses: environmental change, and its sub-causes: consumption, pollution, emissions, and capitalism.

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<sup>59</sup> Moore 54

<sup>60</sup> Haraway 37

<sup>61</sup> Haraway 47

While Klein suggests that global warming is a direct result of the free-market system, the capitalist competition ideology is a pervasive force that will remain even after the system's disintegration. To outrun the most severe global warming consequences, humanity must be enticed to adopt a new ideology that emphasizes a collective narrative of interdependence and response-ability for global change and its ensuing consequences. To change the current environmental trajectory, we must switch the way that humans think about the world, our role in the biosphere, and how actions impact surrounding communities. Social interactions must shift from capitalist competition to interspecies cooperation. This movement, according to Klein, begins with environmental narratives: "deep social change involves having debates during which new stories can be told to replace the ones that have failed us"<sup>62</sup>. An ideological migration that places common resource protection and interdependence at its core will require tremendous momentum to overthrow the current capitalist system, regardless of narrative style. Pervading consumer mentalities make humanity "wholly incapable of seizing these tools and implementing these plans, since doing so involves unlearning the core tenets of the stifling free-market ideology that governed every stage of their rise to [anthropocentric] power"<sup>63</sup>. Reconstructing the rhetoric of climate change provides an opportunity for humanity to depart

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<sup>62</sup> Klein 461

<sup>63</sup> Klein 460

from its anthropocentric privilege and consumerist mentalities to join the inter-reliant biosphere.

### Constructing Climate Narratives

**Narrative Outcomes.** Authors balance reporting personal stories with environmental observations. When narrators share climate data and scientific findings, they lack the emotional connections provided by personal stories. To rectify this issue, authors use frames: “Frames are constructed of our values, our life experience, and the social cues of the people around us. We decide what information we wish to pay attention to- placing what is relevant, important, familiar, or rewarding to know inside the frame”<sup>64</sup> Authors present logical information, but they appeal to our emotions through syntax, semantics, emphasis, and individuals’ stories. Narrators deem what is important for the reader and they introduce these snippets near the beginning and surrounded, or framed, by cue words. The framed information is emotionally charged; it is surprising, exciting, discomforting, irritating, and stirring. Marshall proposes that rather than pay attention to what the frame selects, we should consider what it ignores<sup>65</sup>. When reporters and audiences decide what to focus on, they are also inevitably deciding what to exclude: “Frames do not just focus the attention: they define the areas for *disattention*. These precedents bound climate change to a limited set of meanings that actively exclude other approaches”<sup>66</sup>. The same phenomenon occurs when consumers decide what climate narratives to read, and which to ignore. Audiences

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<sup>64</sup> Marshall 80

<sup>65</sup> Marshall 80

<sup>66</sup> Marshall 166

are often choosing between which frames they prefer. Through analysis of the example pieces, I have observed two common climate change frames: disaster and idealistic narratives.

Disaster narratives emphasize eminent destruction and consequentially, reinforce the fatalist school of thought. Climate change becomes an unstoppable force, leading people to ponder humans' potentially climate-driven physical adaptations, the proximity of our own extinction, and construction of the post-apocalyptic narrative. Scientists are concerned by disaster narratives because they distort data and simultaneously construct fatal futures from projections intended to motivate preventative action<sup>67</sup>. The disaster narrative utilizes scientific evidence of climate decline as proof of imminent peril. The rise of the environmental movement has become enmeshed within the lexicon of the apocalypse<sup>68</sup>. Extinction has transitioned into an emerging climate change dialogue, but instead of focusing on current nonhuman annihilations, society is transfixed by the possibility of humanity's own extinction<sup>69</sup>. Rather than mobilize people to take part in environmentally sustainable practices, disaster narrative reporting encourages fear and helplessness. People do not reduce their consumption, because they believe that their efforts will be insignificant: "A single personal sacrifice is meaningless unless it is supported by wider systemic

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<sup>67</sup> Marshall 143

<sup>68</sup> Marshall 140

<sup>69</sup> Marshall 206

and social change”<sup>70</sup>. If disaster is unavoidable and extinction eminent, why should they change their lifestyles? For many, the disaster narrative creates a consumption standstill, but for some, consumption actually increases as people deem climate change a losing battle.

Bright-siding is the opposite of the disaster narrative: “Bright-siding is ultimately a regressive narrative that validates existing hierarchies. It promotes an aspirational high-consumption lifestyle while ignoring the deep inequalities, pollution, and waste that make the lifestyle possible”<sup>71</sup>. Since people deliberately construct narratives that increase and reduce our senses of fear, how do we know that climate reporters have not altered the temporality of environmental change? “Is climate change really a distant issue for future generations, or have we just decided that we want to see it as one?”<sup>72</sup>. Determining the severity and scope of climate change becomes a guessing game in which scientists reach a narrow consensus, while the public opinion exhibits extreme variation and faulty viewpoints: “The public perception of uncertainty of climate change is shaped by the undue confidence in the way that we talk about every other global threat”<sup>73</sup>. There is a narrower and more refined trajectory to most threats communicated by mass media. This concise and direct communication style builds confidence and certainty. Unfortunately, the application of “probalistic language to climate

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<sup>70</sup> Marshall 200

<sup>71</sup> Marshall 149

<sup>72</sup> Marshall 63

<sup>73</sup> Marshall 75

change generates the specter of uncertainty, even when scientists themselves have an abnormally high level of consensus”<sup>74</sup>. Even in the absence of evidence that something doesn’t exist, uncertainty does not indicate falsified existence<sup>75</sup>. When scientists emphasize uncertainty, use obscure abstractions, and excise images, stories, and metaphors that audiences require for emotional connections, consumers disengage<sup>76</sup>. Narratives need galvanize society into action, rather than highlight current unknowns, bleak, or hopeful outlooks. Society acts under an assumption that there is a clear divide between scientists, who require sound data to be convinced of an issue, and non-scientists, who prefer to utilize their, and surrounding individuals’, emotions as a conscience for action. In actuality, non-scientists can be incredibly data-driven and scientists often gain inspiration for their research through personal and emotional connections to their areas of study. To recreate inclusive climate narratives, authors and audiences need to conceptually disengage from outcome narratives and instead focus on procedural steps for change mitigation.

**Binary Narrative Dialects.** Climate narratives have two stereotyped dialects: the scientific and non-scientific discourses. These fields derive information from one another, converse about the same topics, and unsuccessfully attempt to isolate

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<sup>74</sup> Marshall 75

<sup>75</sup> Marshall 75

<sup>76</sup> Marshall 121



their dialogues. One explanation for this separation is that terms and their uses differ substantially between these fields. For scientists, ‘positive’ indicates an upward trend, but in its colloquial use, ‘positive’ “is just one of a number of dangerous false friends (words that sound the same but mean something different) that bedevil climate change”<sup>77</sup>. A positive carbon footprint sounds colloquially beneficial but denotes a harmful overproduction of carbon. The translation of voices is equally difficult. Passive voice is the primary mode of communication for composing scientific journals. Personal pronouns and active tense are replaced with procedural language. The experiment responsibility is removed because the study should be replicable and unbiased regardless of the individuals conducting the task. Climate narratives mimic this style of writing, but rather than obtain objectivity, they “diffuse the responsibility into multiple stages, each one protected by the passive voice”<sup>78</sup>. Climate change contributors are nameless and unaccountable, while its researchers are omniscient and ever-changing. To increase environmental initiative progress, humanity needs to take collective responsibility and action. To act as a unit, scientists must feel comfortable communicating with and in the general language of the public, while non-scientists should familiarize themselves with the data and experiments driving environmental initiatives.

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<sup>77</sup> Marshall 111

<sup>78</sup> Marshall 182

**Rhetoric Styles.** Consumerism inhabits various rhetorics and mediums differently. Informative rhetoric forms convey large amounts of content with direct and interspersed references to current environmental data, dialogue, and potential solutions. News articles, nonfiction books, editorials, research papers, and websites are all potential sources of informative rhetoric. These rhetoric styles are familiar to consumers and facilitate long-term communication of environmental change.

Until recently, art was categorized separately from communication forms. In *Art as Language*, Garry Hagberb challenges the assumption that art and rhetoric are mutually exclusive elements. When language stimuli are perceived:

a specific idea or feeling is excited in the mind of the hearer by the otherwise lifeless sign that serves as its signifier. This is strikingly reminiscent of a well-known passage of [Curt John] Ducasse: "Art is the critically controlled purposive activity which aims to create an object having the capacity to reflect to its creator, when he contemplates it with interest in its emotional import, the feeling-images that had dictated the specific form and content he gave the object"<sup>79</sup>.

In this excerpt, 'language' refers to a method of human communication, or exchange, through which an external stimulus elicits a specific idea or emotion. 'Rhetoric' then, describes the language device utilized to instigate the desired response. Since art is able to generate cognitive responses similar to reading, writing, speaking, and hearing, it must be considered a form of semiotic rhetoric.

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<sup>79</sup> Hagberb 53

Art is parallel to words within the shared idea-excitation model of meaning: “The ‘feeling-image’ of the artist occupies precisely the same place in the explanatory schema as Locke’s “idea” in the mind of the speaker”<sup>80</sup>. Through the excitation of the mind, sensations are reflected into ideas. If art is accepted as a form of semiotic communication, then its stylistic elements, characterizations, and moods must be incorporated into the category of rhetoric.

Art provides an alternative form of climate change rhetoric through which audiences can experience global-scale data and scientific discovery in common visual entertainment forms. In the chapters 3 and 4, I will analyze the efficacy of artistic rhetoric through the scope of visual and interactive art as it appears in a graphic novel, *Climate Changed*, painting, “Forces of Change,” and installation piece, “One Beat One Tree.” These visual pieces will be in conversation with literary art excerpts, from the novel: *Animal’s People*, and production art, from the videography: *An Inconvenient Truth*.

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<sup>80</sup> Locke, Hagberb 53

## Chapter 2: The Environmental Disaster Novel

*Animal's People* is a novel that explores natural disaster narratives through a chemical trauma created by a multinational corporation, the Kampani, within the economically underprivileged city of Khaufpur. The narrator, Animal, is an orphan born a few days before the 1984 Bhopal disaster, whose spine was damaged from the pollutants, leading him to walk on all fours<sup>81</sup>. Indra Sinha's novel juxtaposes concepts of ableism and valuation with larger questions of human nature, innate ability, and climate justice. Through Sinha's characterization of Animal as both human and nonhuman, he explores the capitalist system that perpetuates hedonism, human-centric decisions, and environmental exploitation. In this chapter, I will argue that Animal's desire to live outside of consumerism offers a symbolic structure through which Sinha overthrows the human and nonhuman divide.

Animal's narrative and rhetoric style diverge from most environmental justice pieces because they describe lives as inseparable from pollutants. Animal is physically crippled from the ongoing chemical residues within the city. Living through, and with the effects of an anthropogenic disaster allows Animal to speak about environmental change as motivator for overthrowing the capitalist system,

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<sup>81</sup> Sinha 1-20

which incentivized chemical destruction of Khaufpur over restoring the environment<sup>82</sup>. Sinha aptly employs Animal's nonhuman ideology to escape anthropocentrism, to narrate the tragedies of Khaufpur, and to simultaneously evaluate climate justice writing styles. Animal's consistent sacrifices of resources, money, and human identity represent an ideology effective for mitigating environmental destruction and facilitating equality.

**Animal is an Intersectional Figure between Nature and Humanity.** Sinha positions Animal within the intersectional identities of human, nonhuman, animal, and disabled individual to illustrate the shortcomings of capitalism's valuation system for organisms with, and without, monetary authority. As an individual that embodies multiple levels of power and privilege, Animal is able to simultaneously critique, opt out, and participate in the capitalist system. Like nature, Animal is outcast from humanity. Society exploits his resources, primarily stories and labor, leaving him damaged and vulnerable. Despite his categorization, Animal acts as an autonomous narrator outside of the capitalist system. His story provides a dialogue structure through which the human and nonhuman divide is overthrown, and environmental equity is demanded.

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<sup>82</sup> Sinha 190

Animal is both an environmental disaster victim and observer. He credits the chemical disaster with his physical and ideological differences from society, which lead him to concurrently identify as human and nonhuman. As an infant, Animal inhaled air vapors released during a pesticide factory fire. His development was stunted, causing his back to contort into a hunched position. Animal was forced to walk on all fours, which led him to physically resemble a quadruped rather than a human. After being teased and ridiculed for his stature, people began referring to him as 'Animal'. In an effort to discourage society's jests, Animal reclaims the name for himself and chooses to live as a beast outside of humanity's oppression. Animal's subjugation within society in combination with his unique lifestyle, which goes against both human standards and nature's evolutionary pressures, leads Animal to inhabit a category between the human and nonhuman divide. Animal's navigation of human and nonhuman spheres is coupled with his internal struggle to label his identity for himself and the world. Animal was born as an able-bodied human and was transformed by anthropogenic environmental stressors. The people of Khaufpur share this experience, but they label Animal as disabled and themselves as damaged. It is easier for Animal to accept himself as being transformed by the natural disaster, to embrace living as an animal, rather than to be seen as a lesser human. Living through, and with the effects of, chemical disaster allows Animal to speak about environmental change as motivator for overthrowing capitalism.

The allegorical figure of Animal provides a first-person monologue for the Khaufpur ecosystem. Animal is as close to a polluted natural being as Sinha can represent while maintaining focus and dialogue with the Khaufpur citizens. Animal's bodily environment is tainted by anthropocentric poisons, leading to disastrous results; yet, unlike the environment, Animal can vocalize these injustices. Through Animal, the audience is in conversation with the environment, its destructors, and its victims. Sinha represents Animal as an almost posthuman figure that is advocating for both reactionary, remediation of chemical spills, and preemptive care for the environment, living amongst the biosphere rather than exploiting it.

**The Human.** Throughout his narrative, Animal explores and relays the semantics of four concepts to the eyes: human, nonhuman, animal, and disability. Animal positions himself as a natural figure protesting the unnatural. His name, Animal, aligns with the ecological kingdom and his condition illustrates the unnatural consequences of anthropogenic environmental change. Animal's unique position as both genetically human and functionally abnormal allows him to critique and glorify humanity's responses to environmental change, without explicitly categorizing himself within or outside of the schema. For Animal, being human encompasses more than having human genetic lineage. Animal is the offspring of human parents, but he classifies himself as an animal because of his

physical and ideological differences. Animal's posture, movement patterns, and diet do not fit within the Khaufpur society. Animal walks on all fours with his ass as the highest point of his body, rather than his head. He moves with a bounding gait instead of a stepwise stride and "roll[s] over like a big dog, like Jara does to have her belly tickled"<sup>83</sup>. When Animal is hungry, he rummages in dumpsters for scraps and approaches restaurant customers for droppings, as an alternative to begging like his fellow impoverished neighbors. Animal considers his uncivilized behavior nonhuman. His actions are outside of the socially accepted standards and he communicates with stray animals, scavengers, and the uncanny. Animal asserts his dominance through fighting, scent, and unrestricted speech. He competes with animals for territory and meals, but he shares conversations and empathy with preserved fetuses in glass jars<sup>84</sup>. Animal uses behavioral differences and his nonhuman companions, like Jara, to justify his position outside of humanity. Since his activities are more in line with the Khaufpur stray cats than the people, he self-identifies with the scavengers, which are both animals and nonhumans. Animal's behavioral characteristics are in line with the urban animals' adaptations to living with society, therefore he considers himself an animal. Animal uses his nonhuman characteristics to seek refuge from the societal oppressions imposed upon him by the capitalist system. He salvages resources and forfeits income to

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<sup>83</sup> Sinha 81

<sup>84</sup> Sinha 58-59



remain a part of the natural kingdom, rather than prioritizing money as his Kampani poisoners did.

Animal's critique of capitalism, as the cause of environmental disaster, shapes his communication with the nonhuman. His fits of madness cause him to speak to inanimate, damaged, and deceased relics of the chemical explosion: he hears the cries of the kha in the jar<sup>85</sup>, listens to the plants growing inside the factory<sup>86</sup>, and argues with the poisonous madness flowing through his body<sup>87</sup>. Animal blames the American owners who moved their pesticide company to Khaufpur for cheap manufacturing and, after its destruction, "refused to come [pay for damages]"<sup>88</sup>. He watches the "silent war" as "Mother Nature tries to take back the [poisoned] land"<sup>89</sup>. Like the insects that the poisons were designed for, the people of Khaufpur are not as resilient against the environmental contamination. In an act of rebellion, Animal chooses when he will participate in and opt out of capitalism. Like an animal, he scavenges for basic necessity, but he works in the bastis to try to bring the Kampani to court<sup>90</sup>. Animal chooses to participate in capitalism for justice rather than money. He wants the Kampani to monetarily compensate the people of Khaufpur, despite recognizing that settlement will not fix the harm done. The Kampani destroyed Khaufpur and no

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<sup>85</sup> Sinha 58-59

<sup>86</sup> Sinha 31-32

<sup>87</sup> Sinha 44-45

<sup>88</sup> Sinha 34

<sup>89</sup> Sinha 31

<sup>90</sup> Sinha 32

one can fix it, but Animal still wants them to pay for it out of principle<sup>91</sup>. The Khaufpuris deserve justice even if the environment, and his body, are permanently damaged.

Animal can critique and manipulate capitalism because of his position as a nonhuman outside of the capitalist economy. Animal's economic understanding is greater than animals, but he considers himself a stranger to the economy. Animal is not invested in the court cases for the potential settlement money they will bring. He was paid well by Zafar and in his prior job in court as a "mystery defendant" against the Kampani<sup>92</sup>, but he chooses to "live without [spending money]"<sup>93</sup>. Animal begs, steals, and cons others to avoid participating in the workplace. Within "garbage dumps...[he] forage[s]" and occasionally finds vulture "eggs" to eat (248). Animal believes that people "don't need money" (242). He is paid by Zafar, but hardly spends it. He chooses not to spend money, but he offers his services against the Kampani for which he is paid. Animal intentionally positions himself outside of the cyclic nature of capitalism, but he is unable to subsist entirely as an animal living within nature.

Capitalism allows Animal to seek justice against the Kampani, but Animal blames capitalism for the environmental destruction that he is fighting. The possibility of court settlement places an economic threat on the Kampani, but

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<sup>91</sup> Sinha 69-70

<sup>92</sup> Sinha 51

<sup>93</sup> Sinha 242

Animal does not intend to take any settlement money to fix his back. Animal cannot rectify his situation without participation in the economy, but he cannot bear to contribute to the system that has damaged his body and environment. As a result, he is reluctant to engage in monetary exchange.

**Undermining Valuation through Functional Ability.** Sinha utilizes direct reference to anatomical landmarks and narrator agency to undermine socioeconomic valuation hierarchies. *Animal's People* is narrated by Animal through a series of retrospective cassette tapes to an audience that he calls “eyes”. Just as Animal was named for his twisted back, he names the eyes for their inability to see. Like Animal, the eyes are physically impaired. The audience can only perceive what Animal narrates through his words and their own mental conceptualization. The eyes are blind to Animal’s world aside from reading sentences transcribed onto the page. By removing the eyes’ agency, Animal places himself and the audience at more equitable experiential levels. Consequently, ability and disability become functionally relevant terms. At any moment, the audience can conceptualize certain aspects of Animal’s experience, and is unable to process others. Animal is in control of the audience's rhetorical environment, and consequently their ability to interpret the story, just as anthropogenic environmental pollution gave Animal his (dis)abled status.

In the city, where structures are designed for bipedal people, Animal is at a disadvantage. In the poisoned forest, where creatures walk on all fours, Animal is content: “This [forest] is my kingdom, in here I am the boss”<sup>94</sup>. Animal’s experiential feelings of (dis)ability reveal a binary between natural and industrial landscapes. Animal, an allegorical representor of nature, is uncomfortable living within cities. Likewise, the people of Khaufpur stay outside of the forest until they need resources. Alteration of the landscape, from natural to industrial, or the reverse, enables and disables organisms. Consumption of environmental resources, and cyclitic restoration, creates a dynamic ability narrative between all beings, which is distinct from humanity’s current notions of ability. Experiential ability is a competitive force that infiltrates Khaufpur’s capitalist valuation structure. Within this society, disability is a static term that describes ‘consistent inability’. Due to his back, Animal is placed at the bottom of the socioeconomic hierarchy and mocked for his inability. Crip Theory pushes against these notions. It rejects disability hierarchies, during which varying levels of value are placed upon different disability groups over others, arguing that this valuation system results in the fragmentation of communities<sup>95</sup>. Animal embodies Crip Theory through his descriptions of himself as situationally capable and incapable. For example, Animal is able to climb trees better than people can, but he is unable to drive cars. Depending on the situation, Animal displays different levels of ability

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<sup>94</sup> Sinha 30

<sup>95</sup> Fries; Kaufman; Longmore; McCruer; Russel; Zames

just as, depending on the environment, organisms display various skills and issues. The cyclic notion of ability, and consequent perceived worth, redefines the audience's notions of capitalist valuation and challenges the notion of a 'shared' biosphere. If humanity continues to judge worth based on ability, and abilities are tied to environments, then a Cthulucene coexistence of humans within nature may be problematic and unreachable. Sinha suggests that prior to living within nature, we must change the conceptions surrounding perceived worth.

**Evaluation of Current Rhetorics.** Animal's nonhuman ideology allows him to narrate the tragedies of Khaufpur while simultaneously evaluating common climate justice writing styles. On the first cassette tape, Animal describes opposing genres of climate justice reporting and their impacts on action. Sinha differentiates his novel from other stories through Animal's intersectional identity. Animal begins by casting himself outside of society: "I no longer want to be human"<sup>96</sup>. Following this self-segregation, his dialogue is crass, impolite, and bestial. His references come from madness, sexual fantasy, and colloquialisms: "I'm not clever like you. I can't make fancy rissoles of each word. Blue kingfishers won't suddenly fly out of my mouth. If you want my story, you'll have to put up with how I tell it"<sup>97</sup>. Animal indicates his literary proficiency

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<sup>96</sup> Sinha 1

<sup>97</sup> Sinha 2

through his allusions to dinner parties and Hopkins' kingfishers, prior to distancing himself from previous environmental narratives. Animal chooses to ostracize himself from society to escape the human qualities which he loathes and blames for Khaufpur's environmental demise. He describes a foreign journalist as if he were visiting the zoo: "You were like all the others, come to suck our stories from us, so strangers in far off countries can marvel there's so much pain in the world"<sup>98</sup>. Animal uses the second person to distance himself from the root of the problem, instead implicating the journalist and his objectification of the Khaufpuris. In the eyes of the journalist, Animal is a specimen, an abnormality that is repeatedly ogled, recorded, and reported. Animal is studied and objectified as a scientific anomaly, but the conditions of Khaufpur remain unchanged.

Rather than fit in with the humans that point out his flaws, Animal distances himself from ridicule while exposing the capitalist corruption that he loathes. The journalist asks Animal to record his story on a series of cassette tapes in exchange for profit. He proposes that Animal sell himself to society in exchange for financial gain. The journalist masquerades as a humanitarian, but his requests perpetuate an unsustainable model. Khaufpur supplies the world with tales of environmental catastrophe, court failings, and inadequate financial compensation. In exchange, authors pay interviewees negligible sums and report that third world countries are suffering. Sinha criticizes the current reactive

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<sup>98</sup> Sinha 5

environmental narrative and assistance programs through his frequent accounts of the visiting journalists. Khaufpur is repeatedly reported on and visited, but for twenty years it has incited sympathy without receiving aid.

Capitalism provides a convenient escape from society for journalists and onlookers alike. Journalists can travel to Khaufpur, report on stories of victims, and feel morally just, all the while earning a profit. Visiting and transcribing acts as their charitable donation. Consumers buy the most recent accounts of environmental disaster victims, perhaps send donations, and feel good about themselves because they are globally informed. Capitalism facilitates a cycle through which journalists pay minimally for information and consumers reward journalists, rather than disaster victims, for their tales. Money is exchanged from victim to journalist and from reader to journalist, but there is minimal motivation for readers to give directly to victims. Readers do not develop a connection with the victims or their damaged environments. Khaufpur hosts many visiting journalists, but their narratives report the same disaster stories. The Khaufpur narratives are not unique. They are repeated frequently and hardly changed: Animal asks, “What should I talk about?” and his translator responds, “[the] usual, what else?”<sup>99</sup>. There is no incentive for Khaufpuris to tell new stories because their pay and outcome are always the same.

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<sup>99</sup> Sinha 4

**A Different Type of Narrative.** Animal attempts to change the cycle of ineffective climate narratives through his autonomy as an author. Animal gains autonomy by leveraging his usual story and identity. To evade previous structures of financial and foreign dominance, Animal argues that his position merits novelty. Since Animal does not fit within the stereotypical privileged human author category, he records his story with linguistic freedoms and in the absence of societal expectations: “With no Chunaram to tell you what I was saying, I could say anything”<sup>100</sup>. He can insult the journalist, the system, and his situation without repercussions because there is a language barrier. In his untranslated natural state, Animal finds refuge and the journalist, in turn, receives blunt honesty: “Today he comes saying he has never found such honesty as in that filth of yours”<sup>101</sup>. Animal’s brash language is juxtaposed with the unrestrained effects of the Kampani poisons. He victimizes himself by acknowledging his own bestial madness and its anthropogenic, polluted roots. As the audience questions its narrator’s reliability, Sinha implicates capitalism as the culprit. The polluted environment and capitalist narrative enterprise appear to drive Animal mad, but his story is, although brash, is more open and informative than the journalists that visit and alter Khaufpur’s stories. The same globalist system that brought the Kampani to Khaufpur for cheap prices demands a thrilling story to maintain its

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<sup>100</sup> Sinha 5

<sup>101</sup> Sinha 7



consumers' attention. Animal must be unique, his linguistics unexpected, and his narrative unheard to capture an audience. To accomplish these criteria, Animal tells his audience the narrative of his life, rather than the tale of Khaufpur. He details stories of jealousy, promiscuous spying, and street scams, among other accounts, to hold the audience's attention and gain credibility as an entertaining, exposed narrator.

Animal is not inherently condemnatory to narratives, nor does he despise the journalists who enter Khaufpur; rather, he is against the capitalist mentality that drives them there. He detests the marketable human spectacle and capitalist mentality that draws reporters from foreign countries: "I think of this awful idea. Your eyes full of eyes. Thousands staring at me through holes in your head. Their curiosity feels like acid on my skin"<sup>102</sup>. While Animal makes a conscious choice to separate himself from human society, the rest of the Khaufpuris are unmerited exhibits. Their capacity to endure environmental tragedy, socioeconomic hardship, and poor living conditions makes them a point of interest and comparison. Journalists flock to the area looking for a guaranteed report and fast income. Foreigners like to hear about the people of Khaufpur because they are lower on the capitalist ladder than their viewers. Animal insists that people enjoy

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<sup>102</sup> Sinha 7

“marvel[ing at] pain in the world”<sup>103</sup>. The foreign visitors’ elevated position on the capitalist ladder affords them luxuries and special treatment from the locals:

People bend to touch his feet, sir, please sir, your help sir, sir my son, sir my wife, sir my wretched life. Oh how the prick loves this! Sultan among slaves he’s, listens with what lofty pity, pretends to give a fuck but the truth is he’ll go away and forget them, every last one. For his sort we are not really people. We don’t have names<sup>104</sup>.

The people of Khaufpur are reduced to their actions and environmental hardship. They are beggars, disabled, nameless, and pitied. Bringing these poor individuals into the globalist capitalist system seems beneficial but doing so actually disadvantages all that are involved. Animal highlights capitalism’s inequitable gains through the purchase of his story: “On your side [referencing the journalist] it’s shame because you know you’re paying shit for something priceless [the story], Chunaram has no shame, his silence is delight, he has taken a fortune for a thing he considers worthless”<sup>105</sup>. The journalists pay minimally for stories to share with the world, while the translators devalue and generalize the accounts. All of the Khaufpur narratives speak of suffering, therefore they are all labelled as equally worthless to those who live in Khaufpur. There is no demand for tales of grief within Kaufpur because these narratives are in excess, but in America, where hardships are comparatively less severe, journalists can sell tales of misfortune, poverty, and neglect. To gain respect within and outside of Khaufpur, Animal

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<sup>103</sup> Sinha 5

<sup>104</sup> Sinha 9

<sup>105</sup> Sinha 10

shifts the perspective of his audience, claiming that his narrative is unique. He is the only animal and therefore his story is rare.

**Animal's Story is Unique.** Animal's story is unlike most reports of climate disaster. In "Popularity-driven science journalism and climate change: A critical discourse analysis of the unsaid", Katarzyna Molek-Kozakowska analyzed the rhetoric of popular science reports using a Critical Discourse Analysis (CDA) program. The study found that:

[Most written environmental disaster] coverage relies on threat frames, privileges novelty and the timeliness and impact of climate science, avoids responsibility and adaptation frames, and endorses the so-called progress narrative...this may forestall social and personal mobilization by placing trust in science institutions and technologies to confront the crisis<sup>106</sup>.

The journalist that approaches Animal for his story craves many of the attributes listed above. Animal is rare because of his stature and his colloquial, crass dialogue provides a novel approach to Khaufpur's story. The journalists reporting on Khaufpur approach their narratives without reader responsibility and they describe the eminent court proceedings. They capitalize on Khaufpur's tragedies through tales of disability. The journalists evoke sympathy. Readers learn about the disabled, but they do not see them as humans that merit assistance. Animal's narrative is distinct from the common environmental disaster reports. His narrative focuses on living with environmental change and pursuing justice through demolition of systemic, capitalist class divides. He omits eminent threats

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<sup>106</sup> Molek-Kozakowska 73

of poison, instead speaking of poverty and hunger, which have developed from undistributed wealth in Khuafpur, and allowed the Kampani to desert their chemical destruction. Through his narration of daily occurrences, Animal pushes for resolution of current systems of power, rather than the night of the poison. Animal clearly holds the Kampani responsible and his life is a daily adaption to the consequences of the poison. Animal does not falsify progress: his back has not improved, the Kampani have avoided court for twenty years, and the town desperately needs medical attention. Sinha intentionally diverges from common environmental reporting strategies in hopes that a different dialogue strategy will facilitate progress.

Sinha encourages audience investment and climate action in Khaufpur through his characters. Animal's narrative portrays character attributes while simultaneously discussing their environmental disaster experiences. Rather than describing stories of tragedy, Animal speaks about everyday life. He describes character actions, which are inherently affected by the poisons, but not characterized through them. Animal recalls his early encounters with Somraj, a companion of Zafar, through music. The audience learns of the Somraj's appreciation for sounds, before hearing his diagnosis: "Music does not all have to be made with strings and bows and pipes, it can also be made by drops of rain or wind cut by a leaf"<sup>107</sup>. Animal is mesmerized by Somraj's knowledge of the

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<sup>107</sup> Sinha 48

subject. He allows readers to be immersed in Somraj's thought process, prior to exposing that Somraj's voice was ruined by the poisons. Somraj can listen attentively but he can no longer sing. The audience, rather than attenuating this fact, is repeatedly reminded of the tragedy as Somraj provides daily voice lessons to students but cannot vocalize his own songs. Like Somraj, Animal listens to endless disaster narratives without opportunity to improve Khaufpur. Sinha encourages his audience to remain invested in the disaster narrative through well-developed characters with ongoing struggles. He implores the audience to act through stories of tangible, repetitive inaction.

**Undermining Capitalism.** Animal uses his apparent disability as a strength; because his back is twisted, he is unique, valuable, and financially demanded. Journalists will seek out and pay Animal for his story because he was affected differently from the rest of the Khaufpuris. Animal shares similar hardships to the other Khaufpur people, who also have health ailments from the poisons, but his narrative is told more vehemently. Animal is in command of his story: "Stupid eyes, they don't know what the mist does to the people, they don't know what happens next. They know only what I tell them"<sup>108</sup>. Animal permits the audience to hear his story solely through his voice and the aural physicality that accompanies his words, their pronunciations, and arrangement. The capitalist

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<sup>108</sup> Sinha 13

consumers are held captive to his method of narration if they want Animal's story. The buyers, in the form of the journalist, must wait for Animal to speak into the cassette tapes. Animal proposes that "if you act powerless, you are powerless, the way to get what you want is to demand it"<sup>109</sup>. He is selling his story but retains the right to tell it as he chooses. In doing so, Animal eliminates all other competition. There are Animal's words or no words at all. The journalist is restricted to publishing Animal's story as it was recorded; and the other Khaufpur disaster narratives lack the autonomy and insight that Animal's tale provides. Animal captivates the journalist and the audience through his ultimatum.

Despite Animal's attempts to conquer the capitalist system, we "never can hear [his] voice, nor can [he] know what pictures [we] see"<sup>110</sup>. Animal is able to manipulate the system, but he cannot escape the capitalist consumer model. People will still look for appealing, understandable, and consumable narratives. Animal doesn't necessarily cater to these expectations, but his audience is still dependent upon consumption. Animal's knowledge and experiences are passed on for the price of entertainment; but his interspersed critiques of capitalism and society are unanticipated. Ultimately, Animal sells his story at the cost of others' interpretation of it. He chooses to spread the crimes of the Kampani throughout

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<sup>109</sup> Sinha 19

<sup>110</sup> Sinha 21

the world, but in doing so, he subjects Khaufpur to global socioeconomic judgement and environmental criticism.

**Instilling Action through Resignation.** Animal hopes that his narrative will inspire ecological restoration and medical assistance, but his narrative describes incessant years of inaction. Environmental reporting provides Khaufpur with consistent journalist-driven income, occasional humanitarian initiatives, and global pity. Despite the poisons attracting journalists to the area, no one has financed or even proposed a plan for removing the factory waste.

Animal's narrative and rhetoric style diverge from most environmental justice pieces because they describe lives as inseparable from the pollutants.

Animal defines himself through the present transformation that his environment has caused rather than what he once was:

I used to walk upright, that's what Ma Franci says, why would she lie? It's not like the news is a comfort to me. Is it kind to remind a blind man that he could once see? The priests who whisper magic in the ears of corpses, they're not saying, "Cheer up, you used to be alive." No one leans down and tenderly reassures the turd lying in the dust, "You still resemble the kebab you once were..." How many times did I tell Ma Franci, "I no longer want to be human," never did it sink in to that fucked-up brain of hers, or maybe she just didn't believe me, which you can understand, seeing it used to be when I caught myself-mirrors I avoid but there's such a thing as casting a shadow- I'd feel raw disgust<sup>111</sup>.

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<sup>111</sup> Sinha 1-2

Animal is resigned to a life amongst the poisons, which he blames for his madness and stature. He likens the news of his transformation to Haraway and Hogness' post-humanist compost pile, but rather than accepting the metamorphosis, he begrudgingly subsists. The deterioration of his body was the result of anthropogenic harm inflicted upon him, rather than the aftermath of his own consumption decisions. Animal cannot change his situation.

Although people created his demons, Animal does not think people are capable of fixing him and the larger problem in Khaufpur. Animal's acceptance of his inequity is a leading motivator for the audience to listen to and contemplate solutions for Khaufpur. Animal does not narrate within a fatalist perspective. He does not say that Khaufpur can't change, instead, he says that people won't change. The Kampani refuses to come to court and the people of Khaufpur are stuck reminiscing about times before the poison. The guilty and the innocent should share the same environmental restoration goal, but both sides are stalled by twenty years of capitalist-derived inaction. The Khaufpuris say there is no money for poison cleanup, and the Kampani refuse to return to a financial lawsuit.

**Environmental Change Uncertainties.** Animal believes that his condition was caused by a chemical fire in Khaufpur, but outsiders are not always convinced. Modern medicine points towards poor living conditions, unsanitary practices, and poverty as common causes of health problems. Animal attributes the



townspeople's health ailments to the same night: "When something big like that night happens, time divides into before and after, the before time breaks up into dreams, the dreams dissolve into darkness"<sup>112</sup>. Unfortunately, the people of Khaufpur do not recall specific details of the past, they just remember that it was better than the present. The chemical explosion is easily blamed for acute injuries endured during the night of the explosion, but chronic health problems' origins are more difficult to identify, especially when people don't remember or have differing start dates. The lack of observations and general imprecision surrounding medical cases in Khaufpur makes it difficult to identify causality. Scientists need accurate data and minimal variables to determine correlations. Khaufpur's long-term pollution history, ranging from chemical fires to biohazardous waste, makes Khaufpur uncondusive to studies of causality.

*In Don't Even Think About It: Why Our Brains Are Wired To Ignore Climate Change*, George Marshall conjects that people's "interpretation of event[s] largely depends on their views on [environmental] change"<sup>113</sup>. This cognitive predisposition refers to confirmation bias, or the "tendency to actively 'cherry-pick' the evidence that can support our existing knowledge, attitudes, and beliefs"<sup>114</sup>. Marshall's text suggests that people who believe that the Khaufpur environmental disaster could cause health problems, would be predisposed to seek

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<sup>112</sup> Sinha 14

<sup>113</sup> Marshall 15

<sup>114</sup> Marshall 14

evidence that supports this assumption, while those that disagree would find contradictory explanations for health ailments. Marshall suggests that these understandings are further complicated by another form of bias, availability bias, that compels people to make choices based on content that is readily at hand. This can be just as misleading as other forms of confirmation bias<sup>115</sup>. Khaufpur outsiders could easily witness the poor living conditions of the town and label them as the culprit for disease. In contrast, the Khaufpur people, who consider their lifestyles normal, may be more likely to label the factory poisons as the cause of their ailments. Without evidence to support either claim, given the lack of medical facilities and testing, the Khaufpuris and their visitors are free to embrace whichever claims they align with. This arbitrary assumption of information leads to indecisive court proceedings and inaccurate medical treatments, perpetuating the town's pre-existing problems.

**Changing Environments Shift Normality.** The colloquial rhetoric and social structures of Khaufpur are shaped by the chemical fire and its fallout. Disabilities are a prevalent, and health ailments conversations are common. The magnitude of the chemical fire and its impact leads ableism to take a new form. People with respiratory conditions are common. In an environmentally sound area, these medical conditions would be labelled as disabilities, but in Khaufpur, they are

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<sup>115</sup> Marshall 15

normal. Animal is viewed as disabled because of his mobility issues, but his respiratory system, as far as we know, is fine. In Khaufpur, environmental catastrophe has changed the standards of medicine. All illnesses and ailments that exhibit similar symptoms to the chemical fire affects, are labeled as such but in court there is doubt:

Thousands of people say that for twenty years their health's been ruined by [the] poisons. How do you refute this? We say that the situation is not as bad as alleged, that not so many people are ill, that those who are ill are not seriously ill, plus of whatever illnesses there are, most are caused by hunger and lack of hygiene, none can be traced back to that night or to [the] factory<sup>116</sup>.

There is an expectation that the lower class will struggle with poison and that the financially privileged will receive medical assistance, inhabit unaffected areas, and flee from contamination. The problems caused by an upper-class demand for better bug spray chemicals have led to a physically lower lower-class.

Evolutionary fitness for survival is tainted by humanity's self-selection against the poor. Since Khaufpur is an impoverished city with few resources to resolve the pollution and medical ailments, its people are subjected to harsh environmental conditions and lower qualities of life.

Sinha critiques western medicine and its attempts to fix the anthropocentric impacts of environmental change through the character of Elli. Elli is an American doctor that comes to Khaufpur to treat the symptoms of the

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<sup>116</sup> Sinha 69

Khaufpuris. While she recognizes that landscape is chemically poisoned<sup>117</sup>, and therefore that the Khaufpuris will continually be exposed to the poisons, she still attempts to cure the people of the town, who continue to stay ill. Sinha demonstrates the futility of fixing the effects of environmental destruction, rather than the environment. The Khaufpuris' chronic health conditions cannot be treated until the chemical poisons are removed from environment.

For twenty years, the town has tried to receive financial compensation from the Kampani factory owners, but to no avail. The Kampani refuse to appear in court, leading the Khaufpur people to be increasingly polluted with leaching groundwater pesticides. They cite medical uncertainties, and under conformational bias, tie the Khaufpuris' medical ailments to their poor hygiene and living styles. Just as the Kampani left nature to fix itself, the Khaufpur people are expected to do the same. They are treated as nonhumans, fit to be exploited and forgotten. Their town provided cheap space and labor, a delay in legal allegations, and no financial burden. When the factory exploded, the Kampani left Khaufpur without worry of repercussions.

The Khaufpur people's anomalous medical conditions and stories are disregarded just as their living space was contaminated by the Kampani. Khaufpur is only given respect in court after they demand that "the Kampani bosses come...[and provide an ultimatum] that the Kampani's assets may be

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<sup>117</sup> Sinha 270-278

attached”<sup>118</sup>. Through interactions with the Kampani and outsiders, Khaufpur develops juxtaposing concepts of valuation. Capitalist elites label Khaufpur people as disabled nonhumans. Their impoverished lifestyles coupled with crippling medical conditions lead them to be classified outside of humanity’s ‘civilized’ economic system. They are treated with the same deprived position as the natural resources that surround them. This form of equal treatment between environment and its inhabitants, contrary to Haraway’s suggestions<sup>119</sup>, dehumanizes its inhabitants rather than providing agency to the ecosystem. Instead of refuting this valuation structure, Khaufpur perpetuates the capitalist social system. The town displaces responsibility from the townspeople to the rich elite and outsiders, who exhibit socioeconomic and political superiority. The Kampani, courts, and activists, all of which are outsiders, hold the economic power to improve environmental conditions.

In *Anthropocene or Capitalocene: “The Rise of Cheap Nature”*, Jason W.

Moore argues that environmental decisions are intrinsically linked to social relations through the capitalist system:

And once we begin to ask questions about human-initiated environment-making, a new set of connections appears. These are the connections between environment-making and relations of inequality, power, wealth, and work. We begin to ask new questions about the relationship between environmental change and whose work is valued—and whose lives matter. Class, race, gender, sexuality, nation— and much, much more—can be understood in terms of their relationship within the whole of nature, and

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<sup>118</sup> Sinha 190

<sup>119</sup> Haraway 36

how that nature has been radically remade over the past five centuries. Such questions unsettle the idea of Nature and Humanity in the uppercase: ecologies without humans, and human relations without ecologies<sup>120</sup>.

Sinha illustrates this paradigm through the perpetual class inequalities within the Khaufpur disaster survivors, suggesting that outsiders determine the quality of the environment. The social hierarchy consists of Khaufpur outsiders and insiders, victims and escapees, and economically privileged and poor individuals. Outside humanitarians, who bring money and economic stimulation, are at the top of the social structure, followed by the various financial levels. Physically disabled members, animals, and the natural landscape are at the bottom and consequentially, receive the least aid.

**Reclaiming Damaged Systems.** Animal asserts his dominance against capitalism through his reclamation of his altered identity and environment. The poisons have affected the natural and urban environments of Khaufpur: the health of the city, organisms, and social systems have deteriorated. Under Zafar's guidance, Animal dedicates his time to fixing crises that arose after the chemical explosion. People are unable to work and consequentially, financially unstable. The city's capitalist system has suffered. Money is distributed in excess of unaffected, working survivors and there is no compensation for injured people. The city economy has changed and as a result of financial burdens and increased

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<sup>120</sup> Moore 91

health conditions, the interpersonal dialogues have transformed. Animal is treated with extreme disrespect due to his stature. When Animal asks Zafar to call him by his name, Zafar is uncertain of its origin and intent. It is unclear whether the name provides justice or malice. Upon learning that the name ‘Animal’ is a token of ableism, the following debate ensues:

[Animal] “This I tell to Zafar, who replies that he dislikes teasing of the disabled. Says he [Zafar], “You should not think of yourself that way, but as especially abled.”

“What’s especially abled?”

“It means okay you don’t walk on two legs like most people, but you have skills and talents that they don’t.”

“How do you know?” I’d not told him about my voices.

“Because it’s true of everyone,” says Zafar. “We just have to find out what you’re good at. Plus you should not allow yourself to be called Animal. You are a human being, entitled to dignity and respect. If you haven’t a name then this is a great opportunity for you. You can choose your own. Jatta for example or Jamil, go ahead pick one, whatever you like, we’ll call you that henceforth.”

‘You’re wrong’, I’m thinking. Let me be as I am, like Nisha does, you would never say such things. I give Nisha a look, but she’s smiling at him.

“My name is Animal,” I say. “I’m not a fucking human being, I’ve no wish to be one.” This was my mantra, what I told everyone. Never did I mention my yearning to walk upright. It was the start of a long argument between Zafar and me about what was an animal and what it means to be human<sup>121</sup>.

Animal reclaims his identity as a nonhuman individual in response to being ostracized. He seeks to be one with nature, despite his ironic position as an unnatural abnormality. His twisted back and quadruped stature are the side effects

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<sup>121</sup> Sinha 23-24

of human-made poisons gone awry, while his nickname 'Animal' is derived from stressed social relationships and financially-driven food foraging behaviors. In choosing to go by 'Animal', he rebels against both the creators of his medical abnormality and those that have persecuted him for it.

In contrast, Zafar, a comparatively well-educated individual, discourages Animal from using the term disabled. Instead, Zafar suggests that he apply the term 'especially abled'. This term is entrenched within the competitive ideologies of capitalism. To be especially abled, Animal must determine what skills he has that make him better fit than others. Zafar asks Animal to rationalize his medical condition and its comparative worth in order to avoid feelings of segregation and alienation. The onus is put on Animal to determine "what he's good at" and to rename himself to gain "dignity and respect." Zafar sees animals as lower than humans. He places value on humanity's skills, names, and innate entitlement. Animal wishes to receive the same respect as the humans surrounding him, but he has no desire "to be one."

When given the chance to choose his own 'human' name, Animal refuses. He is content with his place outside of societal norms and practices. In principle, Animal does not value himself above or below others. He declines the capitalist-driven competition mindset. In detaching himself from this ideology, Animal enjoys the benefits of an internal code of conduct. Farouq tersely acknowledges this preference, saying, "I'm an animal, always you're bleating. I'm an animal, I



don't have to do like the rest of you, laws of society don't apply to me because I'm such a fucking animal"<sup>122</sup>. In response, Animal retorts, "wasn't me who gave myself the name of Animal"<sup>123</sup>. By reclaiming his name, Animal experiences a unique form of privilege: he is immune to societal norms and systemic structures of power. Animal prescribes his own code which can easily undergo revision. Animal can oppose capitalism while profiting from selling stories to it, testify against the Kampani but memorialize their actions in the story of his name, and live as an animal within the factory's jungle. This tactic of utilizing capitalism, rather than participating in it, separates Animal's narrative from others. He actively benefits from capitalist systems without intending to increase consumption of his narrative, profit from settlement, or rely on housing within the factory.

While Animal's name acts as a blatant social and systemic protest, his abode within the Kampani factory is more reclusive. Animal chooses to live within the Kampani's abandoned factory. The poisons that the Kampani left behind were intended to stop natural processes from taking place, but just as Animal survived the chemical explosion and his debilitating injury, nature has taken the space, and Animal has claimed it:

Look inside, you see something strange, a forest is growing, tall grasses, brushes, trees, creepers that shoot sprays of flowers like fireworks. Eyes, I wish you could come with me into the factory. Step through one of these

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<sup>122</sup> Sinha 87

<sup>123</sup> Sinha 87

holes, you're into another world. Gone are city noises, horns of trucks and autos, voices of women in the Nutcracker, kids shouting, all erased by the high wall. Listen, how quiet it's. No bird song. No hoppers in the grass. No bee hum. Insects can't survive here. Wonderful poisons the Kampani made, so good it's impossible to get rid of them, after all these years they're still doing their work<sup>124</sup>.

Sinha juxtaposes the knowledge of the factory's ominous pollution with its visual interior which resembles more of a natural oasis. A jungle of flora grows and disguises the danger within the factory, but it cannot remediate the chemicals lying within the space. Animal takes the place of the fauna. Sinha parodies restoration ecology as Animal and indigenous plants recolonize the factory. Their residence within the factory is a superficial solution. Life within the factory conceals the dangers of the poisons, which have caused Khaufpur's destruction. Descriptions of the factory appear to have fixed the root of the issue; life is abundant, and the factory appears to have been overrun by nature. Unfortunately, reclamation of the space is not an affective remediation option. The chemicals continue to infiltrate the ground water, creating an illusion of pollutant confinement, but continuing to wreak havoc on the environment.

The factory exhibits a Chthulucene<sup>125</sup> microcosm in which humans, posthumans, and nonhumans live alongside one another. The Kampani's poisons are human, they were developed and produced by humans to eradicate the nonhuman. Even after the Kampani have fled, their human impact lives on within

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<sup>124</sup> Sinha 29

<sup>125</sup> Haraway 34-77

the factory and beyond the building as it leaches into the groundwater. Animal's disaster habitat is a superficial reunion between the humans and their natural environment, but Animal's identity complicates this reading. The plants and Animal are representative of the nonhuman. They have reclaimed the territory as their own, but the poisons continue to alter them. Animal's mentality however, is more representative of posthumanism. He chooses to inhabit the space that led to his physical and ideological transformation. Animal opts for a personal narrative ridden with deterioration. He is a composting figure, whose brain and body decay with the environment, spurring fits of madness. The pollutants drag his back down, pulling Animal closer to the decomposing ground and its inhabitants. In this state of decay, Animal transcends the human, nonhuman, and posthuman.

**Nature vs. the Economy.** Sinha parallels the struggle between nature and the factory chemicals with the poison court case battle against the Kampani with: "Look throughout this place a silent war is being waged. Mother Nature's trying to take back the land. Wild sandalwood trees have arrived, who knows how, must be their seeds were shat by overflying birds"<sup>126</sup>. Just as Zafar, Animal, and the other activists are waging war against the Kampani's assets and reputation, mother nature is steadily sieging the factory and returning it to its prior ecological state. Perhaps Sinha utilizes this parallelism to highlight capitalism's symbolic

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<sup>126</sup> Sinha 31

influence. The Kampani are seen as privileged, upper class, educated Americans. They are at the top of the capitalist system. Their actions merit high annual salaries and positions of power. In contrast, the people of Kaufpur are viewed as expendable resources. They are at the bottom of the capitalist system, with almost no financial involvement. The injured Kaufpurians are viewed by the Kampani as nonhuman. They are equal in value to the damaged ecosystem. There is no monetary difference. Their identities, under the influence of capitalism, are indistinct. The Khaufpuris' lives and suffering are devalued and unacknowledged. They hold the same position as nature in the globalist economy. While Animal elects to be categorized as nonhuman, the Khaufpuris have no choice. People visit to utilize their resources, but Kaufpur is excluded from the benefiting elite.

When Elli comes to Khaufpur, Animal assumes that she will treat people the same as she would in America. As a humanitarian doctor with a free clinic, the Khaufpur people are instantly suspicious of her. They worry that she would treat them as specimens, diagnosing their ailments to report to and support the Kampani in court. After spying on Elli for Zafar, Animal thinks she was better than Khaufpur's other visitors, but even Elli sees the people of Kaufpur as lower and distant. Their lifestyles and living conditions alarm her:

Elli says, 'this whole district looks like it was flung up by an earthquake.'

[Animal] On hearing Elli speak this word, *earthquake*, something weird and painful happens in my head. Up to that moment this was Paradise Alley, the heart of the Nutcracker, a place I'd known all my life. When

Elli says *earthquake* suddenly I'm seeing it as she does. Paradise Alley is a wreckage of baked earth mounds and piles of planks on which hang gunny sacks plastic sheets, dried palm leaves<sup>127</sup>.

When Animal experiences Elli's perception of Paradise Alley, he sees its expendability in comparison to America. The area's rundown atmosphere contributes to its devaluing. Yet, Animal recognizes that Paradise Alley's aesthetics are a product of disability. The city is unable to gentrify the area because it is environmentally and financially unstable. There is no money to maintain the alley because there is not enough money for people to eat, receive medical attention, and fix the groundwater pollution. The chemical explosion has destroyed Khaufpur's economy. Without experiencing hardship, even Elli is able to conceptualize this idea, but she cannot experience the joy that Animal finds within Paradise Alley.

Animal's twisted back and position outside capitalism allows him to recognize the city's constraints and the hidden values. Animal attributes memories and livelihood to Paradise Alley. From countless scams to errands for Zafar, Paradise Alley has provided Animal with occupation and purpose. Through Animal's affinity for and vocal protection of Paradise Alley, Sinha suggests that environments, both natural and industrial, can receive protection through their sentimental values. When Elli devalues Paradise Alley due to its failing economic market, Animal continues to standby it, regardless of worth.

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<sup>127</sup> Sinha 106

To demonstrate the arbitrariness of valuation systems determined by economic worth, Sinha explores inequalities through Animal and Elli's dialogue. Elli theorizes that if the people of Khaufpur were in America, their situations would inevitably be better. Animal recounts this fact:

We folk in the Nutcracker may regard ourselves as nothing, but we are as clever as anyone else. We're as clever as the Amrikans, says Elli, but they have all the money so they have good lives and ours are little more than shit. If I had been born in Amrika, Elli says I'd never have had to walk on all fours all these years<sup>128</sup>.

Sinha utilizes this section to dismantle capitalist notions of power. If all were equal, he suggests that Kaufpur would be as valuable as America. With more input capital, Paradise Alley would be the same as an American commercial strip.

**'Fixing' Animal and Environmental Change.** Like the environment of Khaufpur, Animal is also judged based on perceived worth. Animal's desire to walk upright is embedded within the inherent hierarchy of capitalism. Within the Khaufpur social context, Animal's back classifies him as crippled, while in the medical community, his back provides a fascinating diagnosis. He is scorned in public because of his stature, and popular amongst American specialists because of his unusually crooked back. Animal becomes a disability diagnosis rather than a human. Like the climate narratives of Khaufpur, Animal's medical diagnosis is

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<sup>128</sup> Sinha 247

underwritten by capitalist valuation. These capitalist rationales instill inherent categorizations that lead to ableism and environmental neglect. Animal's desire, and later, refusal, to walk upright parallels the narratives of environmental change. Western technology is often proposed to facilitate restoration and climate solutions. Unfortunately, like Animal's back, the cost of restoration and potential for viable solutions are often pitted against one another. Privileged people, like Elli, determine whether the environment, or Animal, can be saved and if it is worth saving.

Elli's examination of Animal's back leads him to dream of equality and recognition amongst his peers instead of environmental restoration and recovery:

I will walk up and down the Claw. Nisha will not recognize me. She will see a young stranger, upright and handsome, there and then she'll fall in love, desperate to marry him... I know these dreams are so much crap, but with fluff like this, once it's there it's there, and you see stranger things in the movies<sup>129</sup>.

In a world of visual impressions, Animal fantasizes that walking upright is crucial to relationships. He desperately hopes that Nisha will see him as an eligible candidate, but she cannot look past his disability. When he reveals his feelings for her, she grimaces at the thought of his body. Animal is strong, intellectual, and compassionate, but he cannot prevent people's poor judgements.

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<sup>129</sup> Sinha 187

Sinha ends the novel with Animal being given the option for transformation. Animal's opportunity to be 'fixed' through bioengineering is akin to the environment's possible remediation through geoengineering. Animal is asked to choose between continuing life as a nonhuman or starting a new segment of his story as a disabled human living within the social and capitalist systems.

Animal forgoes the surgery and instead frees Anjali, a prostitute slave and childhood friend. The freeing of Anjali serves as Animal's final rebellion against the capitalist system that caused his disability. Animal uses the capitalist system to free himself and Anjali from it. He purchases Anjali's freedom, allowing Anjali to escape servitude and providing Animal reprieve from monetary pressure. Anjali is transformed from a nonhuman commodity to an empowered individual who accepts Animal as he is without capitalist valuation or human comparison. Sinha utilizes the allegory of Anjali and Animal's relationship to provide a larger solution for his climate narrative.

Animal uses the capitalist system to free Anjali from capitalism. Through their example, Sinha encourages utilizing capitalist ideologies to purchase or persuade people to think differently about systems of exchange, hierarchy, and worth. Capitalism's far-reaching hold on society makes it difficult to undermine; through consumption of alternative systems and freedoms, Sinha suggests there is opportunity for escape. Perhaps, if environments and people were inherently



valued, like Animal valued Anjali, they would not be as susceptible to anthropogenic destruction.

Although society treats Animal as a lower organism due to his disability and divergent ideologies, Animal is ultimately more selfless than his companions as he gives up medical assistance in exchange for another human's freedom. Sinha proposes that to cultivate equitable and sustainable environments, humans must act in the interest of entire communities. Animal's altruistic decision, to help and value someone over himself, marks a fundamental difference in mentality. Animal is willing to sacrifice money for someone at the bottom of the caste system. He intrinsically values beings above their perceived net worth. Animal makes a choice that his peers are incapable of making. He identifies a problem and executes its solution without direct benefit. Animal does not know what Anjali will do with her freedom, but he liberates her without expectation. Animal's selfless mentality and unconventional authority is necessary to dismantle the valuation system responsible for environmental and human exploitation. Sinha suggests that individuals must abandon capitalism and undermine systems of power on their own volition.

**A New Environmental Narrative.** Sinha provides character autonomy in a field where there is usually none. Fatalist environmental justice reports lead people to feel helpless, insignificant, and doomed. Sinha pushes back on this

cliché through his portrayal of lone activists. Animal, Zafar, and Elli combat anthropogenic destruction with three unique approaches to capitalism. The Khaufpur medical system is known for high bills and ineffective treatments; its doctors thrive on capitalism and while Khaufpuris suffer further financial stress and health consequences. Even the government hospitals, which are intended to be free, charge: “The government hospitals too are supposed to be free, but their kind of free no one can afford”<sup>130</sup>. Elli fights this capitalism and repairs disaster damage by offering free medical treatment and using personal finances to cover costs. In an idealistic world, Sinha suggests that this model would work, but capitalism requires monetary or beneficial exchange. Animal discovers that Elli’s good intentions are coupled with guilt. Her interest in Khaufpur is tied to her ex-husband, Frank’s, involvement with the Kampani. In an effort to make up for their actions, Elli spends her alimony to assist Khaufpur. When this isn’t enough, she tries to convince her ex-husband to help Khaufpur by delaying the court case to “give people their chance of justice” with a better judge<sup>131</sup>. She offers a false exchange of love for service:

[Elli] “Sounds like we should make a deal.”

[Frank] “What deal?”

He thinks for a while. “What if I can find a way to delay the agreement, to put it off beyond the date you mentioned? Will you come home?”...

[Elli] “You’d be doing such a good thing for the people of this town.”

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<sup>130</sup> Sinha 74

<sup>131</sup> Sinha 323

[Frank] “I’m not doing it for them. I’m doing it for you. And if I do it, you must come back to America. Promise.”

Sadness whelms up inside, as if the big lake under the hills has burst its bung and sent its waters rising swiftly and silently to drown her.

[Elli] “I promise”<sup>132</sup>.

Elli trades her financial and emotional wellbeing for Khaufpur. She utilizes capitalism to fight its effects, but her efforts do not solve Khaufpur’s primary issue. She cannot “get the Kampani to clean the factory. [Yet she knows that] Its poisons are in the wells [and] in people’s blood”<sup>133</sup>. Sinha utilizes Elli and her knowledge to highlight the discrepancy between knowledge and implementation of environmental solutions. Without financial backing and expertise, Elli’s efforts are futile. Through Elli’s conundrum, Sinha suggests that exiting the capitalist system is not enough to solve environmental exchange. Instead, people must selfishly commit resources and opt out of the capitalism to combat environmental change.

Zafar is also an outside humanitarian seeking to assist Khaufpur. He collects ongoing donations for Khaufpuris in crises. Unfortunately, Zafar’s model is ineffective. Despite standing for all, Zafar does not have the resources to help everyone and the money he provides only leads to short term solutions. Zafar’s most acclaimed action, successfully bringing the Kampani to court, relies heavily on traditional capitalism and valuation. Zafar successfully convinces the judge to

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<sup>132</sup> Sinha 323-324

<sup>133</sup> Sinha 322

attach financial consequences to the Kampani's obligatory court appearance. Unfortunately, when the Kampani returns, Zafar is unable to persuade the judge of Khaufpuris' worth. Sinha suggests that intrinsic valuation of Khaufpur is not enough to bring justice to its people and that Elli's exchange equally inadequate at expressing the town's suffering. While Zafar is able to empathize with the Khaufpuris, he cannot persuade the courts to keep the case. Elli in contrast, has success treating and navigating the lawsuit, but she cannot convince the lawyers to value Khaufpur.

Animal is the only character to successfully attempt to undermine capitalism. For the entire novel, he saves his money, "each day spend[ing] only four [rupees]"<sup>134</sup>, without intention for the rest of the money. Animal's avoidance of capitalism is coupled with strategic expense decisions. Animal resorts to exchange when he is unable to negotiate otherwise. He has income, but he does not usually make purchases. He makes several exceptions, paying for Ma Franci, his elder companion, and occasionally food. Animal is able to evade capitalism and environmental distress by embracing his identity and its transformation by the environment. Animal's decision to leave capitalism and conduct an alternative lifestyle is given credibility through his narration. While most proposals for capitalism alternatives are shut down quickly, Sinha's approach is more convincing. Through Animal's voice, he conveys raw and frank understandings

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<sup>134</sup> Sinha 366

without ridicule. Animal speaks for himself without theory or intellect and reports what he knows, suspects, and undergoes without objective for translation or alteration. Sinha does not tell the audience what to do, instead he narrates an alternative with clear drawbacks. Animal's lifestyle is not glamorous. Sinha recognizes that few people would live like Animal, but he suggests that an anti-capitalist approach is necessary for cohabitation. Animal is the only character who that lives within his environment without destroying or devaluing it. His acceptance of the poisons and consequent Chthulu lifestyle allow him to live amongst destruction without furthering it.

**Animal as an Allegory for the Environment.** Sinha concludes his novel with a critique of Animal's solitary anti-capitalist lifestyle. He utilizes Animal's experiential revelations in a novel form of dialogue that is in conversation with the environment. When Animal retreats to the wilderness, he is truly apart from society, but upon reflection, decides he is unable to sustain himself:

I am a small burning, freezing creature, naked and alone in a vast world, in a wilderness where is neither food nor water and not a single friendly soul. But I'll not be bullied, If this self of mine doesn't belong in this world, I'll be a world complete in myself. My back shall be ice-capped mountains, my arse mount Meru, my eyes shall be the sun and moon, the gusts of my bowels the four winds, my body shall be the earth, live its living things, but why stop there? I'll be my own Milky Way, comets shall whizz from my nose, when I shake myself pearls of sweat shall fly off and become galaxies, what am I but a complete miniature universe stumbling around inside this larger one, little does this tree realise that the small thing

bumbling at its roots, scraping at its bark, clawing a way into its branches, is a fully fledged cosmos<sup>135</sup>.

I, the universe that was once called Animal, sit in the tree and survey the moonlit jungles of my kingdom.

“Now I am truly alone.”

Animal characterizes himself as a universe with no resources. He is unable to care for his body alone, yet he describes himself as an ecological community bustling with life. Animal’s body becomes an allegory for the environment. His treatment parallels Khaufpur’s space. For twenty years, Animal and the ecosystem have waited to be restored. Like the environment, Animal is undervalued and ignored. At the end of the novel, the Khaufpuris receive financial compensation, but the Animal and the land, water, and air are still damaged. Neither the environment nor Animal receive reparations, and their conditions remain unresolved as unrestored ecologies. Animal lives with and as an equal to nature. He attempts to abandon the competitive capitalist system for an altruistic symbiosis with his environment, only to realize that he is not prepared for this life. For years, Animal has received nourishment by foraging and scrounging within the city. Similarly, the factory has sustained life through dropped seeds and nutrients from birds flying overhead. Without people producing garbage, Animal cannot subsist. Animal is reliant on the waste from the capitalist system, just as the factory is dependent on birds, having eaten in Paradise Alley, defecating overhead. Animal has become an inhabitant of the factory. He acts similarly to his fellow plant

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<sup>135</sup> Sinha 350

residents, but he is a non-anthropocentric member of the unaltered jungle. He is adapted to living with the poisons of capitalism, as are the resilient plants that surround him.

In environments unaffected by disaster, Animal and these evolved plants do not exist. In the natural jungle, species are unrecognizable to Animal and consequently, he cannot live among them. Animal and the flora within the factory are resilient; they continue to function even with the capitalism, but they have evolved to depend on it. Anna Tsing, an anthropologist interested in apocalyptic narratives, refers to such environments as “salvage sites”<sup>136</sup>. Animal and the jungle have salvaged value from the abandoned factory space. Tsing describes a similar process: “Salvage is not an ornament on ordinary capitalist processes; it is a feature of how capitalism works. Sites for salvage are simultaneously inside and outside capitalism; [she] calls them “pericapitalist””<sup>137</sup>. Despite Animal’s full embrace of an anti-capitalist lifestyle, Sinha suggests that like the environment, Animal is not able to escape capitalism’s far-reaching effects. He is both outside of the capitalist ideological system and inside its resource network. The factory is a pericapitalist space through which Animal reclaims the environment and its resources.

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<sup>136</sup> Tsing 78

<sup>137</sup> Tsing 78

Animal's bodily realization causes him to ideologically "die" and be "newly born into [a] new life"<sup>138</sup>. He is no longer helpless within the human-less world. He finds water, honeycomb, and shelter. Sinha suggests that Animal could be successful living without capitalism, although the transition would be arduous and isolating. Upon being "found" by Zafar<sup>139</sup>, Animal does not resist being taken back to the capitalist Khaufpur. He embraces a world free from the social hierarchy, but he does not live within it. Instead, he lives adjacent to capitalist environments and seldomly participates in them. Animal's public refusal of capitalism is more effective for the environmental narrative than Animal's retreat from it. Through his denial of capitalist valuation, Animal is able to free Anjali and record his narrative. Without capitalism, Anjali would remain in servitude and Khaufpur's narrative would be stagnant. While capitalism drives the horrors of Khaufpur, Animal's decisions to undermine capitalism and relay an effective environmental narrative are paramount to his escape from the poisons. Sinha suggests that Animal's sacrifices represent an ideology effective for mitigating environmental destruction and facilitating equality.

Sinha's depiction of Animal's story provides a realistic and tragic glimpse into the psychology of ableism and capitalist ideologies. Although Animal is never fully recognized as equal, his struggles illustrate the deep-seated and engrained mentalities of the capitalist valuation system. Through Animal's desire

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<sup>138</sup> Sinha 351

<sup>139</sup> Sinha 354



to live outside of corruption, Sinha offers a symbolic structure through which the human and nonhuman divide is overthrown. While Animal provides an unconventional model to dismantle inequitable environmental and societal behaviors, his character critiques fundamental principles of capitalism and advocates their replacement by equitable and sustainable practices.

### Chapter 3: The Visual Art of Environmental Change Rhetoric

Art provides an alternative form of climate change rhetoric through which audiences can experience global-scale data and scientific discovery in common visual entertainment forms. In this chapter, I will examine a graphic novel, *Climate Changed*, and gallery painting, “Forces of Change.” *Climate Changed* has gotten world-wide attention, and it captures a unique climate narrative within an unconventional informational medium. Phillippe Squarzoni’s tale stands out as an autobiographical, retrospective, and metacognitive journey to environmental activism. In contrast, “Forces of Change” recreates a 1933 political cartoon, transporting the Federal Octopus from the country’s capital to a futuristic Great Lakes watershed. Alexis Rockman’s new take on an old strategy garnered country-wide attention and spurred action in political districts surrounding the Great Lakes.

In the 2014 graphic novel *Climate Changed*, Philippe Squarzoni describes his personal journey experiencing and becoming an environmentalist advocate through a graphic novel. His art depicts climate change science through realistic drawings of climate change, its environmental impacts, and primary narrators. His rhetoric is influential, clear, and visually appealing, but the story is nonetheless rooted in current-day capitalist consumerism, which I argue in previous chapters is one of the drivers of climate change. Despite his attempts to display a rhetorical

form distinctly against consumption and exploitation of nature, his art is inspired by and modeled after deep-seated capitalist consumer ideologies. In the following section: “*Climate Changed: A Multifaceted View of Exploitation & Conservation*,” I will argue that Squarzoni perpetuates environmental malpractice through three main rhetorical devices: 1) His use of portrait framing perpetuates the anthropocentric notion that human actors can individually end climate change to ensure humanity’s future existence. The narrative places emphasis on assisting human generations, rather than acknowledging ecological exploitation and its detriments. 2) The style of the art calls back to a time when artists admired the environment for its sublime and unconquered assets. Nature is valued for its destination appeal, causing it to be labelled as an exploration location, rather than an area requiring conservation. Squarzoni’s depiction of the unconquered and sublime mountainous landscape encourages the audience to appreciate the view and its visitation prospects, rather than the ecological importance of the area. 3) The graphic novel allegorizes a hero-villain dichotomy between environmental change activists, the heroes, and emissions producers, the villains.

In contrast, Alexis Rockman’s acrylic painting provides an efficacious methodology for instilling environmental action and subverting capitalism. Rockman’s tentacular capitalist monster poses an immediate threat to the futuristic environment; it is clear, visceral, and the supernatural grabs the audience’s attention. Rockman drives environmental activism through fear.

Rockman simultaneously subverts consumerist decisions by citing their destructive environmental effects. His visual display of environmental degradation, which ranges from biohazards to invasive species, flows from capitalist marketplaces, further incriminating them as the cause of environmental destruction. Unfortunately, these devices also undermine the activism that Rockman hopes to instill. Rockman's science-fiction expose of degrading watersheds and thriving industry, portrays a fatalist perspective on environmental change. There are so many causes of environmental destruction; saving the Great Lakes seems like an impossible challenge. Similar to Squarzoni's villainization of society, Rockman argues that humanity exploits resources at unsustainable rates, leaving the environment to erode and regrow the area. When the ecosystem cannot recover on its own, as is the case in this work, the audience is left wondering whether the space can recover at all.

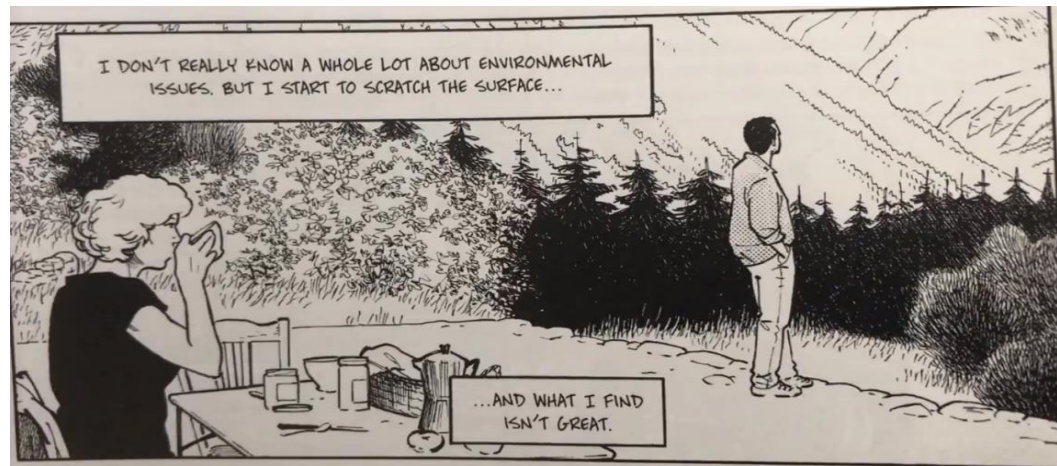
***Climate Changed: A Multifaceted View of Exploitation & Conservation***

*Climate Changed* follows Squarzoni on his immersive journey into climate science and eventually, advocacy. The graphic novel acts as an illustrative resumé through which readers are gradually acclimated to environmental change rhetoric through the lens of a rising climatology author--and a developing environmental studies scholar. Squarzoni spends the preliminary sections of the novel building credibility before employing ethos, logos, and pathos during his conclusionary plea for emissions reductions and environmental awareness.

**The Efficacy of the Graphic Novel.** It's difficult to judge how efficacious climate narratives are without seeing the impacts that they have on their audiences, but Squarzoni's graphic novel rests on age-old rhetoric models: the majority of his argument relies on the use of Aristotle's ethos, logos, and pathos. Squarzoni spends the exposition developing author credibility, or his own ethos as a climate change interlocutor. In the character he draws, he is portrayed as an early scholar that lacks environmental awareness: Squarzoni admits at the start of the narrative that he 'doesn't know a whole lot about environmental issues',<sup>140</sup>, but he is delving into the literature anyway. This enthusiastic, but undereducated, mentality parallels that of his readers. Squarzoni uses a colloquial and

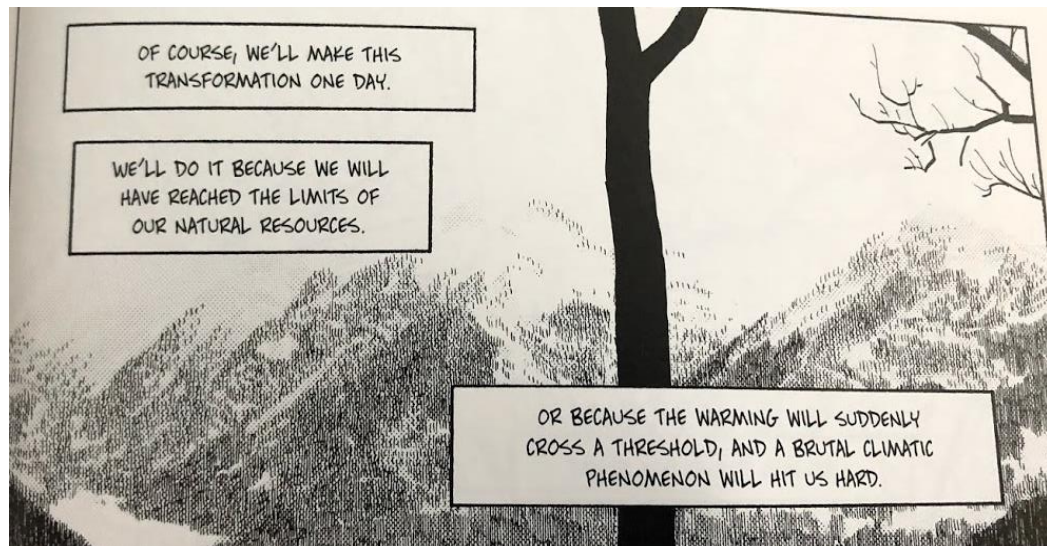
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<sup>140</sup> Squarzoni 27



**Figure 2.** In the introduction, Squarzoni reflects on his minute knowledge of environmentalism and its relation to policy in his, then current, book. After reading several climate narratives, he decides the prospects for biosphere recovery are bleak.

conversational tone, often speaking to his partner, to develop his interest and later, his reporting of climate science. He begins the narrative from a common space with the general public. He deliberates upon his effects on the changing planet, considers changing his actions, and debates whether his choices could have a significant impact on Earth's biosphere. Squarzoni is initially unconvinced by the environmental change movement, and in expressing his reservations, Squarzoni creates a narrative safe space through which he attracts a wide consumer base. Squarzoni's contemplative and uncertain tone facilitates readers' exploration, reflection, and admittance of unknowns.



**Figure 3.** At the end of the graphic novel, Squarzoni considers the possible drivers of environmental consciousness in a future period. He suggests that humanity will wait to act on climate change until it is so severe, it can no longer be ignored.

In contrast, by the end of the narrative, Squarzoni has accrued credibility as a reliable and straightforward narrator. He tells his audience what he thinks will occur. He has accrued enough knowledge that he is now competent to project the near future:

Of course, we'll make this transformation [to reduce consumption] one day.

We'll do it because we will have reached the limits of our natural resources.

Or because the warming will suddenly cross a threshold, and a brutal climatic phenomenon will hit us hard<sup>141</sup>.

Squarzoni suggests that the population will be forced to reduce consumption, rather than coerced and incentivized to make environmental choices. He appeals

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<sup>141</sup> Squarzoni 455

to readers through his own reluctance to reduce consumption. The graphic novel demonstrates the arduous process that emissions reduction has on his family, from making travel decisions to determining what he should write about. Despite his belief in climate science, he still struggles to reduce the impact he makes on the environment. Unlike most environmentalists, he makes predictions based on his understanding of human nature: “Of course, we’ll make this transformation one day. We’ll do it because we will have reached the limits of our natural resources. Or because the warming will suddenly cross a threshold, and a brutal climatic phenomenon will hit us hard”<sup>142</sup>. His predictions are understandable; they utilize conversational language, include minimal scientific terminology, and are concise and to the point.

Squarzoni appeals to the audience through ethos. His rhetoric exhibits language that is appropriate for his audience, but still reflects the complexity of climate change. He admits that he is neither unbiased nor scientifically credible, but his acknowledgement of these characteristics causes him to build trust with the audience while sharing the expertise that he does have. As Squarzoni slowly becomes an expert, he helps his audience feel as though they are becoming, or could become, experts too by reading the graphic novel and other climate narratives. Like the audience, Squarzoni also admits that he is part of the environmental crisis and although he makes a concerted effort, he has trouble

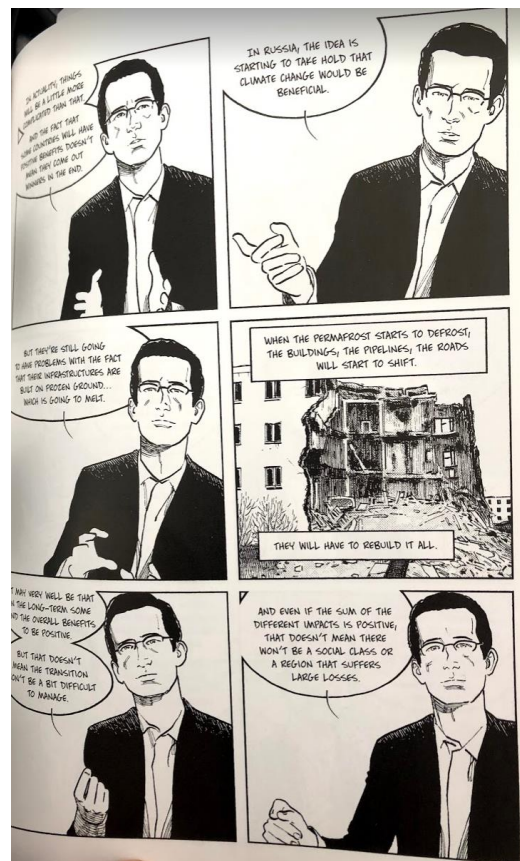
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<sup>142</sup> Squarzoni 455



reducing his exploitation of resources. He develops a rapport for being a nuanced and complicit environmental change advocate through his language, knowledge, and commentary.

While Squarzoni relies primarily on his own opinions and backstories to provide ethos, he sources logos largely from the rhetoric of others.



**Figure 4.** A climatologist that Squarzoni consults for verified climate data and reporting.

Squarzoni dedicates entire pages to expert climatologist forecasts and discussions of climate change's broader implications<sup>143</sup>. The bulk of his argument is pulled from his character's consumption of information, its recapitulation, and interviews, including broadcasted materials and conferences, with experts. This style enables Squarzoni to portray the popular areas of discourse without directly expressing beliefs or viewpoints that may discredit or clash with his audience members. Through his compilation of various quotes, scientists, and mediums, Squarzoni constructs a rhetoric based in logic, but free from direct conflict with his character. In the graphic novel, the audience is free to explore the various climate change information, which Squarzoni, as an author, utilizes to further his own narrative. As Squarzoni becomes versed in environmental dialogue, he shows readers what rhetoric style and information he is consuming (Figure 5). In Figure 4, he wonders which portions of environmental change are naturally occurring and what portions are anthropocentric. Squarzoni, pictured below, reads a climate narrative, represented by a book, and quotes: "Today, emissions caused by humans are twice as much as those from naturally occurring substances"<sup>144</sup>. For Squarzoni, this fact and by extension, source, serves as a motivator for reducing consumption and emissions. Through his own narrative, Squarzoni shares works that have been influential in his transition to activism. The sources and speakers, when applicable, are listed and reviewed at the end of the graphic novel. This

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<sup>143</sup> Squarzoni 279

<sup>144</sup> Squarzoni 56-57

system allows the audience to conveniently access environmentalist dialogues and recommendations for further learning.

**Figure 5.** Squarzoni consumes information and vocalizes important facts, with corresponding sources, for his audience<sup>145</sup>.



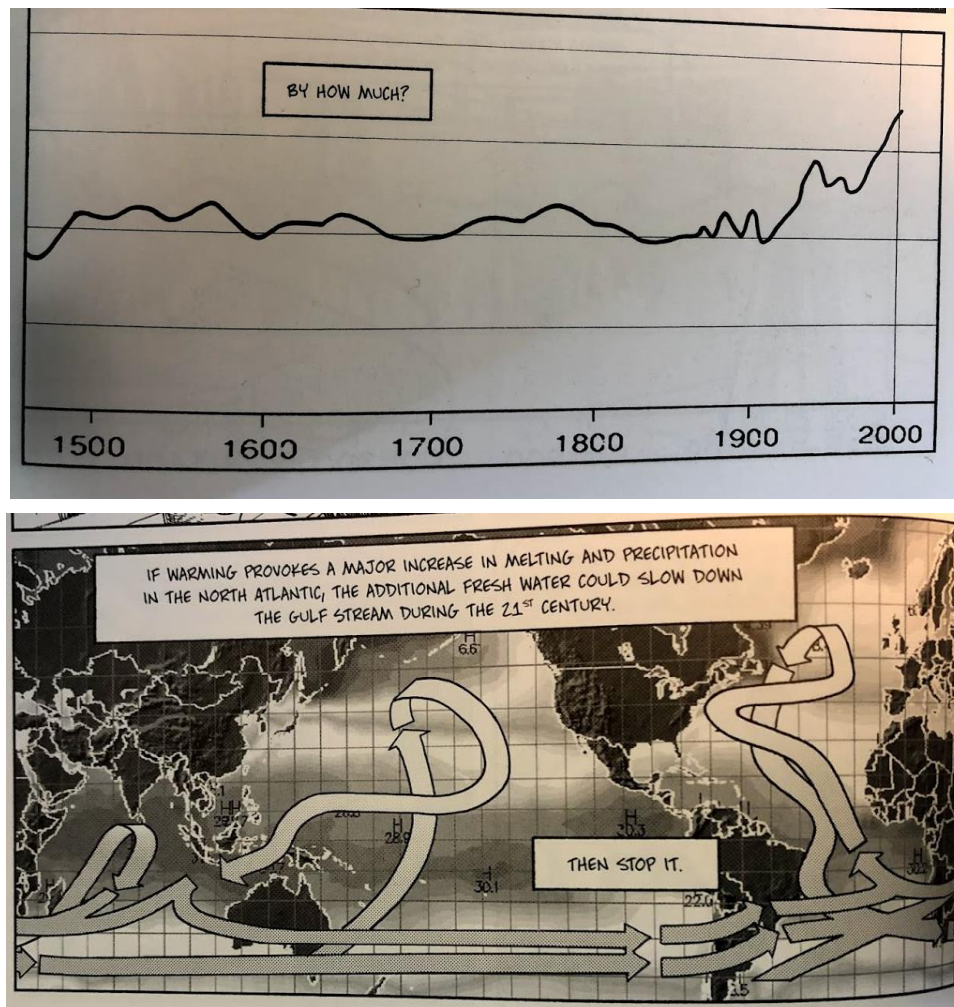
While Squarzoni relies largely on written word for ethos and logos, his drawings convey the majority of his pathos. Squarzoni depicts his childhood memories, the changing climate, and the take-over of topographical features by the industrial landscape. While graphs and maps would normally be categorized within logos, Squarzoni invokes his nostalgia for and emotional attachment to the changing environment: In Figure 5, Squarzoni begins each page with a graph. On the left, rising methane levels are visually, and scientifically, associated with

<sup>145</sup> Squarzoni 56-57

environmental destruction: the firedamp gas, agricultural mass production of beef, and forest clearing are chosen as methane releasers and physical accompaniments to the rise in methane production. On the right, increasing CO<sub>2</sub> is paired with new fuel sources, gasoline, and polluted atmospheres, pictured with the smoke stack. These representations are in keeping with Squarzoni's format throughout the graphic novel; new landscapes, natural disasters, urban sprawls, and changing environments accompany each graph<sup>146</sup>. Squarzoni's continued association between graphical and landscape changes creates an expectation that quantified depredation leads to qualitative destruction and emotional distress. In using data to outline out his conversation, meteorological maps and datasets become, in Squarzoni's work, symbolic climatological signals of destruction. This symbolic representation is the opposite of conventional climate narratives, which rely on graphical data to simultaneously represent large-scale changes in multiple environmental phenomena. By using graphs as cues for destruction, Squarzoni makes an emotional connection between emissions hikes, poor consumer practices, and degrading landscapes.

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<sup>146</sup> Squarzoni 56-59, 114



**Figure 6.** Above: a sketch of a rising CO<sub>2</sub> graph. Squarzoni omits the y-axis, making this data symbolic and unusable. Below: A map of changing ocean currents, which are the result of ocean warming and salinity changes driven by meltwater<sup>147</sup>.

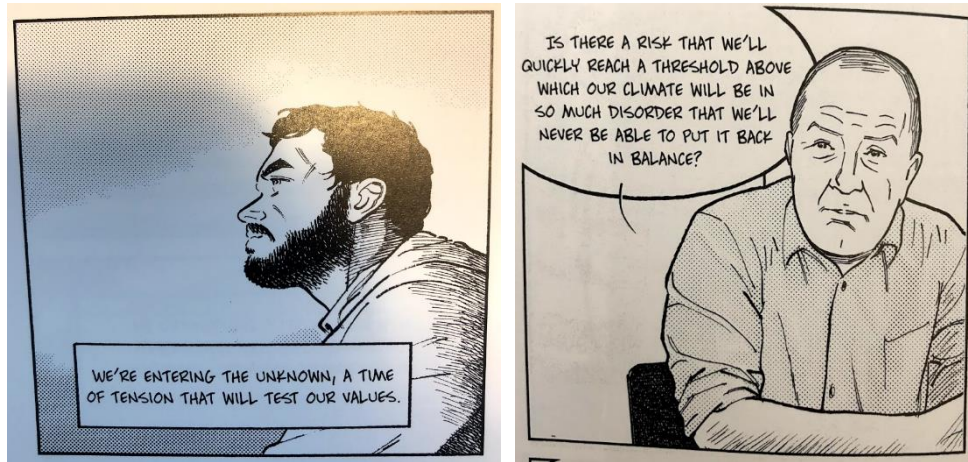
A map of the changing Gulf Stream (ocean current) is easily understood by senior scientists, but general audiences have more trouble attributing changing climatological conditions with their immediate impacts. Others still, seek clarification with the scale, duration, and onset of the issue. How does a graph

<sup>147</sup> Squarzoni 114

with rising atmospheric carbon dioxide levels relate to a map of the slowing Gulf Stream? Scientists have trouble answering these types of questions without jargon, references to changing forecasts, data, and predictions, but Squarzoni sidesteps these questions by creating a large generalization: when the graphs change, the earth will inevitably change too. Squarzoni signifies this assumption through omission of key details. His graph of rising CO<sub>2</sub> levels is indiscernible without the narrative; there is no y-axis. Similarly, the map below it shows changing currents without a key. Squarzoni highlights changes in environment through his deletion of details. Without the numbers and jargon, these diagrams rely on surrounding context to explain their meanings. Under this ideology, there is a discomfoting feeling of the unknown consequences, but a better interpretation of environmental change. The audience understands that things will get worse with continued anthropogenic consumption, but the scale is unclear. The vagueness of his graphs instigates generalized anxiety for the future. Readers are encouraged to reduce their impacts out of fear and guilt, rather than through an understanding of scientific models and datasets.



### Anthropocentric Portraiture and Privilege

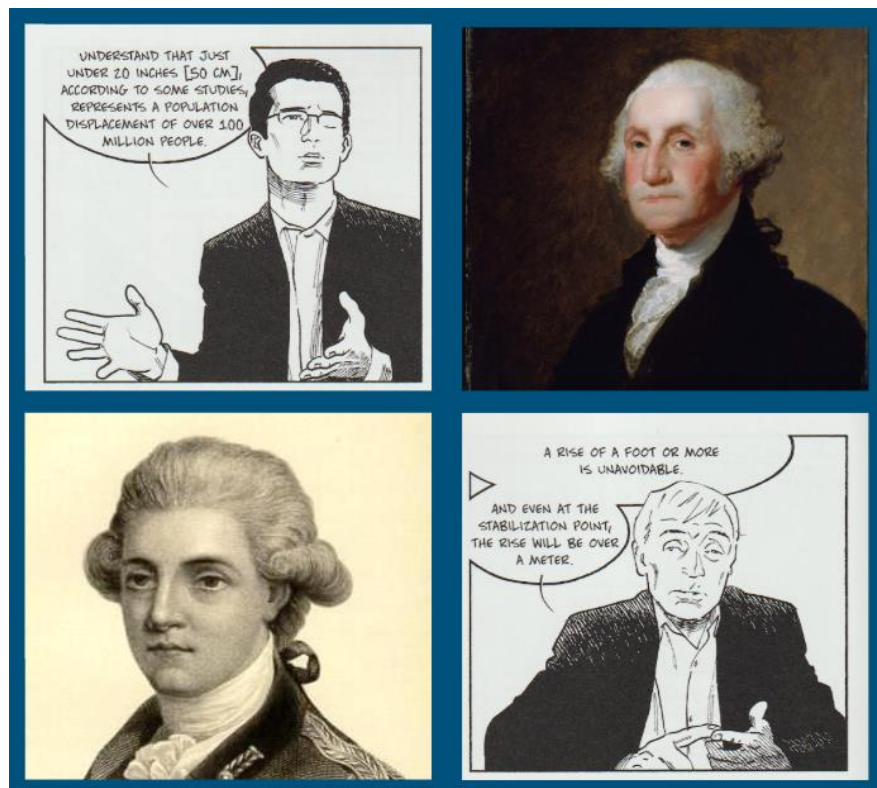


**Figure 7.** Left: A portrait of Squarzoni as he contemplates the implications of unknown environmental destruction. Right: A climatologist considers whether environmental destruction is fixable.

While Squarzoni is concerned about the changing environment, his most common panels contain portraits of people considering the implications of climate change on society. Squarzoni's repetitive use of portraits creates a series of coexisting rhetoric commentaries. Portraits are utilized to indicate expert opinions, characterize scholars within the climate debate, and humanize the environmentalist movement. Individuals in these portrait frames speak directly to the audience and Squarzoni himself. The research is intended to speak to, or resonate with, the audience as it did previously with Squarzoni.

Unfortunately, Squarzoni's portraiture rhetoric is also problematic. In these frames (Figure 8), Squarzoni uses portraiture to allude to climatologist predictions of sea-level rise. But, portraiture draws from a tradition of privileged people with a focus on the neck up, highlighting the brain or the intellectual

capacity of the individual. Portraiture is also anthropocentric. Squarzoni inadvertently encourages his audience to look towards individual experts to solve climate change, and when all of the experts are older, white males, Squarzoni perpetuates the power complex associated with this demographic. The focus on privileged individuals, both economically and demographically, deprivileges the organisms and victims at the center of environmental disasters.



**Figure 8.** Squarzoni’s portraiture harkens back to traditions of English and early American portraiture. Top left: A climatologist describes sea level rises and potential to displace people<sup>148</sup>. Top right: An early American portrait: “George Washington” by Gilbert Stuart<sup>149</sup>. Bottom right: A climatologist speculates on projected future sea levels. Bottom left: “John Andre,” unknown author<sup>150</sup>.

<sup>148</sup> Squarzoni 238

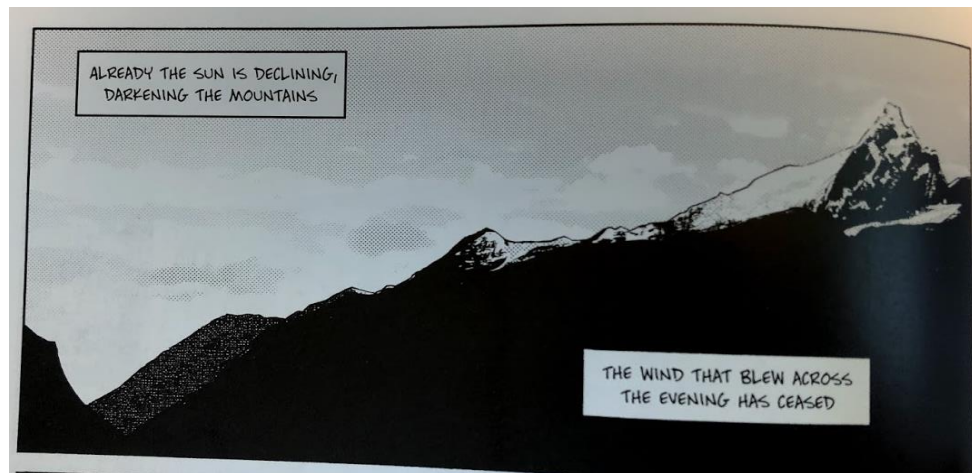
<sup>149</sup> Stuart

<sup>150</sup> “John Andre”



### **Preservation of Postcolonial Exploration & the Sublime**

While environmental change narratives often rely on images of natural landscapes and conservation efforts, Squarzoni's depictions of nature venture into the sublime. He often illustrates unexplored mountains, towering landscapes, and unaltered terrain. For Squarzoni, the environment has become a scenic travel destination. Nature's intrinsic value is derived from its colossal and exotic landscapes. In Figure 9, Squarzoni illustrates the depth and height of the mountains through shading. The mountain peaks reach into the sky, their adorning snow melting into the clouds. In the foreground, there are only shadows. Squarzoni conceals the scene at dusk, leaving the audience to imagine its scale and aesthetics. The unknown captivates the audience. The areas that are less impressive to Squarzoni, like local ecological communities, are unmentioned and unpictured. Once a landscape is deprecated, there is minimal motivation to restore it to its previous state.



**Figure 9.** Squarzoni depicts the mountainous landscape with shadows in the foreground<sup>151</sup>.

Squarzoni does not ask the audience to restore urban and suburban communities to nature. He instead looks towards the dwindling underexplored regions of the globe for inspiration and comfort. Newly industrialized areas are forgotten and Squarzoni shifts the perspective towards pictures of new destinations worth protecting. This selective illustration invokes a problematic colonizing desire. The audience is enticed by the pristine landscape and is encouraged to protect it for future inhabitation. The cities, like the villainous capitalist consumers present in the next section, are depicted as a lost cause for conservation. Squarzoni creates a narrative in which visual appeal drives the environmentalist movement.

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<sup>151</sup> Squarzoni 118

### **Modern Environmentalism Meets the Retro Hero-Villain Dichotomy**

While the last section focused on the capitalist fetishization of travel and exoticism, this section pivots towards another form of recreational consumption. In this section, I will describe Squarzoni's villainization of capitalists as a form of comic rhetoric that seeks to entertain and segregate reducers from consumers. Although environmentalist movements are increasingly shifting towards inclusivity, Squarzoni sets up a dichotomy through which he uses the personified image of unnecessary energy consumption to villainize capitalist overexploitation of environmental resources.

**Combatting Materialist Existences.** In Figures 10 and 11, the products of industrialization meet the non-materialist: a micro-woman battles against a patriotic pollutant robot and towering Santa Claus. Squarzoni argues that the United States' capitalist-driven society draws inhabitants to materialist existences; the robot is constructed out of money, beef, coke, entertainment technology, cars, gas, oil, heating, cooling, industrials, shopping, and light. Santa, in contrast, carries an enormous bag of luxury products and consumables. Squarzoni depicts the rate, size, and endorsement of the consumption practice through the physical scale of his characters. The robot's and holiday figure's mammoth dimensions

tower over individual consumers, in this case, their adversaries<sup>152</sup>. Squarzoni represents the eminent demise of the environment and its inhabitants through the massive size and destruction brought about by the villains. Magnitude differences could be attributed to the extent of the problem and the gravity of the issue. Stopping overconsumption represents a huge undertaking that is time-sensitive and carries magnanimous implications. If society doesn't curb resource consumption, Squarzoni suggests there will be large consequences. The scope of the issue leads the efforts of climate-minded individuals to appear miniscule; like the lone warrior, and their impact goes unseen<sup>153</sup>.

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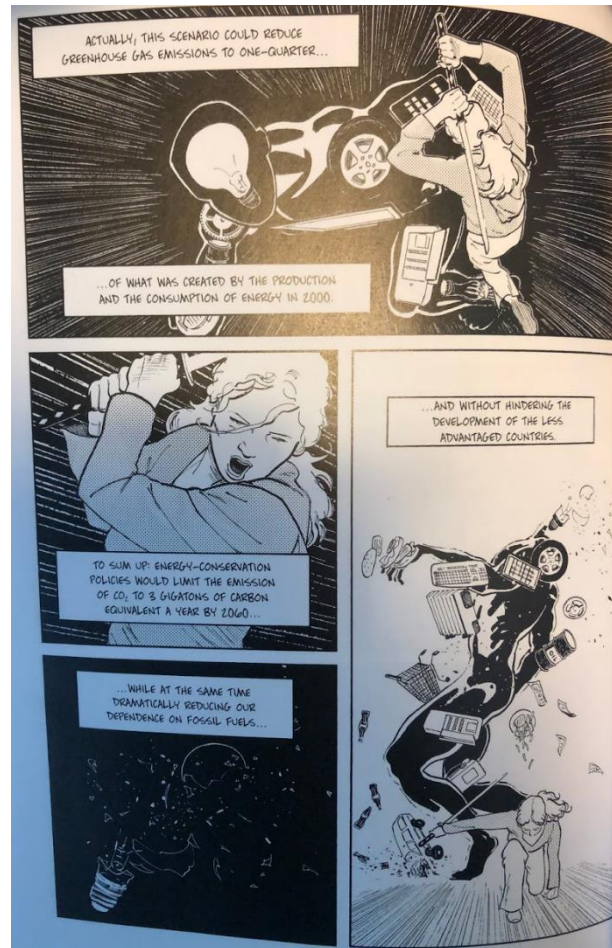
<sup>152</sup> Squarzoni 367; 373

<sup>153</sup> Squarzoni 373



**Figure 10.** Squarzoni pits environmentalists against a towering robot furnished from consumable goods and services<sup>154</sup>.

<sup>154</sup> Squarzoni 367; 373



**Figure 11.** Squarzoni entertains his audience through the comic battle between the reductionist hero and consumerist villain<sup>155</sup>.

In Figure 10, the human trajectory shifts. The recently informed consumer, embodied by a caricature of Squarzoni's wife, battles to slay her own monstrous resource budget in exchange for a new, more-sustainable, energy-conservation policy (Figure 10). Squarzoni uses the image of a colossal conglomerated consumable goods robot to symbolize the programmed and excessive nature of the

<sup>155</sup> Squarzoni 374

American capitalist model. To beat the system, Squarzoni argues that strong environmental policies must join forces with climate-minded individuals.

Squarzoni replaces the environmentalist warrior with actions stemming from global conservationist policies<sup>156</sup>. The human caricature, fueled by the efforts of many conscious decision makers, destroys the robot ideology and spills its contents for consumer viewing. Not only are the idealistic global conservationist policies able to defeat global warming, they also divulge information on the pollution monster(s). Cash, a shopping cart, and an SUV fall out, among other items. The robot is portrayed as a nonhuman, but it was built from anthropogenic consumable goods. The robot figure distances humans from the destruction they cause, instead implicating luxury goods purchased by the upper class. The robot's destruction debris are represented by appliances, vehicles, and cash. Squarzoni suggests that overconsumption is claimed largely by people with means. The woman fighting this machine, in contrast, displays only the minimal materials to brave the altercation. Yet, from what we know about her, this role is puzzling. Squarzoni depicts his family as wealthy, privileged, and environmentally unaware until his publication of this book. If these attributes are the same for the comic, then the warrior fighting society's overconsumption was previously part of the issue. This brief narrative draws attention to a shift in consumption ideology: large resource spenders transition to a more conservative

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<sup>156</sup> Squarzoni 374

lifestyle. The rest of society is absent from this narrative. Squarzoni omits characters with low income and correspondingly small carbon footprints, aside from tales of climate change implications. In the next section, I will further illustrate this point through Figure 13. The potential narrative, through which more environmentally conscious or less consumer-focused/able individuals can influence society, is missing. It is unclear whether Squarzoni views this possibility as unlikely or implausible. Perhaps he believes that only former materialists can convince wasteful societies to switch their ways, or maybe he proposes that environmental policies must be oriented towards the most resource-intensive, and consequently wealthy, areas.

**Heroism: The Rhetoric of Good vs. Evil.** While Squarzoni's comic book altercation sheds light on his views of society, it also provides satire intertwined within his interpretation of good and evil. Consumers take pleasure in hedonism; they look to comic books as one source of entertainment. Like the TV on the robot, comic books require energy and resources for production, shipping, and purchase. Squarzoni criticizes this material- and pleasure-driven lifestyles through his own version of a graphic novel. Climate narratives traditionally lack the action, genre, and appeal necessary for consumption by wide audiences. Squarzoni's interspersed consumption battles provide fantastical moments of reprieve from the otherwise bleak biosphere trajectory. For a graphic novel



audience, the ambiguities of the climate narrative seem out of place. Comics contain heroes and villains, while environmentalist narratives talk more about proactive and reactive measures. In climate accounts, such as Klein's *This Changes Everything* (Chapter 1), blame is often placed on inaction or climate change deniers, rather than current pollutant perpetrators. In contrast, the graphic novel targets individuals that conform to systems of overconsumption and materiality, while acknowledging the roots of these problems. *Climate Changed* is in direct conversation with Moore and Haraway's propositions for consumption reduction and posthumanism (Chapter 1); Squarzoni targets consumption behaviors as the primary drivers of environmental change, just as Haraway and Moore propose alternative mentalities capable of reducing capitalist involvement.

Perhaps the most unique aspect of Squarzoni's work is the clear distinction between right and wrong. In *Climate Changed*, everyone who contributes to pollution and warming is part of the pre-programmed systemic demise of the planet. Overconsumption is bad, but it's easy. Siding with the robot provides amenities. It's hard to beat it. In the novel, the alternative side is to endorse and adhere to climate legislation at the individual level. Going against societal norms is difficult; there are fewer immediate benefits and individuals are up against entire societal and economic systems. If there is no policy to back up a person's decisions to conserve, making an environmental impact can be arduous or unachievable. Individuals that do not fit the 'right' side or the 'wrong' side are

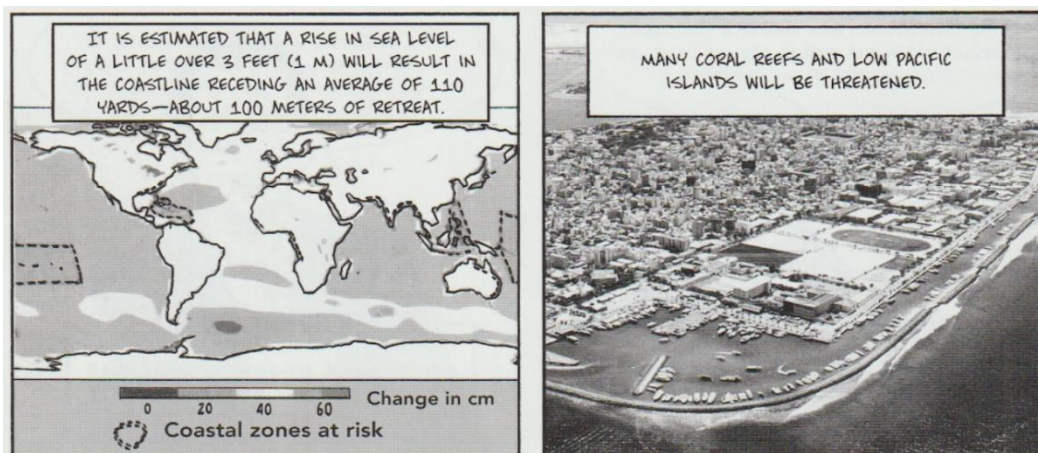
ignored or pushed aside to supporting sections where they become innocent bystanders to climate change. The narrative of this tale is governed by the individuals that can consume it.

Squarzoni's work appeals to the consumerist mentality (Chapter 1). The nature of Squarzoni's heroic dialogue, its semblance of comic-like stories and industrialized narrative, makes it appealing for entertainment-driven audiences. Unlike climate change, which is difficult to envision and occurs over long temporal scales, the comic battle is suspenseful and thrilling. The audience is engaged within the fictionalized environmental struggle during an exhilarating and brief narrative.

Unfortunately, the scope of Squarzoni's efforts, while intended to mitigate climate change, perpetuate the consumerist mentality driving environmental destruction. The audience is encouraged to consume environmentalist narratives due to their entertaining and appealing anthropocentric fantasies. The battle against consumerism is portrayed as a fight for humanity's survival, rather than an attempt to preserve the biosphere.

### Employable Rhetoric Forms that Inspire Action

While Squarzoni's narrative is entrenched within the very consumerist mentalities that are driving climate change, he employs several rhetoric techniques that are highly effective for communicating environmental rhetoric. In prior sections, I argued that Squarzoni's data simplification, portraiture, and hero-villain narratives successfully engage his audience, but also create erroneous, anthropocentric, and consumerist notions, respectively. In this section, I will highlight some of his other efficacious strategies and their effects on his audience.



**Figure 12.** Left: A graph of projected rising sea levels. Right: A picture of an area that is forecasted to be impacted by sea level rising<sup>157</sup>.

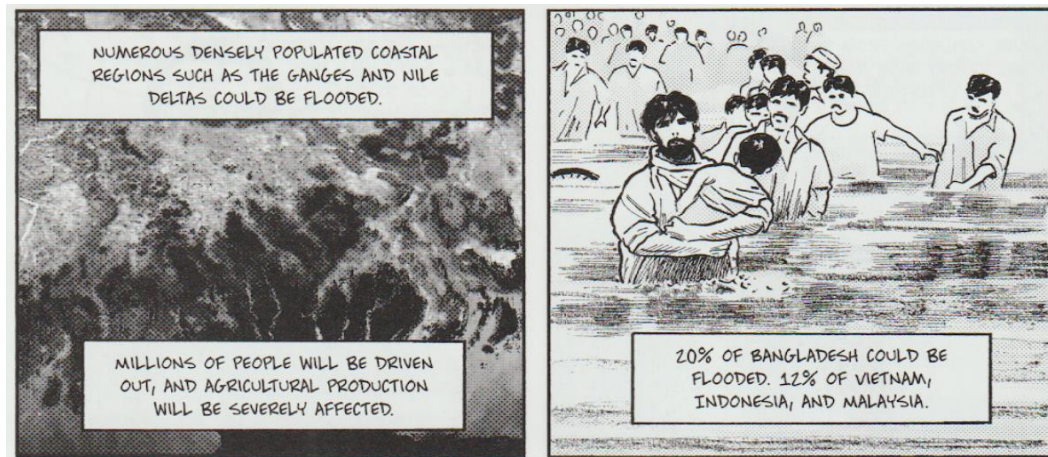
Squarzoni intersperses maps, pictures, and captions within his narrative. In Figure 12, Squarzoni provides a simplified map of projected sea levels. The accompanying caption explains the scale of sea level estimations and the resulting impact on shorelines. To the right, Squarzoni provides a picture of receding

<sup>157</sup> Squarzoni 238

shorelines and notes their impacts on coral reefs and small islands. Squarzoni uses maps to highlight the global scope of climate change. Graphical maps, like the heatmap above, allow Squarzoni to illustrate global phenomena with concrete visuals. To make up for the lack of emotion invoked by maps, Squarzoni pairs his heatmaps with illustrations. Pictures make data easy to conceptualize. In Figure 12, the result of rising sea levels is depicted through the evident lack of coast line. The water has covered up previous beaches. To assist readers in interpreting these changes, Squarzoni uses captions to provide explanations overlapping the visuals, making them more salient and understandable. The intermingled captions provide facts and projections in memorable chunks, making the graphic novel easy to digest. According to Marshall (Chapter 1)<sup>158</sup>, these small and memorable facts are ultimately what influence consumer behavior. Squarzoni's repeated and well displayed use of facts with evidence and conceptual visuals make his narrative effective and influential.

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<sup>158</sup> Marshall 15



**Figure 13.** Left: Squarzoni illustrates rising flood waters in coastal regions. Right: Sketch of projected flood victims<sup>159</sup>.

While Squarzoni relies on well-paired graphical maps, visuals, and captions to convey information, he motivates action through forecasts of environmental disasters. The bulk of these disaster narratives focus on environmental threats to, generally underprivileged, humans. In Figure 13, Squarzoni illustrates rising flood waters and their threat to populations inhabiting Bangladesh, Vietnam, Indonesia, and Malaysia.

The victims, that Squarzoni elects to portray, are non-white individuals with minimal economic means. In showing these images and projections, Squarzoni encourages his audience to consider climate change a challenge to marginalized humans, instead of an impending threat for the entire biosphere. Privileged individuals, who appear unaffected by environmental change within the graphic novel, are given a false sense of security and prepare to help others.

<sup>159</sup> Squarzoni 238

Unfortunately, anthropocentric consequences provide motivation for action at unsustainable scales. People are encouraged to provide monetary aid after disasters, instead of preemptive consumption reductions to aid the biosphere. While Squarzoni intends to spur environmental change, the apparent economic divide, expectations of monetary savior from disaster, and anthropocentrism undermine all efforts of environmental protection.

**Squarzoni as a Climate Narrator.** Squarzoni created *Climate Changed* to be consumable, appealing, and informative. The novel provides small, digestible pieces of information, but with interspersed bias and pure entertainment sections, its not as effective as it could be. The narrative is riddled with anthropocentrism, consumption mentalities, and capitalist divides. While simplified maps, pictures, and captions help the audience to conceptualize data, other visuals, like the hero-villain panels and portraiture, perpetuate the role of climate change as a consumable, economically-driven business. In the following section, I will examine “Forces of Change” as an alternative form of climate rhetoric that, similarly to *Climate Changed*, relies on fantastical and cartoon-like characters in attempt to undermine capitalist ideologies that are driving environmental change.

### **“Forces of Change”: Survival Within Capitalism’s Tentacular Grasp**

In “Forces of Change,” Alexis Rockman presents similarly fantastical renditions of capitalist culture as those within Squarzoni’s *Climate Changed*. In both works, the Capitalocene narrative places the brunt of climate change causality on the current economic system. For Rockman, art is the rhetoric of discourse; his activist intentions and theorist alignments are spoken through his pieces rather than his words. Rockman’s oil and acrylic painting, “Forces of Change,” features a tentacular capitalist monster that sends tremors through its audience while depicting the dichotomy between nature and humanity. Rockman, like Moore, argues that to undermine the Capitalocene, people must change their perceptions of capitalism as a world-economy, to capitalism as world-ecology (Moore, Chapter 1). Capitalism is a series of interconnected ecological relationships with economic impacts. Environmental health is determined through the relationships of inequality, power, wealth, and work<sup>160</sup>. Economic positions of power perpetuate inequalities beyond society, ultimately leading to biosphere destruction.

“Forces of Change,” depicts the modern Capitalocene through a 72” x 44” oil and acrylic painting. The piece is part of Rockman’s “The Great Lakes Cycle”

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<sup>160</sup> Moore 78

portfolio, which seeks to portray the major changes in the Great Lakes environments and their surrounding ecosystems (Figure 14).



**Figure 14.** “Forces of Change” by Alexis Rockman.

“Forces of Change” features a tentacular monster in the foreground, bottom center, lurking within the futuristic remains of the Great Lakes watershed. The squirming polymorphous monster, a nematode gifted tentacular arms, grasps out from its prehistoric abyss. Unlike Squarzoni’s capitalist robot, this octopus-like creature harks back to historic political cartoons of globalism and economic strangle. Its tentacles take hold of technology and nature alike, attacking everything but microbial pathogens in their path. The beast amputates the machine’s arm, severing its mechanical autonomy to reach, grasp, and exploit nature’s dwindling resources. It sinks towards the lake bottom, a fist full of sediment in its hand. The dredge boat bobs uselessly in the monster’s wake.





**Figure 15.** “The Federalist Octopus” 1933 political cartoon. Author unknown.

**A Parallel to Past Capitalism.** Rockman’s octopus-like being resembles the 1933 political cartoon: “The Federal Octopus” (Figure 15). In the 1933 cartoon, the monster represented the capitalist system grabbing hold of government officials’ intentions. Politicians were lured to make money-making deals rather than to represent their constituents’ wishes. In the 2017 painting, the monster symbolizes capitalism grabbing hold of expensive projects. Rather than protect the Lakes with costly initiatives, the capitalist monster lures individuals into saving money instead of the victimized ecosystem.

Capitalism has paradoxically facilitated the Great Lakes economy and destroyed its ecosystems (Figure 14). Tourist destination locations, production plants, power sources, and water systems have brought money to the area. But,

poor ecosystem and industry management has led to its decline. In the bottom center, capitalism controls the focus and foreground. It reaches out with its tentacular grasp and takes hold of its surroundings. Framing the focal point are two tourist attractions: Niagara Falls and New York City. Their sparkling revenue and new infrastructure brightly stand out against the rest of the painting.

Capitalism, New York City, and Niagara Falls are symbolically connected by past economic decisions, which form a circle around the monster. In the lower right, pollution and disease wreak havoc on the watershed. Money-saving closures of water treatment facilities led to microcosms of destruction. Above them, an abandoned dredge and barge represent cancelled lake cleanup projects.

Unsurprisingly, industrial grain and cement buildings were also left to decay, instead of paying the demolition fee. The Tree of Heaven acts as the finale.

Invasive species overrun the area, costing the ecosystem millions. The remaining organisms flee the space, just as humans did before them.

Rockman's work portrays a fatalist perspective on the future posthuman narrative. The painting depicts a stark dichotomy between nature and humanity's economically-selfish neglect of the environment. Similarly to Squarzoni's villainization of the capitalist economy, Rockman argues capitalism is the monstrous villain driving humanity's disregard for the environment. Humanity exploits resources and leaves the environment to "clean up" and restore the area.

Water, the crumbling earth, invasive plants, and diverging tectonic plates are expected to renew the damaged environment.

Rockman's "Forces of Change" mirrors Moore's "The Rise of Cheap Nature," in which he describes capitalism as an interplay between nature, humanity, and work:

Once we begin to ask questions about human-initiated environment-making, a new set of connections appears. These are the connections between environment-making and relations of inequality, power, wealth, and work. We begin to ask new questions about the relationship between environmental change and whose work is valued—and whose lives matter<sup>161</sup>.

The Capitalocene becomes an exposé of human elitists and their consequent relationships with what they perceive as lesser, more natural, forms. The social hierarchy is held accountable for the induction of cheap labor, inadequate compensation, and nature's recurrent exploitation. Humanity has become a reference for the 'haves' and nature—the producer of cheap and free resources—an emblem for the 'have-nots'. Rockman describes this process through his series of paintings within "The Great Lakes Cycle." Industry, machines, and development have transformed the once natural setting into a capitalist system that is segregated. In "Forces of Change," natural systems are remnants of a prior era. Buildings and construction sites line the lake where vegetation and organisms once made their homes. Automated technology, free from minimum-wage

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<sup>161</sup> Moore 78

workers, exploits natural resources at minimal monetary costs. Machines provide cheap labor and the ecosystem is robbed from its resources and structure. Even the shore landscape has been transformed to resemble a sinking peninsula. Rockman signals the unsustainability of these actions through motion. Nature's organisms flee as humanity's creations erode into the water and deadly mutants spring up from the sand. These changes, Moore proposes, lead audiences to stop viewing "capitalism as world-economy, [and] start look[ing] at capitalism as world-ecology"<sup>162</sup>.

"Forces of Change" illustrates a series of relationships between nature, humans, and work. Rockman and Squarzoni both argue that under the direction of economically-entitled humans, who authorize building on and taking from the environment, nature is expendable. Capitalism facilitates this process. In turn, the climate and anthropocentric consequences that arise from industrialized practices have negative impacts on work productivity and humans, especially those that cannot leave or relocate from problematic areas. Architecture is damaged, resources diminished, and products destroyed. The wealthy elite humans move and build new bridges. The rest of nature must deal with humanity's leftover discards and impending natural disasters, in this case, erosion and flooding.

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<sup>162</sup> Moore 85

**The Efficacy of Two Visual Mediums.** While Rockman shares many of the same themes as Squarzoni and Moore, “Forces of Change” is the most consumable, appealing, and understandable narrative, of the three, that successfully subverts capitalist ideologies and entices consumption reductions. The tentacular monster poses an immediate threat. It is clear, visceral, and the supernatural grabs the audience. The octopus encourages preventative environmental action to avoid dismal future environments. Rockman successfully subverts consumerist decisions by citing their destructive environmental effects. The tentacular monster is surrounded by disease, pollution, urban decay, invasive species. Unfortunately, the magnitude and multiplicity of environmental degraders is overwhelming. In displaying all of the environmental problems, Rockman’s fatalist narrative style may demotivate action.

Rockman and Squarzoni also share similar visual rhetoric styles. Squarzoni tries to communicate to consumers via pop culture forms of rationality and the supernatural/hero graphic narrative. Ironically, Squarzoni employs an extremely consumerist form of rhetoric to support his claim that humanity needs to resist consumerism. Rockman on the other hand invokes the supernatural through the painting’s allusion to the Federal Octopus political cartoon, which deals in hyperbole as well as the sublime fetishization of the landscape and spurs a relational and economic analysis of environmental decline.

In this chapter, I provide an outline for art's value as an alternative form of climate change rhetoric and its unfortunate accompanying flaws as an inclusive climate change reporter. The examined pieces are both effective descriptors of environmental change as a topical issue, but Squarzoni incorporates system biases into his art, rendering it consumerist, capitalistic, and out of touch with the environmental debate. In *Climate Changed*, Philippe Squarzoni describes his personal transition from consumer to environmentalist advocate, but he creates a narrative rooted in anthropocentric techniques and consumerist mentalities. In contrast, Rockman's painting provides strong commentary on the economic systems of power that lead to environmental destruction, but it also creates a fatalist narrative in which environmental restoration seemed unrealistic.

Art has varying levels of efficacy. In the next chapter, I explore the rhetoric of kinesthetic art, its ability to partially depart from consumerist ideologies, and its use of space and movement in the esoteric conceptualization of humans within and outside of their environmental surroundings. While this chapter served primarily to expose some of climate arts' shared flaws, the next chapter provides effective models that may offer more conducive climate rhetoric alternatives.

## **Chapter 4:**

### **Experiential Art as an Environmental Change Rhetoric**

In the previous chapter, I argued that art has implicit value within the larger field of climate change rhetoric. Unfortunately, while some artists implore their audiences to make environmentally conscious choices, they simultaneously incorporate temporal artistic techniques and system biases into their art, rendering them consumerist, capitalistic, and out of touch with the environmental debate. To avoid perpetuation of current systems and mentalities, other artists innovate and create new forms of rhetoric that diverge from ecologically harmful ideologies. In this chapter, I will analyze the rhetoric of kinesthetic art, its ability to create distinct esoteric experiences, and some of the shortcomings of current interactive art models. Through an examination of *An Inconvenient Truth*, automated mapping software, and “One Beat, One Tree”, I will propose that experiential rhetoric is an effective platform for conveying evidence of environmental change, but that capitalist audience-artist relationships can undermine positive environmentalist movements.

***An Inconvenient Truth: Pairing Videography with Preexisting Rhetoric***

In *An Inconvenient Truth*, Al Gore and Davis Guggenheim utilizes maps, data, visual analogies, and videography to construct a graphically-driven climate narrative. Their juxtaposition of data-driven climate forecasts, current popular science visuals, and past ecological disasters facilitates viewers' conceptualization of global warming as a sensory, bodily threat that requires preventative action. While environmental texts usually convey imminent issues, videography provides a visual representation of the future that elicits collective experiential responses from the audience. Through Gore's multifaceted use of visual media paired with movement, which can be viewed both informationally and aesthetically, Gore transforms climate data into its own form of artistic environmental rhetoric.



**Figure 16.** Gore displays the only complete image of the earth and gestures to areas of interest.



**Dynamic Presentation Features.** In the exposition, Gore stands on stage and gives an environmental change presentation to a group of live audience members. While climate conferences traditionally focus on raw science and visual consequences, Gore begins his talk by marveling at the earth. Gore uses capitalist ideologies to gain and maintain his audience's attention. He introduces a photo of the only complete view of the globe from space and emphasizes the value of the image through quantification. The shot is the only (single) complete picture of the globe from space. The audience marvels at the rarity of the image, leading the image to receive continued respect and interest. For Gore and his audience, the photo serves three purposes: it is an artform, meteorological data, and a map. The space image of earth not only highlights the planet's beauty, but also connects viewers through their collective consumption.

Gore facilitates a verbal dialogue with the globe, where his attention is directed, and the audience, who observes his presentation. He refers to the globe as "a picture that exploded in the consciousness of the human kind." Gore illustrates this shift in environmental consciousness through his own response to the image. While the map of earth's hemisphere is stagnant, Gore's thoughts are transient:

And that one picture exploded in the consciousness of the human kind. It led to dramatic changes. Within 18 months of this picture the modern environmental movement had begun.... This image [of the planet] is a magical image in a way. It is made by a friend of mine, Tom Dan San... When that is spread out it becomes an iconic image... I show this

because I want to tell you a story about two teachers I had, one that I did not like that much, the other who was a real hero to me<sup>163</sup>...

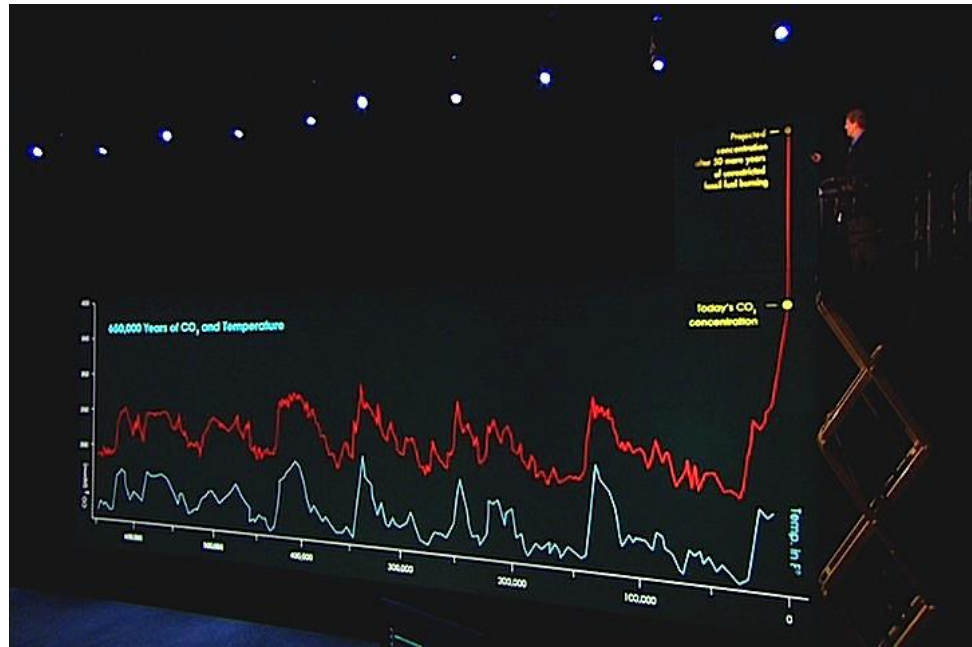
Over the span of a minute, Gore transitions from appreciating the planet, to recalling a friend's involvement in the image capturing, to describing the image, and finally to a story of two teachers. Gore converts fixed photos into climate narratives through his own dialogue. The image serves as a talking map, through which he freely explores the value of earth and its increasing destruction. The motionless image paired with Gore's transient thoughts, creates an entirely new form of climate narrative. Gore can direct his audience to a desired image, while talking through concepts, gesturing, and altering the image through zooming in or out and annotating the picture. Depending on the words that Gore says, the image connotation also changes. Gore's vocalizations change the socioemotional experience of the image. The globe goes, from being an admirable biosphere to an overwhelming meteorological force that harbors natural disaster. Gore points to and identifies the geography and weather, which are temporary, dynamic, and increasingly unpredictable. Through his gestures, Gore can converse with his audience using the earth's image as a reference. He can point, block, zoom, and alter the map. Normally, the space map is stagnant and acts similarly to a famous photograph or an out-of-date road map. The picture can be appreciated, but it is not utilized. Using staging coupled with videography, Gore transforms the image

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<sup>163</sup> *An Inconvenient Truth*, Introduction-The Most Ridiculous Thing

into a narrative backdrop, upon which he can voice his introduction and project his environmental concerns.

### Amending Current Environmental Rhetoric Strategies



**Figure 17.** Gore stands atop a lift to capture the immense scale of the “hockey stick” CO<sub>2</sub> graph.

**Graphical Art and Stage Props.** To convey the scale and significance of graphical data, Gore uses props, such as a lift, to facilitate visualization of anthropogenic impacts on the environment. On his own, Gore can emphasize temperature and CO<sub>2</sub> increases verbally, but unless people have experience with these variables, it is difficult for the audience to comprehend how much fluctuation is normal as opposed to human-induced. Gore employs mobile and kinesthetic art to diminish this problem. Using a lift, Gore creates two connotations. Riding the lift leads Gore to be associated with the middle-class workers that typically rely on these machines. In using the lift, instead of another form of stage equipment, Gore is viewed as an average blue-collar worker who is discussing climate change. This portrayal pushes back against capitalist

mentalities, which often rely on highly educated scientists. Given his ability to learn about climate change, Gore suggests that his audience is also capable of conceptualizing environmental change.

Gore's position as a working man is coupled with his kinetic tracing of the CO<sub>2</sub> graph. As the graph gradually increases in CO<sub>2</sub> levels, Gore follows the trajectory with his body until he can no longer reach the CO<sub>2</sub> heights that occur in the modern atmosphere. At this position, he pauses, steps onto a cherry picker and continues his ascent. When he reaches the current CO<sub>2</sub> value, the audience assumes he will stop and address them from this height. Instead, he continues to rise to the predicted future CO<sub>2</sub> concentrations, which are above the graph's scale. The audience murmurs as they watch Gore, from above the video screen, indicate the anticipated CO<sub>2</sub> hike and its implications for climate change.

Atop the cherry picker, Gore provides an immediate and immense problem for his audience to solve. Gore's movement does not change or alter the scale of his graphs, but it facilitates enactment of magnitude and height. The rising image of Gore leads audiences to connect with the graphs both physically and emotionally. At the top, Gore towers high above the stage; his position is discomfiting and unstable. It is clear that the numbers are far above their desired range given that Gore requires a cherry picker to reach them. Viewers also experience a kinesthetic connection with the magnitude of climate change. The

climate change hyperobject<sup>164</sup> (Chapter 1) becomes sensory and tangible. As Gore uses his own height as a scale for rising CO<sub>2</sub> and temperature levels, the audience is left to represent normal climate levels.

**Visual Analogy & Cartoons.** While Gore relies on stage props to animate his graphs, he utilizes visual analogies and cartoons to capture human behavior in response to climate change. The interjection of traditionally recreational material relaxes the audience's logical side of the brain, as Marshall suggests in Chapter 1, and attunes viewers to information uptake. While the audience is engaged in the storyline of the segment, they are focused on the material which is simple, concise, and memorable. To describe the current state of environmental change, Gore compares humans to frogs. He presents a frog animation with boiling water and argues that, like other dangers, boiling water triggers frogs' fight or flight response. A frog, representing humanity, is presented with a beaker of hot water. Touching the hot water causes the frog to recoil and jump out of the beaker. In contrast, if the temperature of the water is gradually raised, the frog does not notice the danger of the increasingly hot water and chooses to stay within the beaker. The frog's reaction to the water temperature parallels humanity's (in)action towards global warming, and the larger problem of environmental change. When presented with gradual increases in atmospheric temperature,

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<sup>164</sup> Morton

humanity remains apathetic towards climate change. In contrast, after acute natural disasters, there is increased participation in environmental change mitigation. If Gore stated these findings alone, his audience would feel victimized and potentially combative. They would interject lifestyle choices into their rationales for remaining wasteful. By employing the nonhuman figure of the frog, no one is blamed or ridiculed for their responses to global warming. Instead, the audience is encouraged to think more thoroughly about the implications of their actions.



**Figure 18.** A video clip in which Gore uses a frog and heated water analogy to portray humanity's reactions to environmental change<sup>165</sup>. Hit the play button to play or use the clickable link: [Frog Analogy Video](#).

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<sup>165</sup> *An Inconvenient Truth*, Civilization and the Earth 0:00-0:33

The graphic aspect of the frog is similar to Squarzoni's representations of other nonhuman characters. In Chapter 3, I argued that Squarzoni's nonhuman depiction of the consumer mentality allowed his audience to distance themselves from capitalism. Gore's frog analogy behaves similarly. The frog's allegorized decision to hop into or out of the beaker represents humanity's potential to detect and respond to environmental changes. In viewing the frog's response, Gore allows his audience to make the cognitive choice to be informed about climate change, rather than the reactionary approach of waiting to get burned, or harmed, prior to action. Like Squarzoni, Gore utilizes the nonhuman to portray a more societally-accepted version of environmental change rhetoric. Just as Squarzoni's consumers would not have supported the direct villainization of their capitalist involvement, Gore's audience is less likely to respond to condemnatory accusations of environmental inaction. The nonhuman figures, Santa, the robot, the frog, and its beaker, lessen direct criticism of the audience, instead directing their attention towards the abstract issue and its challenge for humanity as a collective unit.



### Adapting the Rhetoric of Modern Forecast Maps



**Figure 19.** Gore uses interactive flood map projections to illustrate rising sea level's capacity to displace 100 million people.

**Interactive Maps Paired with Narration.** While cartoons and analogies are effective on some individuals, others rely on geographical changes to judge whether environmental change has occurred. In *An Inconvenient Truth*, Gore relies on interactive maps paired with anthropocentric impacts to substantiate his claims of environmental change consequences:

If Greenland broke up and melted, or if half of Greenland and half of West Antarctica broke up and melted, this is what would happen to the sea level... A lot of people live in these areas. The Netherlands, the low-countries: absolutely devastating...Worse still, Calcutta and, to the East Bangladesh the area covered includes 50 million people. Think of the impact of a couple hundred thousand refugees when they are displaced by

an environmental event and then imagine the impact of a hundred million or more<sup>166</sup>.

As Gore describes projected sea level rise, the video screen displays maps of population-dense areas as their coastlines are immersed by water. Gore's pairing of climate projections with video animations creates a strikingly realistic perspective on forecasted global geographical changes. As the (projected) ice melts in Greenland and West Antarctica, the audience watches sea levels encroach and submerge areas of the Netherlands and Bangladesh, among other locations. While each of the previous climate narratives included climate projections and consequences, Gore's narration, paired with videography, provides a decent method for conceptualizing environmental impacts. The animated maps allow the audience to visualize what sea level rise looks like, and Gore simultaneously provides additional information including how many people will be impacted, which populations are threatened, and points of refugee comparison.

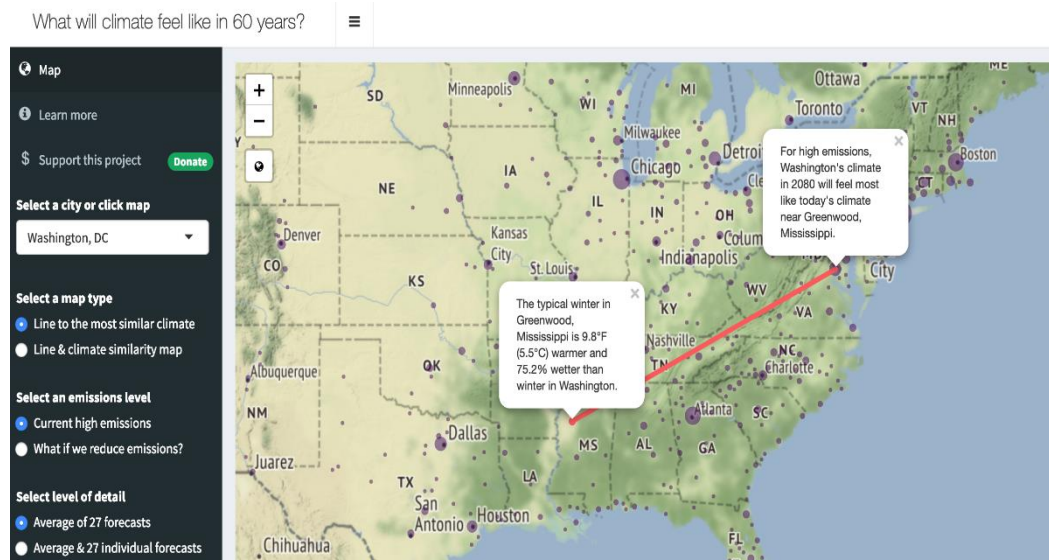
While Gore's method is impactful, it is also anthropocentric. The audience's attention is tied to the human populations impacted by sea level rise. The changing landscapes, ecosystems, and organisms are unmentioned. 100 million refugees are forecasted to be displaced, but many more organisms will be forced to relocate or perish. Gore's anthropocentric lens diminishes biosphere

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<sup>166</sup> *An Inconvenient Truth*, Impact of 20 Foot Rise in Sea Level

protections, instead urging consumers to prepare for additional refugee inhabitants.

**The Rhetoric of Geographical Forecast Models.** The animated maps and narration that Gore performs are not unique to *An Inconvenient Truth*; various app and web page-based map modules emulate the same conceptualization process. On sites like Google Maps, consumers can change their scale, perspectives, focal points, and map styles all the while talking with and contributing to artificial intelligence devices and various neural networks. The popularity and interest in interactive maps are changing the way that people interact and communicate with environmentalism. Rather than focusing on how specific species and organisms will fare with change, an increasing emphasis is being placed on climate and topographical forecasting. While in *An Inconvenient Truth*, Gore primarily examines sea levels within a geographical forecast model, other maps display moving averages of temperature, CO<sub>2</sub>, rainfall, and other abiotic measurements. People want to see how entire swaths of the globe will change. Predicting and illustrating earth's conditions has become both an art and a form of communication. While Gore depicts these changes through videography, using sea level videos and voice narration, online interactive climate modules strive to show differences in current and future predicted conditions through click-based content.



**Figure 20.** An interactive climate map that was produced by the Fitz Lab<sup>167</sup>. It can be viewed at the following link: [Fitz Lab Interactive Climate Map](#).

This climate module in Figure 20 serves primarily as a contextual tool for curious observers. Interested individuals can visit the website and select a city to receive future climate projections. The module provides a temperature projection and connects this climate to another US city that currently experiences conditions similar to the temperatures forecasted. In the example above, Washington, DC in 2080 is projected to exhibit similar climate conditions to those of present-day Greenwood, Mississippi. Looking at climate models, in contrast to Gore's narration, creates less anthropocentric bias. Consumers receive data and determine how it will impact their desired subjects, which could be people, or other aspects of the biosphere.

<sup>167</sup> Fitz, What Will the Climate Feel Like in 60 Years?

There are several benefits and drawbacks to this type of system. Like Gore's presentation, both the global map and the interactive forecast module require preliminary interest in the subject. Audience members and users have to elect to investigate climate change impacts. To get information, audience members have to consume Gore's documentary or the forecast website, respectively. Without an interest in the topic, people could easily avoid or be unaware of both topological approaches. Taken as a solitary activity though, Gore's mobilization of climate projections within art is more accessible to a diverse opinion set than the audience attracted to a climate model website. Gore mixes climate maps with scenes and descriptions of their impacts. Interactive climate forecast, in contrast, have set data fields that output largely numbers. In Figure 20, the future climate is described by temperature values for each location at particular dates. While people are familiar with the Fahrenheit and Celsius systems, audiences would probably struggle to conceptualize other numbers and their impacts on the environment. For example, CO<sub>2</sub> numeric values could be difficult to put in context without supplementary information or narration.

The videography interactive forecast model is effective because of its narrator. When Gore references natural disasters, he can highlight them on the map. He is aware of the environmental shift and is, distantly, but still kinesthetically, interacting with its results. He points, zooms in, and annotates areas as if he had speculatively experienced them prior to and after environmental

change had occurred. Gore's additions to the forecast models through verbal and physical annotations, contribute to the efficacy of his rhetoric. He can tell us which regions look the same and the others that have been altered by human activity. Gore is not climatologist, but he is able to touch, analyze, communicate, and act on the data he has gathered. Through repeated interactions with geographical, scientific, and experiential data, Gore has created muscle memory, and consequent bodily familiarity, with planetary change. His mind and muscles are used to adjusting and reconfiguring maps. Gore, and by extension, his viewers, grow comfortable with the prospect of altering climate narratives through their own repeated interactions with them. Gore's passive actions, mapping, describing, and recording, transform into activist movements when he transitions from observing to reporting. Through his increasingly knowledge-rich interactions, Gore primes himself and the audience for somatic, if not real-time, engagement in the environmental change movement and climate change itself.

### **“One Beat, One Tree”: An Interspecies Dialogue Governed by Capitalism**

Gore’s incorporation of bodily rhetoric is effective, but not necessarily unique. In “One Heart, One Tree”, Naziha Mestaoui uses projected art and virtual spaces to provide her audiences with an esoteric forest experiences that encourage bodily connections with the surrounding environment. While Gore’s rhetoric assists his audience in developing muscle memory to engage and take environmental action, Mestaoui attempts to facilitate interspecies relationships. Through her recreation of growing forests projected onto urban landscapes, Squarzoni creates a fictional space in which capitalist urban sprawls, consumers, and nature coexist. In this section, I will propose that while Mestaoui’s piece gestures towards a Haraway-esc cohabitation, her rhetoric relies on capitalist investments and long-term consumption. Despite attempts to embody an almost posthuman structure of equality, Mestaoui’s crowd-sourced economic model and desire to entertain, undermine progress towards coexistence.



**Figure 21.** Saint-Germain-des-Pres is immersed within the “One Beat, One Tree” projection.

**Activism through Interaction.** The luminous glow of projected trees adorns Saint-Germain-des-Pres’ pristine exterior, transforming the night landscape into an urban jungle. The flurry of phone activity elicits a dynamic interpretation of the scene. Trees appear to sprout up, their pulsing sparks generated by the cellular beat of incoming signals. Mestaoui likens this throbbing growth to the rhythm of an individual’s heart. Each tree garners a label, a name to commemorate its signal’s producer. The heartbeat of the tree is intended to resonate within the app-user’s conscious. The projected tree growth serves as a model for the green movement. Each person is connected to their own holographic tree through a phone app. For every person that participates and for every tree that is projected, a similar ‘real’ tree is planted somewhere else in the world.





**Figure 22.** A juxtaposition of the virtual and visual “One Beat, One Tree” displays.

Mestaoui’s piece is a moving projector display campaign of a growing forest overlaid on famous government and memorial landmarks, buildings, and educational institutions. The projection requires audience participation and active donations to express its dynamic elements. For the display to run, audience members must attend the exhibit, download an app, and make a monetary commitment to have a tree planted in exchange for their entertainment (Figure 22). For every person that pays for a tree to be planted, a unique tree is added to the projector display in live time. The more users that participate, the more trees that are planted by Mestaoui’s charity.

Unlike Gore’s graphical display, which required passive audience involvement, Mestaoui attempts to entice her participants to be involved in environmentalism through bodily and monetary engagement in her displays. To witness and be a part of the art, viewers must take action, in the form of

downloading an app, communicating with the charity, experiencing their tree and forest growth, and monitoring their tree contribution over the app afterwards.

**Technology Enhances Mestaoui's Rhetoric.** Mestaoui argues that the use of technology is necessary to facilitate conceptualization of the environmental narrative: "Technology gives the possibility to see the invisible. For some people, trees are energy and inspiration. Virtual becomes real. Immaterial becomes material"<sup>168</sup>. This art provides an esoteric map through which the audience can experience a forest being grown without the temporal limitations that planting and travel usually demand. While Gore's interactive maps and the Fitz climate module fill in conceptualization gaps by showing how the environment is expected to change, Mestaoui's piece is an ideological map for environmental cohabitation. The virtual forest represents a real collection of trees that are growing in harmony without anthropogenic harm. Phones allow the new conservationists to explore their virtual progress and to move through their tree contributions without harming the forest or releasing emissions to travel to a tree-planting site.

An app facilitates users' abilities to grow the projected landscape. This populist agency allows individuals to essentially consume environmental protection and conservation: This project "gives the opportunity to each of us to be part of the

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<sup>168</sup> Mestaoui

solution... Just as each heart is unique, each tree is unique. If we all act together, it can have a huge impact”<sup>169</sup>. When people purchase trees, they undermine the capitalist mentality that consistently devalues nature and environmental spending. Trees shift from being perceived as common resources to valuable commodities. Despite Mestaoui’s intentions to empathize with and value trees, the monetarization of conservationist ideologies and commodification of trees creates an extremely capitalist and anthropocentric piece. Mestaoui’s art operates under a transactional model that requires bodily interaction, it begins with app subscription and culminates with additional tree purchases after a walk through the exhibit.



**Figure 23.** Four Paris monuments that received private funding for the installation.

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<sup>169</sup> Mestaoui

**Financial Pressures Perpetuate Consumer Valuation.** While Mestaoui's environmental narrative successfully portrays environmental optimism through kinesthetic engagement, much of the rationale, explanation, and sustained interest is lost. Individuals are intended to feel invested in the trees that they 'plant,' but they are not necessarily invested in the mission of the organization. There is no incentive for continued donation because contributions are driven by event participation and aesthetic appeal. When the display disappears after the night's end, the project is over, for a portion of the individuals, and put on hold for the remaining group. Recurrent donations may be made to the mission on behalf of art support or in response to future repeated stimuli, such as visits to the "One Beat One Tree" exhibit, museum display, or even notifications from the app. This art piece does a great job of spurring interest, but it creates an unsustainable level of conservation. People may pass along and refer others to the initiative, but, in the capitalist mentality, there is nothing to turn customers into long-term returning investors. This momentary stimulation is problematic because capitalism draws consumers' attention to what is appealing, rather than what is sustainable. In this exhibit, environmental remediation is a passing fad, not a long-term goal.

Mestaoui's success is dependent upon consumer engagement and user input, leading her to embody capitalist ideologies that perpetuate environmental malpractice. Mestaoui creates physically palpable demands of her audience, but her marketing and displays are limited to large investors. Her projection

installation pieces are exhibited within or on the front of expensive and pristine buildings (Figure 23). Nature is projected through images of capitalist grandeur and power. Mestaoui markets her work towards capitalist elites, who occupy positions of economic, political, and social privilege. She juxtaposes the virtual natural world and the tangible capitalist elites. These images create a stark contrast between financially uninhibited consumers and the idealized environment through which consumers derive resources, services, and pleasure. Perhaps Mestaoui targets this economic level because they have the highest potential to change the environment (Chapter 1) or maybe they are the most likely to contribute to her cause financially.

To gain and maintain an audience, Mestaoui relies on a philosophy outlined by Christian Parenti in “Environment-Making in the Capitalocene Political Ecology of the State.” Parenti proposes an alternative central catalyst to Moore’s depiction of the Capitalocene: the state. Parenti argues that without the state to legislate and value goods and services, capitalism would lack the cohesive forces necessary to harness, develop and utilize natural resources:

The state is an inherently environmental entity, and as such, it is at the heart of the value form. The state is at the heart of the value form because the use values of nonhuman nature are, in turn, central sources of value. The modern state delivers these use values to capital. The state is therefore central to our understanding of the valorization process and to our discussion of the Capitalocene<sup>170</sup>.

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<sup>170</sup> Parenti 167

Parenti suggests that the divide between humans and nature could not exist without the state's authority structures and economic and resource regulations. Mestaoui's exhibits rely on consumers, private investors, and government buildings and monuments. In Figure 23, all of the exhibit locations are monuments in France and their installations were paid for by private donors and the government<sup>171</sup>. While capitalism is still viewed as an interplay between humans and nature, Mestaoui complicates this dialogue by seeking environmental advocacy from consumers, investors, and governments separately. Her permanent art displays appear in tax-funded museums, art galleries, and education centers. Mestaoui utilizes the state's influence to appeal and captivate the consumer, and consequently, the state uses Mestaoui's designs and mission to campaign for and give evidence of their environmental efforts. To maintain engagement, both monetarily and ideologically, Mestaoui attempts to prolong interest in environmentalism through the passing of consumption. During some periods of the year, monuments highlight her work, at other times, consumers visit museums and interact with her pieces<sup>172</sup>. Through this cycle, there is no sustained environmental engagement, but Mestaoui is at least able to sustain the number of environmentally-minded individuals, despite their identities switching, throughout the year.

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<sup>171</sup> Mestaoui

<sup>172</sup> Mestaoui



**Figure 24.** Museum visitors consume “One Beat, One Tree.”

**Maintaining Engagement in Environmental Transformation.** Through the planting of trees, altered appearance of famous architecture, and audience’s creation of projectable art, Mestaoui suggests that geographical transformations are not inherently negative. Through her project, Mestaoui seeks to redesign the landscape. The forests planted, and reenacted by human consumption of holographic art, create a more tangible global interactive climate map than most climatology websites. The audience responds to the forest and larger biosphere when they choose to participate in, or opt out of, the project. The act of being simultaneously within and outside of organic art creates a dialogue that facilitates audience communication. The scenes are experiential and remotely tangible. The

combination of shared experience coupled with mutual investment changes the trajectory of the art. Mestaoui uses capitalism to redirect value. Her dual viewing locations facilitate consumers' transition from spending money on luxury items, such as apps, museum trips, and monuments, to making donations to forests.

Mestaoui's pieces, despite a transition in spending culture, are inherently capitalist and perpetuate consumer mentalities. While these ties do not inherently doom the piece to environmentalist inefficacy, they perpetuate systems of power that are currently contributing to environmental change apathy. Mestaoui's model is sustainable if she can continue to elicit care for the environment. In contrast, if consumers gain satisfaction in planting one tree, they may be less likely to contribute to more meaningful actions, having given a prior tree donation. Providing donations gives consumers an instant feeling of satisfaction. This satisfaction may fulfill the consumer's desire to participate in environmentalism, or it could encourage further and future participation. Effective environmental rhetorics are able to consistently engage and elicit action. Mestaoui's piece accomplishes consistent engagement through her rotation of audience members, but it does not guarantee that significant environmental progress will be made.



In this chapter, I have provided an overview of two interactive visual art pieces. While Gore and Mestaoui's pieces share some of the same kinesthetic rhetorical strategies, their calls for action differ in efficacy and affiliation. Gore embraces accessible data through geographic, experiential, and analogous kinesthetic examples. His strategies for increasing interactivity mirror some of the mapping forecast models available for climate conceptualization, but his variable content and videography keep audience members more engaged than passive activities. In contrast, Mestaoui utilizes explicit divisions between individual consumers, state supporters, and investors to target and disperse her environmentalist rhetoric most effectively. During interactions with "One Beat, One Tree," in its various forms, Mestaoui facilitates environmental dialogues that inspire and connect with her viewers. From the heart beat addition to the unique forest plants, Mestaoui builds cognitive, physical, and monetary connections through audience movements.

Unfortunately, both Gore and Mestaoui's presentations, while accessible and physically engaging, do not motivate sustained Capitalocene protest or environmental conservation. *An Inconvenient Truth* leaves the audience scientifically enlightened but without clear direction for action. Unlike Squarzoni (Chapter 3), Gore does not provide a list of resources or next steps. Likewise, "One Heart, One Tree" misleads governments and audiences into believing that one donation, when done through large-scale crowd sourcing, is enough to change

the future climate map trajectory. One exhibit showing, or tree payment, rids both the government and people of their climate guilt and provides a breathtaking display, but it does not significantly change the future environmental narrative, especially capitalism's role in climate change. Consequently, the campaign reaffirms the Capitalocene hierarchy. Those who can afford to pay monetarily for their guilt do, while unseen laborers clear land, plant trees, and suffer climate change consequences.

## **Conclusion**

In this thesis, I have worked to dispel notions of binary objective scientific and subjective artistic environmental narratives. Instead, I presented a spectrum of rhetoric styles and mediums that allow for both translation of current environmental findings and new dialogue surrounding biosphere change. In each source, authors contributed new and unique perspectives that were in conversation with fellow scholars' observations of the environment, capitalist system, and consumers' ideologies. These recurrent additions and conversations make modern environmentalist rhetoric a unique branch of communication spurred by authors' common documentation, commentary, and proposals for change.

While distinct from other genres, all of the analyzed environmentalist dialogues shared a common orbit around notions of consumption. The consulted environmental narratives were appealing, understandable, and consumable. Unfortunately, these attributes create a paradoxical relationship in which consumption is required for information transfer, but consumption of resources, including environmental narratives, perpetuates environmental change. Given this unavoidable paradox, effective environmental rhetoric balances between consumption of climate dialogue and perpetuation of unrestrained consumerism. The audience must be sufficiently enticed by the environmental dialogue in order to continue consuming rhetoric, but also simultaneously aware that appealing narratives perpetuate unrestrained consumerist actions, leading to environmental harm, rather than the intended environmental remediation.

To inform their audiences and maintain this balance, authors have a responsibility to acknowledge the capitalist drivers of economic change and their consequent broadening of what humanity considers eco-friendly and unfriendly actions. Sinha represents this concept in *Animal's People*. Animal's desire to live outside of consumerism not only makes him a credible narrator, but also offers a symbolic structure through which Sinha overthrows the human and nonhuman divide. In lieu of these drivers, authors should be aware of the rhetoric and dialogue forms that they use and the connotations that they carry. Impactful rhetoric models push against back against consumer ideologies of environmental and resource exploitation, instead proposing coexistence.

In this thesis, there were a spectrum of rhetorics. Despite this spread, none of the rhetorics were able to fully subvert and overcome consumerist principles driving environmental decline. Consequently, to classify environmental change narratives as purely effective or ineffective would be a gross inaccuracy. Specific rhetoric types are not always impactful nor are they always harmful, this binary would prevent usage of all mediums. In this thesis, rhetoric forms were often effective, but when paired with biased ideological arguments, they perpetuated consumerist, anthropocentric drivers of capitalism. For example, Squarzoni's illustrations, when combined with captions and graphs, were highly effective. Unfortunately, his bias towards a non-white victim narrative perpetuated the

capitalist misconception that only economically underprivileged individuals are vulnerable to climate change.

Through more thorough understandings of environmental change rhetoric origins, biases, and efficacy, authors can better motivate their audiences without perpetuating systematic power structures and capitalist ideologies. To increase the possibility of environmental action, authors can opt to pair dialogue strategies, as Gore did with his interactive climate maps, verbal narration, and camera functions, and/or they can determine rhetoric forms that work well for their niche audience, as Rockman did with his tentacular monster. Ultimately, to improve environmental consciousness and preservation, diversifying the number of employed environmental rhetoric forms is helpful, as illustrated by *Animal's People*, but subverting capitalist systems of power and consumerist ideologies are necessary to avoid perpetuation of current environmental disregard and unrestricted consumption.

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