Climate, Complacency and American Culture: The Role of Narrative in the Era of the Misinformation Amid the Anthropocene

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Abstract

This article explores the relationship between climate misinformation campaigns and narratives in light of skepticism and denial of climate change in the era of the Anthropocene. Beginning in the earliest moments of human existence, this paper establishes the importance of narratives in the founding of modern humanity and how such foundational stories has led to our current Anthropogenic world. It goes on to examine misinformation created and funded by politically powerful foundations and companies that distorts the current discussions of climate change among the American public. In leu of the abundance of climate misinformation, this paper also analyzes how the complex emotions inherent in climate change can rationalize the blatant fallacies presented in misinformation campaigns and why they remain socially and politically salient. Given such emotional perils that are unequivocally intertwined with existing in a radically shifting climate, it is necessary to invoke a greater emotional response that overpowers the fear and anxiety that rationalizes the belief in misinformation. Grounded in such emotions inherent in the era of the Anthropocene, this paper argues that narratives and the art of storytelling, the very foundation of what it means to be human, are uniquely suited to convey the severity of climate change. They have the power to invoke an empathic response which works to reverse the hold misinformation has over a sector of the American public that drives climate change skepticism and denial.

Key Words

Narrative, Empathy, Immersion, Anthropogenic Climate Change, Misinformation

Introduction

A global movement has emerged that is actively addressing the dire state of the radically shifting climate. For the first time in the history of the environmental movement, the world witnessed millions of people from countries that spanned across the globe gather in protest to demand action from complacent governments, and as a result, many countries have made changes to move towards a more sustainable future.[1] This momentum, however, remains largely absent on the American political agenda, demonstrated in the largely constant (high) levels of carbon emission and the current administration pulling the U.S out of the Paris Agreement.[2] Among the concerns in the era of the Anthropocene—the destruction of mass amounts of biodiversity, initiation of the Sixth Extinction, and even the sheer necessity to create a new geological epoch to account for human impact on the environment— climate change is by far the most pressing. It acts as the catalyst that will both magnify existing environmental concerns and accelerate their demise.[3] The perception of climate change, however, is arguably more pressing than climate change itself, as it is far easier to rally support for change in policies among a public that believes that climate is radically shifting. In the United States, a relatively small, but significant, portion of the population questions the reality of climate change and remain skeptical that human activity is the key driver. These denials stem from the steady stream of misinformation, funded by influential oil companies and politically powerful individuals, that distort the public's understanding of climate change and spread seeds of doubt. Narrative, a strategy that communicates the significance of an event through structure and plot, plays a

[1] Somini Sengupta. "Protesting Climate Change, Young People Take to Streets in a Global Strike," The New York Times, September 20, 2019, https://www.nytimes.com/2019/09/20/climate/global-climate-strike.html.
[2] T. Wang. "CO2 Emissions United States 2018," Statista, July 30, 2018, https://www.statista.com/statistics/183943/us-carbon-dioxide-emissions-from-1999/
[3] Philippe Lena and Liz-Rejane Isseberner. "Anthropocene: the Vital Challenges of a Scientific Debate," UNESCO, May 12, 2015 https://en.unesco.org/courier/2018-2/anthropocene-vital-challenges-scientific-debate.

crucial role in combating misinformation.[4] This paper argues that narratives are a crucial tool in shifting the perception of climate change among skeptics and deniers as they effectively engage and transport their audience, invoking an emotional response. This active response created from the consumption of narratives works to reverse intrinsic emotions associated with not only the convictions held by climate change deniers, but the complex emotions inherent in living in a warming world.

Narratives and the Conception of Modern Humanity

The species *Homo Sapiens* has been in existence for roughly 70,000 years. From the emergence of the first *Sapiens* up until present day, humanity has transformed from inhabitants of the Earth and the complex ecological relationships that comprise it, to autocrats who have attempted to assert control over the world's natural order. This path of dominion has led to the current environmental crisis that is crippling the current global landscape and emerged because of the narratives that were collectively told, believed, and embraced throughout humanity's founding.

Storytelling is at the very core of what it means to be human as it is deeply entwined with the earliest era of human history. Yuval Harari, author of the novel *Sapiens*, a condensed history of the origins of modern-day humanity, argues that "…large numbers of strangers can cooperate successfully by believing in common myths. Any large-scale human cooperation…is rooted in common myths that exist only in people's collective imaginations… it all revolved around telling stories, and convincing people to believe them."[5] The ideas of money, rights, justice, religion and every other foundational element of the modern world exists as a product of human imagination

[4] Lindsay Morton. "The Role of Imagination in Literary Journalism," *Literary Journalism Studies* 10, no. 1 (2018): 93–111. https://drive.google.com/drive/folders/1uSpRyLckieKzQRyV0kVp1ZIgTxuNnA22.
[5] Yuval Harari. "The Tree of Knowledge." In *Sapiens: A Brief History of Humankind* , 2nd ed. (Broadway, NY : Harper Perennial,2018), 27-30

and the stories constructed over hundreds of thousands of years. One of Harari's key examples of narratological construction is the French car company Peugeot. The company owns factories, employs hundreds of people, produces physical products, has the ability to borrow money, and be sued. Peugeot would still exist even if all of its employees, managers, and officers were dismissed and all of its shares sold. However, if the company were to be dissolved, life would largely go on business as usual—all of Peugeot's factories and employees would still remain. As Harari puts it, "…Peugeot [has] no essential connection to the physical world…[it] is a figment of our collective imagination."[6] Humans collectively imagined, and subsequently believed in the idea of a limited liability company, and it holds influence over society as a result.

Humanity has an emotional attachment to these narratives that have been constructed over hundreds of centuries. A nation exists because of humanity's collective belief in it, but it is the emotional attachment to the narrative of a nation that inspires citizens to enlist in the armed forces to defend fellow members that they have, and never will, meet. Similarly, humanity created the narrative of laws, but entire fields of studies and careers exist because of the value we place upon justice and devotion we feel to protect it. The idea of nationality and justice are products of the emotional connection humanity feels to the stories that have constructed the current world. These narratives exist because they have been told, but they remain integral to the human identity because of their emotional salience.

Though the emotional manifestations of nation-ness and justice are valuable products of humanity's stories that benefit the world at large, the emergence of carbon-based capitalism, as a product of the collective narrative construction, is the cause of the world's current environmental crisis. The economic system of capitalism is just as much of a human fiction as is the idea of

[6] Id.Bid 28

limited liability companies—it is a system we collectively agree upon to conduct both large scale and day-to-day transactions. Adam Smith's theory on markets and the "invisible hand" are constructed stories that played a role in the birth of the current global economy's reliance on carbon and the burning of fossil fuels. The metaphor of the invisible hand claims that individual self-interest and consumption both benefit society and achieves its goals at large.[7] It is this *laissez-faire* approach that convinced the global society that powerful oil companies' interests benefit the world as a whole and remains the rationale for its continued use. This reliance on fossil fuels, and resistance to convert to other forms of energy, is a product of the stories that have been told about its importance in achieving national growth.

The Era of the Anthropocene

The narratives that have fundamentally shaped the development of humanity have unequivocally led to the radically shifting climate. The world economy's current reliance on fossil fuels, that have stemmed from the human construction of capitalism and markets, has caused an insurmountable volume of carbon dioxide to be released into the atmosphere that has caused the changing global climate. In essence, the stories we (the collective) have told, played an integral role in the current climate crisis, so much so that the scientific community has proposed the creation of a new geological epoch to document the human impact on the environment.

Many discussions and conversation that surround climate change operate under the premise that humanity is living in a new geological epoch coined the Anthropocene. For the past 12,000 years, we have been living in the Holocene which tells the story of civilization and all its subsequent development since the last ice age, effectively marking 12 centuries of a stable

[7] Christina Majaski. "Dispelling Mysteries About the Invisible Hand," Investopedia, May 5, 2019, https://www.investopedia.com/terms/i/invisiblehand.asp.

climate.[8] The Anthropocene moves to document the profound change in the composition of the Earth including the increase in carbon emissions and sea level rise, the commencement of the Sixth mass extinction of species around the globe, and the severe reduction of biodiversity as a result of deforestation and industrial development.[9] In essence, the Anthropocene is the proposed geological epoch that will document the shift in the physical composition of the Earth as a result of the radical increase in human activity.[10]

It is clear what the Anthropocene is, and what it proposes, however, it is less clear where in geological history to mark the end of the Holocene and the official start the Anthropocene. Climate scientists Simon Lewis and Mark Maslin propose two potential markers: 1610 and 1964. The year of 1610 was the clash of the worlds, where the Old World began to interact with the New World. The movement of Europeans to the New World altered and homogenized the diet of humanity as crops from the New World appeared in non-native Europe while crops from the Old World were planted in the Americas.[11] This is the first human driven change to the biota of the environment as both the flora and fauna were being trans continentally traded for the first time in human history. European exploration and occupation in the New World also caused a massive loss in life among indigenous populations. A population of approximately 54 million in the Americas prior to 1942, dropped to just over 6 million in 1650 as a result of diseases carried by the people of the Old World, war, enslavement and famine.[12] The death of over 80 percent of the

[8] Damian Carrington. "The Anthropocene Epoch: Scientists Declare Dawn of Human-Influenced Age," The Guardian, August 29, 2016 https://www.theguardian.com/environment/2016/aug/29/declare-anthropocene-epoch-experts-urge-geological-congress-human-impact-earth.
[9] Id. Bid
[10] Simon Lewis and Mark Maslin. "Defining the Anthropocene" (Macmillan Publishers Limited, 2015) doi:10.1038/nature14258. 173
[11] Id. Bid 174-175
[12] Id. Bid 175

population caused a global dip in carbon dioxide levels which documents the first human driven change in the Earth's atmosphere.

The year of 1964 is often referred to as the Great Acceleration, marking a period in which population grew exponentially, humanity was altering natural processes, and states were testing nuclear weapons.[13] There was an ever-increasing demand for natural resources to sustain the growing population and in order to effectively do so, scientists were genetically engineering crops. All the while, scientists across disciplines were enthralled in the innovation of weapons that were capable of decimating an entire continent, positing radioactive fallout in uninhabited land. The accumulation of these individual events has changed the composition of the Earth including the presence of plutonium isotopes in sediments, peaks of iodine isotypes with shelf-lives of 30 million years in marine sediments and soils, and lead isotopes in ice cores.[14]

Regardless of the specific date assigned to the start of the Anthropocene, the activity during this period has undeniably altered the composition of the planet and has set in motion secondary effects. As Simon Lewis puts it, "In a hundred thousand years, scientists will look at the environmental record and know something remarkable happened in the second half of the second millennium. They will be in no doubt that these global changes to Earth were caused by their own species."[15]

This seemingly arbitrary debate over dating a geological epoch is both socially and politically significant. Establishing the start of the Anthropocene in 1610 suggests that the origin of trade and globalization—the very foundation of the current world order—is to blame for the

[13] Id. Bid 176
[14] Id. Bid 176-177
[15] Hannah Devlin. "Was 1610 the Beginning of a New Human Epoch?" The Guardian, March 11, 2015 https://www.theguardian.com/science/2015/mar/11/was-1610-the-beginning-of-a-new-human-epoch-anthropocene#targetText=The year 1610 marks the,the continent by European colonialists.

myriad environmental concerns the are captured in the renaming of the current epoch. Similarly, establishing the commencement of the Anthropocene in 1964 highlights the perils of technological advancement that threaten planet-wide destruction. Inherent in the creation of a new epoch is the acceptance that the composition of the Earth, and the global climate by necessity, is changing and it is an unnatural product of human activity. The chosen inception of the Anthropocene, or creating a new geological epoch in itself, dictates the stories people construct about global climate change and the environment at large.

Climate Change Denial and Dissemination of (Mis)Information

The proposition of the Anthropocene, regardless of the chosen point of inception, would not only officially accept that the composition of the Earth is in fact changing, consequently shifting the global climate, but confirm these changes are occurring because of human activity. Climate change would become an accepted truth in the formation of a new geological epoch, which calls into question the practicality and the morality of the activities (i.e. burning fossil fuels, deforestation, etc.) that has caused these environmental concerns. Questioning these practices threatens the companies in industries that have played instrumental roles in causing climate change (i.e. oil companies). In response, these companies, and other organizations that symbiotically benefit from the fossil fuel industry's success, have funded misinformation campaigns that intentionally distort public knowledge of climate change. In misinforming the public and shifting conversations that surround climate change away from action, these actors have effectively stalled any nationwide progress towards a sustainable future in the name of protecting their industry and economic prosperity.

Misinformation campaigns are defined by Robert Brulle, an environmental sociologist and professor at Drexel University, as the "…deliberate and organized efforts…of for-profit

corporations and their allied trade associations, conservative think tanks, advocacy/front groups, and foundations… to misdirect the public discussion and distort the public's understanding of climate change."[16] Advocacy groups and organizations that openly disagree and work to convince people to unsubscribe from collectively accepted climate science are broadly referred to as Climate Change Counter Movements (CCCM). These CCCMs create doubt through the dissemination of inaccurate climate science and magnify existing skepticism that has existed in the U.S since the birth of the environmental movement.

Though most of the world, and the scientific community, accepts human driven climate change as a fact, there remains a portion of the American population that is skeptical of climate change. The exact number of climate deniers and skeptics in the U.S vary depending on the data collection method, but according to Kristin Haltinner and Dilshani Sarathchandra, both professors of sociology at the University of Idaho, one thing remains clear: "…the levels of climate change skepticism remain higher in the United States than other developed countr[y]."[17] A survey conducted by the Public Religion Research Institute cited by Haltinner and Sarathchandra, found that just over a quarter of Americans reported that there is no solid evidence of Anthropogenic climate change.[18] While convictions of climate denial vary in that they have different rationales, they are all founded on inaccurate science that misrepresents the actual scientific understanding of climate.[19] Any basic climate science would debunk these

[16] Robert J. Brulle. "Institutionalizing Delay: Foundation Funding and the Creation of U.S Climate Change Counter Movement Organizations," *Springer Nature* 122, no. 4 (2014) 682-684 https://doi.org/10.1007/s10584-013-1018-7
[17] Kristin Haltinner and Dilshani Sarathchandra. "Climate Change Skepticism as a Psychological Coping Strategy," *Compass* (2018)
[18] Id. Bid
[19] About a third justify these beliefs because they have not personally seen a shift in the weather, indicating climate change is not happening, 18 percent believe that it is natural for temperature to vary and therefor, even if there is a rise in global temperature, it is not a result of human activity. Around twelve percent say that they have seen conflicting scientific evidence, five percent indicate that they believe that reported news stories on climate change are fake, and the remaining 12 percent cite their own personal experiences or their religious affiliations (3)

rationales, yet people who believe them remain unconvinced which begs the question—how do misinformation campaigns form these scientifically unfounded beliefs that are, and remain, socially and politically salient?

The funding of CCCM's partially explains the dissemination of misinformation as the monetary resources they receive allow such organizations to widely spread their messages. In a study conducted by Brulle, data from the Internal Revenue service (IRS) and the National Center for Charitable Statistics between 2003 and 2010 showed that 91 CCCM's were funded by 140 foundations and 5,299 grants that totaled $558 million over the 7 year span.[20] Among the numerous organizations, the most significant donors included Donors Trust, Donors Capital, and the Koch Foundation.[21] A separate study found that Exxon Mobile, one of the largest fossil fuel companies in the industry, gave $1.5 million to 11 conservative think tanks in 2017.[22]

Climate change counter movements are mobilized by this funding structure and use specific strategies to disseminate widespread misinformation to the public. Catriona McKinnon, a professor of political theory at the University of Reading, sets forth a framework that articulates three main strategies climate denial organizations use: (1) create a sense of authority and appeal to fake experts (2) set unrealistic expectations of certainty and consensus among the scientific community and (3) outright deception.[23]

The most common use of the false authority strategy is among conservative think tanks, such as the Heartland Institute, the Cato Institute, and Marshal Institute, that use their official

[20] Robert J. Brulle. "Institutionalizing Delay: Foundation Funding and the Creation of U.S Climate Change Counter Movement Organizations," Springer Nature 122, no. 4 (2014) 684 https://doi.org/10.1007/s10584-013-1018-7
[21] Id. Bid 687
[22] Elliot Negin. "Why is Exxon Mobil Still Funding Climate Science Denier Groups?" Union of Concerned Scientist, January 2019, https://blog.ucsusa.org/elliott-negin/exxonmobil-still-funding-climate-science-denier-groups.
[23] Catriona Mckinnon. "Should We Tolerate Climate Change Denial?" *Midwest Studies in Philosophy* 40, ed. 1 (2016) 208-210. doi:10.1111/misp.12056

platforms that appear to be credible as a medium to post scientifically inaccurate reports. Many of these think tanks have sections dedicated to climate change and the environment with article titles "fact checking" climate science[24]. The Heartland Institute[25], a prominent climate misinformation think tank, publish multi-volume issues of Nongovernmental International Panel on Climate Change (NIPCC). The NIPCC, the deliberate antithesis to the United Nation's Intergovernmental Panel on Climate Change (IPCC), collects work from 50 independent scientists from 15 countries, with a select few who have no financial stake in the outcome of the global climate change discussion, and reviews only climate denial literature from conservative scientists.[26]

Setting impossible expectations for communal consensus is also a common tool where think tanks and advocacy groups use dissenting opinions in the scientific community and minor inconsistencies in climate models to magnify those uncertainty as a call for inaction.[27] In any field across disciplines, consensus is rarely ever 100 percent, nor is it usually apart of the criteria for taking action. This tactic calls for a fallacious consensus and capitalizes on the reality that there are, as there are in any field of study, disagreements among members of the scientific community. The current literature that exists satisfy the criteria for action—out of nearly 14,000 peer-reviewed articles written about climate change between 1991 and 2012, only 24 deny climate change, which is less than one percentage point.[28] And yet, despite the overwhelming majority that agree with the current climate change conversation and the science within it,

[24] To name a few "U.N lies about food supplies and climate change", "The global warming crisis is over", and "A significant goof in nature climate change". All of these articles were posted to conservative think tank websites that cited conservative scientists and outlying descending opinions among the scientific community

[25] displayed on their website is a quote from the economist that brands them as "the world's most prominent think-tank promoting skepticism about man-made climate change"

[26] "The Global Warming Crisis Is Over," The Heartland Institute, May 19, 2015.

[27] Catriona Mckinnon. "Should We Tolerate Climate Change Denial?" Midwest Studies in Philosophy 40, ed. 1 (2016) 209. doi:10.1111/misp.12056

[28] Id. Bid

CCCM's will emphasize the less-than-one percentage point as a rationale to stave off political and economic action that would hurt major players within the fossil fuel industry.

The final tactic McKinnon articulates is perhaps the most damaging as groups and companies knowingly undermine climate science by overtly denying it. Exxon Mobile notoriously uses this strategy; it has been recently uncovered that while the company had been vocally doubting climate change, they were investing significant amounts of money and resources to fund scientific research into the phenomena. A study orchestrated by Harvard professors Naomi Oreskes and Geoffrey Surpan found that climate studies published by Exxon funded projects from 1977 to 2014 aligned with the broad scientific consensus. Moreover, it was discovered that over 80 percent of internal communications and company research acknowledges that climate change was both occurring and drive by human activity.[29] After these findings, the company spent and upwards of $20 million to fund climate denial in an effort to prevent climate legislation.[30]

It is undeniable that deliberate misinformation campaigns about the environment exist, and it is equally clear that they exist because of the influences of large corporations that benefit from public doubt and subsequent inactions which are direct biproducts of misinformation. But why does doubt about climate change, that aligns with only a small minority of the population, resonate so strongly among the people who believe it? One explanation is the emotional perils inherent in a radically changing world and the implications of such (entire coastal cities drowned by rising sea levels, ecosystems collapsing, widespread global famine, etc.) is too much of an emotional burden to bare. The anxiety and fear that surrounds accepting the truth of the

[29] John Schwartz. "Exxon Misled the Public on Climate Change, Study Says," The New York Times, August 23, 2017 https://www.nytimes.com/2017/08/23/climate/exxon-global-warming-science-study.html.
[30] Catriona Mckinnon. "Should We Tolerate Climate Change Denial?" Midwest Studies in Philosophy 40, ed. 1 (2016) 210. doi:10.1111/misp.12056

Anthropocene causes individuals to deny that it is occurring. Research has shown that when fear is present, people resist learning new information, developing an "information aversion" that inhibits the retention of information, particularly to subjects that have been the cause of such fear and anxiety.[31] This phenomena has been coined the "ostrich effect" in which people "put their head in the sand" to avoid information that induces fear and anxiety.[32] Further research from Haltinner and Sarathchandra found that people who avoid information that is emotionally overwhelming, "tend to ignore complex and uncomfortable information and trust that "the experts" will take care of things" and rely on the beliefs of those they deem trustworthy.[33] This presents a problem: people are unwilling to learn about the reality of climate change, because that reality is too debilitating to engage, so they rely on experts to grapple with the changing world. As demonstrated in the discussion of misinformation, not all "experts" are created equal, so if the population of the anxiety-debilitated rely on think tanks funded by climate denialists, inaccurate climate science becomes fact in the minds of these individuals. Further, because of this fear and anxiety that surrounds the truth of the Anthropocene, it is easier for people who cannot understand the severity of climate change to graft on to the misinformation that actively denies the information that invokes these feelings.

Why Narratives?

Though it is clear that the telling of narratives is significant in the founding of humanity, it is less clear why techniques of storytelling are emotionally salient and effective. Research conducted at Penn State sought to investigate the relationship between narrative and emotion and found that stories that are told that embrace narrative techniques—plot, character development,

[31] Kristin Haltinner and Dilshani Sarathchandra. "Climate Change Skepticism as a Psychological Coping Strategy," Compass (2018)
[32] Id. Bid
[33] Id. Bid

symbolism—were effective in invoking empathy from its audience. In 2012, the researchers assembled a study that asked the 399 participants to read a news story about undocumented immigrants and the work conditions they are often subjected to. One group read a narrative version in which they met undocumented immigrant Alejandro Martinez that was injured at his job. As a result of his illegal status, he could not seek medical attention and had two fingers amputated. The narrative version includes personal details of Martinez's life including direct quotations from both Martinez and his wife, along with his children. In the non-narrative version, the story does not include any of these personal details or accounts. The group that read the narrative version felt a higher degree of empathy and compassion for Martinez that expanded to undocumented workers at large. Some wanted to find more information about living conditions of undocumented immigrants while some were even moved to act.[34]

The narrative form of Martinez's story humanized him to the readers of his story through the popular literary technique of characterization. Instead of just reporting facts of undocumented immigrants, readers of the narrative version were able to personally meet Martinez and his family. Such characterization and humanization rendered the details of the facts into emotions that motivated some within the study to further learn about lives of undocumented immigrants. This emotional response is explained by social psychologists Melanie Green and Kaitlin Fitzgerald's transportation theory, which focuses on the causes and effects of a reader being immersed into a story. Two key concepts of the transportation theory is (1) that it can occur for both factual and fictional stories and (2) immersion influences the reader's attitudes and beliefs.[35]

[34] Lene Bech Sillesen and David Uberti. "Journalism and the Power of Emotions," Columbia Journalism Review, 2015 https://www.cjr.org/analysis/journalism_and_the_power_of_emotions.php.
[35] Melanie Green and Kaitlin Fitzgerald. "Transportation Theory Applied to Health and Risk Messaging," Oxford Research Encyclopedia of Communication, September 2019. https://oxfordre.com/communication/view/10.1093/acrefore/9780190228613.001.0001/acrefore-9780190228613-e-261.

The term "transportation" was coined by cognitive psychologist Richard Gerrig who compared narrative experience to physical traveling. A traveler, after being exposed to a new part of the world, returns to his home feeling moved after experiencing the journey, in a similar way to when people "…are transported into a narrative world…they may be more likely to change their real-world beliefs and behaviors to become more consistent with the story."[36] In essence, the more people feel transported by narrative techniques, the more likely they are to change their attitude, beliefs, and even behaviors after being immersed in such a narrative.

In the study conducted at Penn State, people who read the narrative version of Martinez's story felt more of an emotional reaction because they were transported to a greater degree than those who read just the facts of undocumented immigration. A feeling of empathy emerged for Martinez and his family that, for some, extended to undocumented workers at large. This invocation of empathy is crucial in shifting expressions of doubt among climate change deniers as their skepticism is often a product of fear or apathy. If skeptics read a personal account of an individual who was deeply affected by the changing climate, and were transported by narrative techniques in the process, perhaps that emotion and sense of empathy would arise in that individual.

Steven Pinker, a cognitive psychologist and professor at Harvard University, argues that the invocation of empathy has unimaginable impacts on a human population. In an interview with Pacific Standard staff members David Edmond and Nigel Warburton, Pinker proposes a historical hypothesis that posits the inception of the Humanitarian Revolution during the Enlightenment as a result of a mass increase in literacy rates that allowed the population to read

[36] Id. Bid

accounts of atrocities during that era.[37] Up until the Humanitarian Revolution, medieval torture methods such as public disembowelment were standard criminal punishments and slavery was practically commonplace. It was only until there was a massive increase in literacy rates, and a subsequent increase in the consumption of novels and journalistic accounts, that the public began to question the morality and justice of such practices.[38] One explanation for this, as Pinker argues, is that at the same time there was an increased consumption of stories, there was an equal increase of public empathy as a byproduct of reading such written accounts. Stories, imbued with details and characterization of otherwise faceless criminals, caused people to become sympathetic to the victims of the cruel and unusual punishments because the practice had been humanized.

Translating this hypothesis to the era of the Anthropocene has the potential to have a profound impact on the population of skeptics and climate change deniers. Humanizing climate change by telling transportive narratives about people suffering the adverse effects of a warming world, and invoking a subsequent emotional and empathetic response, could begin the process of shifting such skeptical views. In doing so, the emotions invoked would work to combat not only the emotions imbued in climate related anxieties and fear, but also combats the hold of misconceptions of climate science portrayed in misinformation campaigns. Such shifting beliefs amongst the skeptics could unite the American public about the current environmental crisis and result in greater action taken to implement environmental policy that would move the U.S towards a more sustainable future.

[37] David Edmonds and Nigel Warburton. "Big Ideas in Social Science: An Interview with Steven Pinker on Violence and Human Nature," Pacific Standard, June 2017 https://psmag.com/news/big-ideas-in-social-science-an-interview-with-steven-pinker-on-violence-and-human-nature.
[38] Id. Bid

Conclusion

In the midst of a global environmental movement, the United States remains a noticeably absent actor in the push for environmental reform. Though climate change is a multifaceted issue that roots itself in issues of politics, identity, economy, capitalism, and arguably the inner workings of the international system, a driver of the U. S's complacency comes from inaction among the American public. More precisely, the sector of the American public that does not acknowledge the validity of climate change who often prevent environmental policy from even making an appearance on the legislative agenda. This skepticism is a product of deliberately disseminated misinformation, which becomes so salient among some groups because it is simply easier to deny the climate, and the Earth, is changing as a result of human activity. In accepting the truth of the Anthropocene, one is faced with overwhelming feelings of anxiety and fear—misinformation acts as a medium to avoid experiencing such emotions that come with accepting climate change as a universal truth. It is because of these complicated emotions that are intertwined with climate denial that makes narratives so crucial, because they evoke such emotion that, if transported effectively, produce a more powerful feeling of empathy than the underlying fear that drives skepticism. So, in order for the U.S to join the world in the transition to a greener, more sustainable future, we must, in true *Sapiens* form, compose and deliver compelling stories.

Future Research

The scope of this paper was tailored to a semester-long project in which I was able to conduct research that pertained to a subject within the broad realm of Environmental Humanities. With ambitious goals, this paper is a part of a larger project in which the relationship between stories and humans, humans and the environment, and climate change and politics will be further

explored. This research focused particularly on climate change deniers amid the Anthropocene, attempting to understand their inaction and ways in which to shift such emotional complacency through an environmental and narratological lens. Future research will refocus on climate change denial through a political lens in hopes to understand the complex roots that are inherently interconnected with climate and identity, and how the theory of transportation and the power of narratives applies to climate identity politics. In doing so, such research will address the importance of shifting such a seemingly marginal portion of the population's perception of the environment and its radically changing climate.

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