

To: My Readers,

This assignment was a tough one. With all the research I know it's likely possible to lose track and get distracted. Therefore, I tried my best to make this essay as cohesive as I can so that you may understand it better and easier. I cut it into several paragraphs each focusing on a main idea which I hope is not hard to tell. As well as using transition words, and trying my best to paraphrase/quote and sourcing.

In the midst of writing this essay and going through the revision process, I have been catching on to improve myself in terms of run-on or incomplete sentences and grammar/punctuation. I believe I tend to get a little too wordy so hopefully, I can still continue to work on that as time goes by. I have also done a lot of connecting sentences together so that they may flow and make sense in the correlation.

In this specific assignment, I would say that the argumentative concept has greatly impacted my writing practices here as it is an argumentative essay. Writing an argumentative essay is a lot different than other assignments because I had the urge to ask rhetorical questions more often, as well as think of rebuttals to what someone with an opposing view would say.

Sincerely,

Samea Ahmed

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11/22/22

ENGL 110: Writing and Rhetoric

Assignment #3 Research Essay

Doomsday is Approaching, and it's All Your Fault

What do you notice when you look around the world today? Where does your attention go? Perhaps the visualization you form of this world is beautiful and calming, filled with unity and love, respect, and optimism. Or perhaps you picture all the crises our world has fallen into, especially due to current events. At least, that's what I imagine. When it comes to the crisis of climate change, we feel that we are at fault. Even more so, how we are at fault. Many people claim that climate change isn't real, and the many that *do* believe it is real, believe that it is a natural process and humans aren't to blame. However, climate change is in fact happening and mankind plays a huge role, and we need to do better.

Let us begin by looking at the very definition of climate change. According to the United Nations, it “refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle.” Other natural causes of climate change consist of things such as volcanic eruptions and shifts of the plates within the Earth's crust. How do we know all this? Because the study of climate change has been going on for over 200 years, and it is also known as Paleoclimatology. For instance, one of the earlier studies began in 1824 when Joseph Fourier hypothesized that a planet the size of ours, with the same distance as the earth from the sun, should be a lot colder than it is. He proposed that something within our atmosphere is likely acting as a heating cover. Fast forward to 1856, a scientist named Eunice Foote came to find the cover Fourier was talking about. Which showed that CO₂ as well as water

in the atmosphere corral heat radiation. As for the evidence behind climate change, take a look at the rising sea levels, the warming ocean, or maybe the melting ice sheets (NASA, 2022). But how do we come into play amidst this? Aside from the natural causes, which- well, let's get into that.

One case I'm sure we are all very familiar with is plastic, a man-made creation. Plastic was brought to recognition in 1862 by Alexander Parkes, who named it "Parkesine" (Plastics Industry Association, 2021). Plastic usage has increased drastically over the years, from 15 million tons in 1964, to 311 million tons by 2014, and will likely continue to do so if nothing effective is done (World Economic Forum, 2016), for example, the Plastic Ban. After much controversy surrounding the topic, on March 1, 2020, The state department of environmental conservation enforced the plastic bag ban. It's been two years now. While much has reduced, there is equally as much that hasn't changed. According to the article, *New York Banned Plastic Bags Two Years Ago. Why Are They Still Everywhere?* On New York Focus, they discuss how it seems that there is poor enforcement of this ban, as many stores and large corporations such as Dollar Tree continue to use plastic bags. "As a result, bags continue to pollute streets and waterways, block storm drains, and hamper the city's recycling efforts." the Department of Environmental Conservation (DEC) is being blamed for not acting strongly and efficiently as well as New Yorkers for not being mindful and understanding what's happening. Many people still argue that it's not a big deal, with reasoning such as needing plastic for garbage bags and whatnot. However, we need to understand that there are better ways to accomplish the same task with different and more earth-friendly materials such as bio-degradable bags or compostable bags. One may also argue that it is not as convenient or affordable but let's face it, it is not a big sacrifice to make for the betterness of our planet. A planet that we all live in. Moreover, plastic

pollution, considering the noneffective plastic ban, contributes to a large number of issues related to climate change. According to the Climate Portal, “Plastic pollution and climate change contribute to many of the same environmental problems, like biodiversity loss. Climate change also worsens plastic pollution’s effects: spreading this waste farther as weather and natural hazards intensify and weakening marine ecosystems so they're less able to withstand plastic pollution.” Their statistics also state that “Plastic is made with fossil fuels and comprises roughly 6% of global oil consumption. 2 Humans discard huge amounts daily...” These plastics also release carbon and other gasses throughout the long period it takes for them to decompose. (Iris Crawford, 2022) It is also important to note that most plastic is made from chemicals that are derived from the construction of fuels like oil, gas, and fuels. (Friends of the Earth 2019)

Speaking of which, oil and gas are what are known as fossil fuels, along with coal, which is all the most common types. Fossil fuels come from decaying plants and animals. They are made up of carbon and hydrogen, which are burned to gain energy. (National Geographic,) Nowadays they have become a huge part of our everyday life, where they are used for our modes of transportation, heating, and electricity. While these are natural resources, it is non-renewable meaning they will eventually run out, and not be able to replenish themselves. It was brought to the most attention during the industrial revolution around 1760 - 1840, and since then there's been a dramatic increase in the burning of fossil fuels. A chart by Our World in Data shows fossil fuels broken down into oil, gas, and coal. While the use of coal has decreased over the years, oil and gas are still rising. The total fossil fuel consumption of 2021, was 136,018 Terawatt-hours (TWh), compared to 1800 for example, where it was around 97 TWh. (Hannah Ritchie, Max Roser, and Pablo Rosado 2022) Why should this be alarming? Well, the burning of fossil fuels causes the release of carbon dioxide, also known as greenhouse gases. In a video by The Royal

Society, they explain the greenhouse effect. As the sun radiates onto the earth, some of that light is reflected back into space, while the rest is absorbed into the earth. From there, part of the absorbed energy is re-emitted as heat. Then greenhouse gases absorb and re-radiate some of that heat. The more fossil fuels burned, the more greenhouse gasses are produced, which in turn results in more heat being trapped within the atmosphere, heating the Earth. The burning of fossil fuels has increased atmospheric CO₂ by almost 40% since the 1900s. At that same time, the average global surface temperature also increased by 0.8°C. There have also been other drastic changes that are very concerning, such as the rise in sea level by +50 mm since the 1960s at -50 mm. There has also been an increase in the oceanic heat temperature, a decrease in snow cover, and the rapid melting of ice in the Arctic. (The Royal Society, n.d.)

The melting of ice in the Arctic, both glaciers and sea ice, are due to the rise in temperature from the emission of greenhouse gases, which as discussed is largely influenced by humans through our increasing use of burning fossil fuels. According to World Wild Life, 95% of the first and broad sea ice of the Artic is already gone. If emission continues to go uphill, then it is presumed that the arctic could be ice-free as soon as the summer of 2040, scientists say. What does it mean if the ice is melting? The melting of glaciers and sea ice is leading to an increase in sea levels. This is also leading to an increase in coastal erosion because of the rising temperatures. Ice is also melting in Greenland, four times faster compared to 2003, and advancing 20% of the present sea rise. If all the ice in Greenland were to melt, it would increase sea levels globally by 20 feet. Aside from the effects on sea level, the melting of ice is also affecting weather patterns. As the ice melts, it reveals more of the ocean, canceling out the effect that would otherwise be cooling the poles, which in turn again creates warmer temperatures interrupting the usual sequence of the flow of the ocean. It has also been linked to storms and

other natural disasters such as hurricanes, floods, and typhoons, which will greatly affect us. The warmer waters will also affect our fishing and thus our food, as the warmer water will change where and when fish spawn. On top of that, the sea level rise, weather patterns, and the melting of ice will continue to lead to the extinction of arctic species such as polar bears and walrus, as they are also spending more time on land because of their home and food vanishing, which is also causing conflict between humans and animals. (Lorin Hancock, n.d.)

Human beings are one of the biggest influences on climate change, if not the main cause. 97% of scientists concur, “It is extremely likely that human activities, especially emissions of greenhouse gases, are the dominant cause of the observed warming since the mid-20th century. For global warming over the last century, there is no convincing alternative explanation supported observational evidence.” (US National Climate Assessment, 2018) In a chart, *Forces Driving Climate Change*, there are three categories; observed categories, modeled temperature which consists of natural and human causes, and the sum of natural processes. From this chart, one can conclude that the sum of natural causes itself is not anywhere near the observed temperature. However, the modeled temperature, which includes human activity, matches almost perfectly with the flow of the observed temperature over the years. (Union of Concerned Scientists, 2021). Aside from the human impact on climate change through the burning of fossil fuels, oil and gas usage, industrialization, waste, and use of plastic, overfishing is another factor. It is resulting in a decrease in marine life. Second is Farming, which takes up and can destroy a large amount of green land, which further contributes to climate change. And because the farm animals also happen to release greenhouse gases, methane, for example, which can further lead to an increase in temperatures. This leads to the fourth reason, Deforestation which is the clearing of trees and land. These trees and forests change CO₂ into oxygen, so when they are cut down the carbon that was stored within them is released. Consumerism, as we are

overproducing various products, most of which aren't sustainable further leads to waste buildup. There are vehicles, oil drilling, power plants, and more to blame for what's happening to our world, which is caused by us.

Climate Change is very much real, proved by scientific studies over countless years. Human beings should be held responsible for what we are doing to our environment. There is much more happening regarding climate change, beyond what is mentioned in this paper. Therefore, I suggest doing your own research if I haven't convinced you in the slightest. And if you argue that science isn't real, then perhaps you believe in religion. The Quran, which is the religion Islam's holy text states, “ظَهَرَ الْفَسَادُ فِي الْبَرِّ وَالْبَحْرِ بِمَا كَسَبَتْ أَيْدِي النَّاسِ لِيُذِيقَهُمْ بَعْضَ الَّذِي عَمَلُوا لَعَلَّهُمْ يَرْجِعُونَ” which translates to, “Corruption has appeared throughout the land and sea by [reason of] what the hands of people have earned so He may let them taste part of [the consequence of] what they have done that perhaps they will return [to righteousness]” (Quran, 30:41) Or look at the Bible Prophecy, “God will “destroy those who are destroying the earth.”—” (Revelation 11:18) And if you don't believe in either, perhaps you can tell me how you identify your logic when logical itself is a scientific phenomenon. But I suppose that's a discussion for another time. In the meantime, let us work harder to preserve our home for generations to come, practicing what we preach.

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