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TWO TRUTHS

Sally Gildehaus
Ms. Collins
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My eye catches it in newspaper headlines. My ears trace it to news and snippets of political hearsay. I may feel it begin to gradually slither into my backyard, extending across the world. Earth's people are at a conundrum with climate change. Geologists can trace climate changes back to thousands and millions of years, but a significant shift in today's record keeping is a different ball game. Is climate change happening from natural cycles, or are humans causing atmospheric alterations by increasing population and consumption waste, such as carbon dioxide (CO₂) emissions?

"Is the climate changing? Yes! The climate is always changing," states Dr. S. Fred Singer, a respected scientist in environmental sciences. Singer and other citizens support the idea that global warming is real, but there is no indication that CO₂ is the cause. Geologic history, traced through ancient ice cores, proves "for the last 2 million years, nearly 20 ice-age periods have dominated the Earth's climate, interrupted by warm periods lasting 10,000 years or so." ("A Scientist's View on Climate Change"). The current political issue is overrated, as climate changes are normal in Earth's cycles.

Other skeptics state people cannot control CO₂ emissions as most comes from natural events, such as forest fires and volcanic eruptions. According to Singer, fret about 'atmospheric change' should have ended a decade ago. Satellite studies over thirty years observed that there was some warming in the Northern Hemisphere, slight warming

in tropic zones, and opposing cooling in Antarctica. There are still issues of population growth and industrialization concerning climate change, but these factors do not coincide with timely scientific data. There are no conclusions that can be drawn from the results expressing the climate is changing in threatening ways (“A Scientist’s View on Climate Change”).

There is some agreement that climate change exists. A variation on this agreement restates humans’ minimal influence on the atmosphere. The Nongovernmental International Panel on Climate Change (NIPCC) provides evidence contradicting Environmental Protection Agency (EPA) and Intergovernmental Panel on Climate Change (IPCC) reports; the NIPCC states that the reports are biased and give information that political proposals will thrive on most. According to the NIPCC, the warmest period following the most recent ice age was “the Medieval Warm Period about 1,000 years ago, when average temperatures were about 2-3°F warmer than averages over the past 10,000 years.” (“Chapter 3-Observations: Temperature Records”). How is it that it was warmer a millennium ago with less human influence?

Scientists and government officials who believe climate change is accelerating by human causes center a good portion of their presentations on CO₂. Supposedly it is the emission people have the most control over. Nations can set standards cutting back on CO₂, although possibly bruising their economies by the expenses. However, in the big scheme, anthropogenic CO₂ is less than “6 out of 180 billion tons put into the atmosphere” (citation); other amounts account for biological releases. If Earth is in a warming period, it is going through orbital cycles, which take years to complete. Rising amounts of CO₂ cannot be affecting those cycles; it is unrelated, and the comparably

small amounts which humans release has very little to no effect on natural levels already in the atmosphere. However, purportedly small human CO₂ emissions may disrupt the atmosphere, and also the Earth's climate. This is an aspect of today's more popular argument, which shows evidence humans contribute to atmospheric alterations. (citation).

Our world is on a continuous advancement in technology, from the newest cell phone to medicinal therapies. Advancements come from demands, which in turn require more energy. Developed nations, especially the United States, have become an industrial and consumer hierarchy, burning the highest per capita rates of energy. CO₂ is viewed as the number one culprit in the greenhouse effect. It is not natural CO₂ within the carbon cycle that is public concern, it is gas released from factories and vehicles. EPA reports from 2005 show "global atmospheric concentrations of CO₂ are 35% higher than they were at the beginning of the Industrial Revolution" ("Carbon Dioxide"). Increasing population growth is conducive to more emissions, posing a greater threat to the intricate balance of Earth's atmosphere.

Current CO₂ levels are at their highest levels over the last 650,000 years (IPCC 2007). Humans are disturbing the carbon cycle by deforestation and ocean pollution, compromising natural abilities to remove CO₂ from air composition. The annual CO₂ concentration increase is about 1.9 ppmv/year ("Atmosphere Changes"). Earth's orbital cycles are irrelevant to people whose economies depend on burning more fossil fuels. This often leads to double destruction by raising CO₂ while damaging the plants that remove CO₂.

Due to human activities, greenhouse gases are deposited at a higher rate than biological cycles can remove and balance it. Fossil fuels-especially coal, which accounts

for 70-75 percent of anthropogenic CO₂- can last up to 120 years in the troposphere, which means certain emissions from the 1890s are just beginning to dissipate (Miller 464). The United States is the major contributor to atmospheric CO₂; the nation makes up for 4.6 percent of world population, yet it produces about 24 percent of the world's total emissions (Miller 466). Scientists, politicians, and engineers who say accelerating CO₂ levels are disturbing the atmosphere are developing alternatives to prevent the potential crisis to Earth's atmospheric stability.

Here is the conundrum: which side do you believe? How can there be two opposing sets of 'true scientific proof'? I like to see science from an empirical perspective, therefore I lean more towards the argument people are most concerned about. Anthropogenic CO₂'s effects are more proof-worthy and can be clearly seen by our daily energy demands. The opposition does have some intellectual points, but I can see the contradictory evidence more clearly. Thinking about how population growth leads to higher demands and how CO₂ levels correlate with temperature change, the results for this heated topic are more convincing. If no actions are taken, the threats grow larger until it touches all, even your backyard.

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