

Essay #4 – Living a moral life in a Time of Climate Chaos

In Essay One of this series, I summarized the latest science on global climate change, and I made my case as to why I think we are committed to a cascade of climate-related tipping points that will warm the globe 4, 5, 6 or more degrees Celsius regardless of how furiously we we try to prevent it.

For review, the greenhouse gases that I (and almost surely you and everyone around you) emit every day are changing our climate and driving growing tragedies around the globe. Already the world is seeing heat waves, droughts, floods, weather extremes, ocean acidification, and other direct climate impacts from our greenhouse gas emissions. These are causing secondary impacts like famine, civil war, conflagration wildfires, waves of refugees, and on and on. These local and regional catastrophes aren't natural events – they are the results of my emissions and those of other consumers.

In Essay Two, I offered a menu of climate change-related stressors I believe will (along with the grave social and economic stressors already coming at us) likely to push us into a time of regional, national, and global chaos.

In Essay Three, I argued that people are suffering and dying because of my emissions, and so I am either committing a sin, or a crime against humanity, or both. I then identified what I believe are the two crucial questions we must explore if we are to live a moral life in a time of climate chaos. For reference through the remainder of this essay, those questions are as follows:

- First, how do we stop our personal contribution to global climate change, and all the damage this is visiting on humanity, through our emission of greenhouse gases.
- Second, how do we make amends for the damage our personal emissions to date have caused, are causing, and will cause in the future? (Most greenhouse gases remain in the atmosphere for centuries.)

There are, of course, a plethora of other moral questions related to climate change. Giving justice to all of them might be interesting to a theologian or a moralist, but I need to focus on the essence. And I believe that how we answer these two questions will define the broader scope of our moral behavior in the times to come.

A note here: through the remainder of this essay I will use myself as the moral whipping boy – talking about my moral obligations and what I need to do to fulfill them. I hope using myself as an example will facilitate the discussion on moral obligations we all have, not simply convince you that I'm a bad person (which may also be valid).

Moral Question One, then, is about stopping my sin/crime (from now on, I will simply refer to it as a sin). Right now, I'm not concerned about the greenhouse gas emissions of the rest of humanity; and no matter how egregious I'm not concerned about the malfeasance of our politicians or those who run the great oil companies or Joe down the road who drives a Hummer. After all, none of these people forced me to spew greenhouse gases into the atmosphere – this is my responsibility.

So I'm focused on how I can stop my continuing sin of greenhouse gas emissions -- how I can cease the harm my emissions bring to people all around the world. No matter what other great deeds I do through the remainder of my years, if I fail at this I will fail to lead a moral life.

But what does that really mean – stopping the sin of greenhouse gas emissions? Is some lower level of emissions OK, or do I need to cut them to zero? Are some types of greenhouse gas emissions morally acceptable while others are not? And is it OK for me to disrupt the world around me – people, local economy, local community institutions – by eliminating my emissions; or is some compromise of

reductions the better path, knowing that my compromises will damage people further out in the world?

I don't have an answer to these questions – this is what I want to explore in the seminars. I will, however, offer an analogy that might illustrate the moral dimensions of this question. Slavery, like climate change, was (still is) a moral issue. It was/is morally abhorrent for people to own other people. And so, while it would have been good for a slave owner with ten slaves to free nine of them, his ownership of the last one was still immoral.

So then, if I'm emitting 20 tons of greenhouse gases a year, cutting 90 percent of them would be good. But the two tons I continue emitting is still causing damage. So is this morally unacceptable? Or have I cut enough?

Also, I believe it's fair to recognize the technical difficulties of entirely eliminating my emissions. Maybe the concept of “net zero” emissions – a combination of adding and subtracting greenhouse gases to the atmosphere that results in a net of less than zero staying there – is an important consideration.

And then there is the question of how soon I need to cut my emissions. The United Nations says the world needs to cut emissions in half by 2030 and to zero by 2050. Is that good enough for me, or am I morally obligated to cut my personal emissions as quickly as possible?

My bottom line then, is how much and how soon do I need to reduce my greenhouse gas emissions to fulfill my responsibilities as a moral person?

I want to diverge here and settle the question of why I can't simply counter my greenhouse gas emissions with offsets. These are where a person takes greenhouse gases out of the atmosphere to displace the gases they emit into it. The most common offset method is carbon sequestration – pulling Carbon Dioxide (the most significant greenhouse gas) out of the atmosphere and sequestering it in a permanent state. The most typical current carbon offset is reforestation – planting trees which, as they grow, pull carbon out of the air and put it into the wood of their roots, trunks, and limbs.

There are other greenhouse gases we emit or, cause to be emitted through our lifestyles. These include Methane, Nitrous Oxides, a variety of Chlorofluorocarbons, and other industrial gases. All of these are more potent per unit of mass than Carbon Dioxide in terms of their climate change impact, but the glory of offsetting is that any greenhouse gas pulled out of the atmosphere can offset any we emit. We just need to make sure our accounting is good – for example, we would need to pull out 300 kilograms of CO₂ for every kilo of Nitrous Oxide we emit because Nitrous Oxide has 300 times the warming effect of CO₂.

This seems simple. In my part of the world, a fast growing conifer forest can sequester three tons of carbon per acre per year. And as long as these reestablished forests endure, they sequester a lot of carbon – eventually tens, if not hundreds of tons per acre. So why can't I just pay one of the many companies offering offsets to counter all my current greenhouse gas emissions and then just go on with my life the way they is?

Unfortunately offsets are not always what they appear. Particularly for reforestation, they aren't immediate nor (in an age of conflagration wildfires) permanent. And reforestation should already be happening for many reasons that have nothing to do with climate change. Also, reforestation offsets can be and have been used to justify heavy logging – essentially justifying deforestation by saying that offset reforestation will fix it. And a reforested area sequesters nothing like the carbon its mature predecessor did – not for decades and perhaps centuries.

Forest related offsets, particularly those based in third world countries, can also cause serious problems for the people dependent on those forests – people we don't see and never know when we

plunk down our dollars to offset our latest plane trip. And some offset programs are rife with varying degrees of deception (called marketing) or outright fraud. Even more important, relying on offsets does nothing to change the institutional structures that have and are causing greenhouse gas emissions and the resulting climate change.

But most important to me, simply offsetting my greenhouse gas emissions amounts to papering-over my moral failing with a technical fix. In doing this, I would use the money I earned, in part at least, by emitting greenhouse gases to hide my guilt. But my moral dilemma remains.

I will note that there may be a place for what I call personal offsets – ones I do with my own hands preferably on my own land. I hope we can discuss the distinction between those and commercial offsets in one of the seminar sessions.

Moral Question number Two: “How do we make amends for the damage my personal emissions to date have caused, are causing, and will cause in the future?” is both direct and subtle. I feel a moral obligation to help the people climate change is hurting. I could simply contribute to great disaster relief organizations – Red Cross, Mennonite Central Committee, International Rescue Committee. That's simple – right?

But how do I balance the immediate needs from current disasters with needs coming from slowly evolving tragedies – ones like the chronic famines expected later in the century. Maybe some or all of my contributions should go to organizations like Oxfam or The Heffer Project that help raise the productivity of substance farms?

Then there's the question of how much money should I spend on this? This in turn begs another question – how much of the money and things I now have have I gotten through activities that, directly or indirectly, emitted greenhouse gases? A thorough appraisal of this would be difficult, illuminating, and probably terrifying. Because if some or most of my assets came from sinful (or criminal) activities, am I entitled to them? Or do they need to go to the victims of my sin?

And do I need to explore question two in the context of question one – do I need to make amends in a way that causes no further damage? This would make the whole project more ... interesting.

I believe these questions need to be discussed before we delve into the practical world of actually cutting emissions. I wish I had clear and acceptable answers, but then if they came easily we wouldn't be facing the global catastrophe that's now before us.

Respectfully,

Allen Edwards