A Kantian Look at Climate Change

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In 1992, representatives from almost all countries met in Rio de Janeiro to discuss what they took to be one of the most pressing issues the world had to tackle: that of global climate change. Since that time, little has been done to combat climate change. We now have a full-fledged crisis on our hands. The Rio Earth Summit of 1992 did practically nothing to fight climate change, and the Kyoto Protocol of 1997 has been called “the single worst failure of political leadership that I have seen in my lifetime” by one of the leading experts on climate politics, Al Gore.\(^1\) The hard, “inconvenient truth,” which we are now forced to acknowledge, is that climate change needs to be dealt with if we hope to provide a sustainable future for our species.

The topic of climate change is surrounded by several elements of uncertainty. But at least two things are indisputable. First, climate change is globally recognized as a crisis. Despite continued attempts by right-wing American conservatives to convince us that there is nothing to worry about, the best scientists from around the world all agree that the planet is experiencing climactic changes with unprecedented rapidity. The Intergovernmental Panel on Climate Change (IPCC) reflects this consensus, stating that “warming of the climate system is unequivocal.”\(^2\) There is no longer any question as to whether or not climate change is happening. The second indisputable fact is that human beings are the main perpetrators of climate change. The IPCC states that “global increases in CO\(_2\) concentrations are due primarily to fossil fuel use, with land-use change providing another significant but smaller contribution.”\(^3\) Since humans are responsible for both the burning of fossil fuels and the changes in land use, climate change emerges as a human-made phenomenon. Climate change is anthropogenic.

Although we can lament the sad truth that human beings are destroying the Earth by their unsustainable practices, there is a positive aspect behind the fact that human beings are the perpetrators of climate change. This positive aspect is simply that we have some control as to the direction of the future of the Earth System. Unlike previous

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crises that threatened the existence of large populations (such as the bubonic plague), we know the main source of the problem. And, since we are the source, we are in the fortuitous position to actually do something about it. The big question that lies before us is where we should turn to take on this issue. Like any other major problem, one of the first good places to look for solutions is our own tradition. Instead of trying to take on the problem blindly, we should first ask whether there are any tools already embedded in our tradition that we can use to confront the situation. I think the answer to this question is that there are, and that Immanuel Kant’s philosophy is a good place to start.

Kant has been dead for over 200 years (he lived from 1724 to 1804), but there are many ways in which he was way ahead of his time. His conception of nature is considered by scientists to be “the essence of modern models,” he predicted something akin to the United Nations with his idea of a “League of Nations,” and he thought that universes “exist along a larger oscillating chain of Big Bangs and Big Crunches,” thereby anticipating the most recent cosmological theory of “The Big Bounce.” Moreover, he was one of the first philosophers to lament the ecological destruction that he witnessed happening around him. In his *Critique of Judgment*, Kant bemoans the destruction of the pine forests near his hometown of Königsberg.

**What is Climate Change, and why is it happening?**

Before we look at the ways in which Kant’s philosophy can help us deal with our climate crisis, we need to get some idea as to what is going on with this phenomenon. John Houghton provides the following explanation of anthropogenic climate change:

> Human activities of all kinds whether in industry, in the field (e.g. deforestation) or concerned with transport or the home are resulting in emissions of increasing quantities of gases, in particular the gas carbon dioxide, into the atmosphere...Because carbon dioxide is a good absorber of heat radiation coming from the Earth’s surface, increased carbon dioxide acts like a blanket over the surface, keeping it warmer than it would otherwise be. With the increased temperature the amount of water vapour in the atmosphere also increases, providing more blanketing and causing it to be even warmer.

Various human activities such as burning fossil fuels (whether it be for driving vehicles or powering factories) and land-use changes (from deforestation, irrigation, etc.) are creating excess amounts of carbon dioxide (the most dangerous greenhouse gas), and this causes there to be more heat in the atmosphere than the natural level. This excess of heat not only raises overall temperatures, it also places more energy in the Earth’s climate system. The increase in temperature leads to several problems. One of them is the melting of snow caps and glaciers, which increases the overall sea level and thereby puts both island and coastal regions at risk of submersion. On land, the melt leads to an
increase of run-off in certain regions, which negatively affects the quality of various bodies of water. Another major problem is an increase in heat-related mortalities in various regions. The IPCC Report of 2007 cites increases in deaths caused by heat stroke and an increase in infectious diseases.\(^\text{11}\)

Along with the increase in temperature, the increase in the amount of energy in the climate system leads to an imbalance. The Earth System tends towards a steady state if left to its own devices. This may mean that there are certain times when it has to expend large amounts of energy, which thereby creates stints of bad weather. However, these stints are normally not so intense so as to be unbearable for human beings and they rarely last for long periods of time. The problem with adding more energy into the Earth System is that it the energy has to go somewhere, such as more frequent and more intense severe weather patterns, such as storms, with a consequent increase in natural disasters.

We do not know exactly what will happen in the future with regard to climate change or how severe the changes are going to be. We do, however, know that there will be an increase in temperature, an increase in severe weather, a decrease in habitable land, and an increase in tropical diseases. If we keep going in the direction that we have been with regard to our unsustainable practices, it is certain we will both reduce the quality of life of future generations and imperil the existence of our species.

The good news, however, is that the anthropogenic causes of climate change are in principle in our hands. We can cut back on fossil fuels if we so choose. Moreover, we are already in a position to mitigate the effects of climate change. The IPCC states that:

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\text{there is high agreement and much evidence that all stabilisation levels assessed can be achieved by deployment of a portfolio of technologies that are either currently available or expected to be commercialised in coming decades, assuming appropriate and effective incentives are in place for their development, acquisition, deployment and diffusion and addressing related barriers.}^{12}\]

So we either already have or will soon acquire the necessary technologies to fight climate change. The challenge that lies before us is to start being responsible citizens and utilize these technologies. If we simply stop engaging in unsustainable activities and start practicing ecologically friendly ones, we will provide a future in which upcoming generations can flourish.

**Kant’s Categorical Imperative as imperative**

Where can we turn to for guidance in the quest to be ecologically conscious? There are many strands in our tradition that could steer us in the right direction, but Kant’s moral
philosophy is uniquely important because he offers us a straightforward test to determine the universalizability of an action.

There are several places in his oeuvre where Kant articulates the Categorical Imperative, but the clearest formulations are in the *Groundwork for the Metaphysics of Morals*. There he describes his task as “the search for and establishment of the supreme principle of morality,” the Categorical Imperative. There are several variants of this principle, each with a distinctive flavor. However, the gist of the Categorical Imperative is this: “So act as if the maxim of your action were to become through your will a universal law of nature.” Before you do an action, you are to ask yourself whether that action could be implemented as a command for all other rational creatures to follow as if it were a universal law. If it can be implemented in this way, it is right; if not, it is wrong.

One of the illustrations Kant provides to show how this principle works is his example of making a promise that you do not intend on keeping. Suppose you are in a bind and desperately need to come up with money. You ask a friend to lend you some knowing full well that you will never be able to pay it back. Kant asks whether such an action is right. To answer this question, first get clear on the maxim of your action. Kant defines a maxim as “the practical rule that reason determines in accord with the conditions of the subject.” Here, the maxim would be something along the lines of: “I will borrow money without the intention of paying it back in order to get myself out of a bind.” Next you figure out whether this maxim can be a law for everyone to follow. Here, the corresponding universal law would be: “Everyone must borrow money without intending on paying it back.” Now ask yourself is whether or not your action is inherently contradictory if placed in a system in which everyone is forced to follow it. In this case—a specific case of making false promises—Kant states:

> The universality of a law that everyone who believes himself to be in distress could promise whatever occurred to him with the intention of not keeping it would make impossible the promise and the end one might have in making it, since no one would believe that anything has been promised him, but rather would laugh about every such utterance as vain pretense.

If we all went around making false promises, we would never take each other’s promises seriously. And, since the success of procuring the money depends on the borrower taking your promise to pay it back seriously, the maxim adopted fails the test of universalizability.

An action is right if it can be universalized as a rule in which everyone could follow without conflict and an action is wrong if it cannot. This model for determining the rightness or wrongness of an action is helpful in regard to how we should confront
anthropogenic climate change, because universalizability is on a par with sustainability. In speaking of Kant’s Categorical Imperative and climate change, Martin Schönfeld states, “The potential of a rule to evolve into a general and naturally self-sustaining schema of action is what makes the action right.” In other words, sustainable practices are right because they can be universalized. On the other hand, if an action is unsustainable and therefore cannot be universalized, it is wrong.

If we transport Kant’s thought into an environmental framework, we can say that an action is right if it is something that we can will that every other person in the world do and still allow the Earth’s climate to sustain a healthy equilibrium. Consider Americans driving to work. Almost all Americans drive their cars by themselves to work without questioning the rightness of this action. What many of them fail to realize is that this simple commute is a major contributor to anthropogenic climate change. Approximately one third of all greenhouse gases produced in the United States are a result of transportation and much of this is directly attributable to work commutes. Since the United States emits roughly a quarter of the total global greenhouse gases even though it comprises only four percent of the world's population, we will see that we could not will that citizens of other countries act as we do without causing a major increase in the level of greenhouse gases. If every citizen modeled their commuting practices on Americans, anthropogenic climate change would drastically increase, runaway global heating would be a certainty, and civilization collapse would follow. Thus the attempt to universalize American commutes creates a situation that makes American-style commutes impossible.

American readers might be taken aback at the result of this Kantian analysis. They may protest and say, “If Kant’s theory makes it wrong for me to drive to work, it must be wrong.” But this initial protest is probably rooted in an inability to see easy alternatives. The IPCC’s statement that the technologies to fight climate change are almost all already intact proves to be correct in this particular instance since there are many alternatives to driving alone to work. The best alternative to driving to work is riding a bicycle, which leaves no carbon footprint whatsoever and has the additional benefit of promoting one’s health. If everyone were to simply stop driving cars to work and ride their bicycles instead, this would promote a healthy, sustainable Earth. Therefore, this action is right. Those people who cannot feasibly ride a bike to work (due to handicaps or due to the sheer distance between their home and their place of employment) can look to other alternatives such as carpooling, utilizing rideshare programs, or taking public transportation. The simple question that you have to ask yourself is whether or not your action could be willed as a universal law for everyone to follow, and this will tell you whether it is right or wrong. If everyone took the bus to work or carpooled with others, it would drastically cut down on greenhouse gas emissions, meaning it would promote an Earth that is more sustainable—which means that future generations could continue to take the bus, or carpool with neighbors. This means that ecologically-friendly practices such as these are the right ones to choose.
So, we can see that the Categorical Imperative helps to approach anthropogenic climate change. It implies a simple thought experiment to determine sustainability. An additional asset of the Categorical Imperative is the universalizability not only in space but through time—which points to the intergenerational aspect of climate change. Stephen Gardiner notes,

Climate change is caused primarily by fossil fuel use. Burning fossil fuels has two main consequences: on the one hand, it produces substantial benefits through the production of energy; on the other, it exposes humanity to the risk of large, and perhaps catastrophic, costs from climate change. But these costs and benefits accrue to different groups: the benefits arise primarily in the short to medium term and so are received by the present generation, but the costs fall largely in the long term, on future generations.21

As Gardiner points out, members of the current generation that burns fossil fuels gain an overall benefit from doing so, while member of future generations will suffer from it. The current generation’s unsustainable practices (e.g., suburbanites driving SUVs, etc.) are in the short-term self-interest of the individuals who engage in them. Since our generation may not be around to see the bulk of the environmental destruction that we are causing (we will be dead before things get really bad), there is no self-interested reason for us to be ecologically conscious about our actions. Of course, future generations will inherit an Earth in shambles. But why should we care about them?

Kant’s Categorical Imperative gives us an unequivocal answer to this question. As Schönfeld points out, “Morality, in Kant’s humanistic model, concerns all people, at all times, and not just one’s self. By default, the universalizability condition points from present states to future states.”22 To understand this, we need to examine another way in which Kant expresses the Categorical Imperative: “Act so that you use humanity, as much in your own person as in the person of every other, always at the same time as end and never merely as a means.”23 What this means is that it is immoral to treat other humans as mere instruments for your own ends. This not only includes the humans who live today, but it also includes all future generations. Therefore, it is wrong to act solely in one’s self-interest and continue to practice unsustainable practices that are harming the environment as this would treat future persons as mere means rather than as ends. For Kant, all rational creatures, whether they are alive today or will be alive in the future, deserve to be treated with respect, which means that we cannot limit our focus to people that are currently alive when making decisions about how to act.

Thus far, I have tried to argue that the Categorical Imperative test is a helpful, simple way to fight anthropogenic climate change on the individual level. If everyone took it seriously and asked whether their actions were universalizable, we would be moving in the right direction with regard to climate change. However, human beings are more
prone to act in their own interest and do the easier, more convenient thing than the inconvenient, environmentally friendly alternative. People will likely continue to engage in unsustainable practices rather than change their way of living, regardless of whether they know the consequences of their actions. This is one of the reasons why we still continue to have so many Americans (77 percent as of April of 2008\textsuperscript{24}) drive to work alone rather than choose a more ecologically-friendly mode of transportation. With this in mind, our response to global climate change has to be brought about on a communal, political level as well as an individual level. Rather than counting solely on individuals to change their ways of life, we need to rely on political leaders to respond to this crisis through political action. Once again, Kant’s philosophy provides some fruitful ideas in regard to the communal aspect of mitigating climate change as well.

### The Communal Response

Kant had no illusions that humans are selfish but trusted that humans could work together to organize a state, regardless of the crises that would show up. He saw the worst side of human beings in living through and witnessing the brutalities involved in the Seven Years’ War (1756-1763), which took the lives of about one million people and was the first major worldwide war.\textsuperscript{25} Despite, or perhaps because of this, Kant thought that civilization gradually evolves to higher and higher states of well-being. In \textit{Perpetual Peace} he remarks, “the problem of organizing a state, however hard it may seem, can be solved even for a race of devils, if only they are intelligent.”\textsuperscript{26} In other words, no matter how nasty and selfish individual human beings may be, as long as their brains work, one can convince them of the merits of cooperation.

Kant thought that the best way to overcome global problems such as wars is to have nations work together. He proposed a League of Nations to attain this task:

> In a League of Nations, even the smallest state could expect security and justice, not just from its own power and by its own decrees, but only from this great League of Nations, from a united power acting according to decisions reached under the laws of their united will.\textsuperscript{27}

The League of Nations is Kant’s vision of nations setting up laws all countries need to abide by to promote a peaceful coexistence. The basic idea is that humans will be allowed to progress if there is a mechanism that allows them to live peacefully. The mechanism is the League of Nations. One of the goals that Kant puts forth in conjunction with the League of Nations is that humans begin to see themselves as not only citizens of their particular locality, but as citizens of the world as well. He held the view that all humans deserve to be respected, regardless of their national ties and that we should see ourselves as citizens of a shared community: the world at large.
Here, Kant offers two ideas relevant for climate change. The first is the idea of world citizenship and the second is his proposal of a League of Nations. Since climate change is a global issue, humans will have to start thinking globally about themselves and their actions. If we begin to realize that all of our ecologically destructive actions are not only detrimental to our locales but to the Earth System, we may begin to think twice about our actions. Each and every pound of carbon dioxide released into the atmosphere worsens climate change, and this affects absolutely everyone. The effect of every ecologically destructive act is magnified because we are now living in a global economy. Not only will the adverse consequences of climate change harm people by impairing their habitats, but the commerce that exists between nations will also suffer. For example, one potential threat of climate change is the decrease of the productivity of important crops in Latin America. In a global economy, this is not just a problem for Latin Americans. The interconnectivity between countries means we are already “world citizens” in many respects. And, if we are able to see ourselves as world citizens rather than as national citizens, we will be able to take a step in the right direction with regard to fighting global climate change.

Kant’s vision of a League of Nations is perhaps the most important idea relevant to the climate crisis when we consider the level of cooperation a proper handling of this crisis will require. Since anthropogenic climate change demands a collective response from the leaders of all nations, there has to be some united intergovernmental body to attack this issue. This is precisely what Kant had in mind. The current political entity that most closely approximates Kant’s League of Nations is the UN, which set up the Intergovernmental Panel on Climate Change. The IPCC plays a crucial function in transnational scientific communication and consensus building.

In the most recent assessment report (AR 4), the IPCC provides several global climate projection models that differ according to whether we confront climate change on an individual level or on an intergovernmental level. The different scenarios that they posit combine to elicit what we can call a “cone of probability” as to the direction of where climate change will go. The scenarios that depend solely on individual responsibility lead to higher temperatures and a greater amount of energy in the climate systems, while the scenarios that rely on transnational cooperation lead to lower temperatures and a lower amount of energy in the climate systems. In other words, our odds improve if nations work together to solve the anthropogenic climate change crisis. This further strengthens Kant’s case for a League of Nations.

Of course, the ideal way of handling global climate change is to attack it from as many angles as possible, which will mean implementing sustainable practices on an individual and communal level. Individuals can utilize the Categorical Imperative test to determine if their actions are sustainable and the various political leaders of the world can utilize Kant’s emphasis on intergovernmental cooperation to work together to implement sustainable policies that all nations must follow. There are already certain
proposals on the table regarding intergovernmental cooperation. Most of them have to do with a worldwide tax on countries whose greenhouse gas emissions go over a certain level in order to deter nations from adding to the problem of climate change.\textsuperscript{30} Regardless of the intricacies of the proposals that are offered, the bottom line is that action is going to have to be made and this action is going to have to be soon.

**Concluding Remarks**

At the beginning of this paper, I mentioned the ways in which Kant was ahead of his time. I noted that his understanding of nature has been lauded by modern day scientists as approximating the Standard Model. In fact, modern day scientists have looked to Kant for insight in their quest to understand how the world works.\textsuperscript{31} Just as these scientists looked to Kant for inspiration, I urge that we look to his philosophy in our quest to find a framework in which to confront anthropogenic climate change.

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\textsuperscript{1} This is quoted by Stephen Gardiner in his “Ethics and Global Climate Change,” in *Environmental Ethics: Readings in Theory and Practice*, edited by Louis P. Pojman and Paul Pojman (Belmont, CA: Thomson Wadsworth, 2008), 573; Gardiner, *EGCC* hereafter.


\textsuperscript{3} IPCC, “Summary,” 5.

\textsuperscript{4} This quote comes from *The Routledge Companion to the New Cosmology*, edited by Peter Coles (London: Routledge, 2001), 240.


\textsuperscript{6} Schönfeld, *HRD*, 7.

\textsuperscript{7} For more information of the recent theory of the Big Bounce, see the article “Big Bang or Big Bounce?: New Theory on the Universe’s Birth,” in *Scientific American*


10 Throughout the paper, I have emphasized only the human difficulties behind anthropogenic climate change, but the problems that we are creating for non-human entities like ecosystems, animals, and plants are equally as problematic. Since Kant’s moral philosophy emphasizes human beings, we will limit our focus to humans.


14 Kant, GMM, 38.

15 Kant, GMM, 37.

16 Kant, GMM, 39.


20 Technically, the Categorical Imperative test would end in asking whether a person could still accomplish their goal of commuting to work if everyone else in the world also did it. Although this practice may be sustainable for a short period of time (i.e., if
everyone commuted to work right now, I could still commute as well), anthropogenic climate change would increase drastically in such a short amount of time that human beings would not be able to live in this way anymore.


22 Schönfeld, *GK*, 57.

23 Kant, *GMM*, 46-47.


27 Kant, *IUH*, 19.


30 In fact, proposals such as this were on the table as early as 1992. Cf. Houghton, *GW*, 242-245.