Climate Change Ethics and Self-deception

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"Proposition 5: A threatened discourse

In the perfect moral storm, our position is not that of idealized neutral observers, but rather judges in our own case, with no one to properly hold us accountable. This makes it all too easy to slip into weak and self-serving ways of thinking, supported by a convenient apathy or ideological fervor. Moreover, the devices of such corruption are sophisticated, and often function indirectly, by infiltrating the terms of ethical and epistemic argument." (Gardiner, 2011, p. xii-xiii)

"Proposition 6: Shadow solutions

Given this, we are susceptible to proposals for action that do not respond to the real problem. This provides a good explanation of what has gone wrong in the last two decades of climate policy, from Rio to Kyoto to Copenhagen. However, the form of such "shadow solutions" is likely to evolve as the situation deteriorates. Some recent arguments for pursuing geoengineering may represent such an evolution. (Gardiner, 2011, p. xiii)

Both in terms of ideas and actions, humanity's response to the problem of global climate change demonstrates many self-deceptive elements. In particular, there is convincing evidence that people are subject to motivated reasoning and willing to accept weak arguments when these reduce their feeling of obligation to take action, and where doing so empowers them to continue acting in their own interest exclusively while ignoring the potentially legitimate moral claims of others. Within a set of eight propositions about climate change ethics, Stephen Gardiner includes two that relate to the human faculty for self-deception. Because we benefit from the fossil-fuel-intensive activities that are driving dangerous climate change but will not personally endure the worst consequences, we may be tempted to justify inaction or even harmful new actions on the basis of suspect arguments. For instance, some have argued that we have no way of knowing what sort of climate people in the future would prefer. Considered from a disinterested position, it is implausible that a climate experiencing rapid and unpredictable change, in which all human infrastructure is increasingly poorly suited to the conditions in which it operates, would actually be preferred to the climatic *status quo*. The argument about unknown preferences does not hold,

yet is does seem to serve as partial justification for inaction in the minds of some people. This is simply one example of a weak argument in favour of inaction, but it illustrates common characteristics of many such arguments, and demonstrates how many of these arguments are closely tied to the faculty of self-deception. As Gardiner explains:

> "If it can avoid the appearance of overtly selfish (or self-absorbed) behaviour, an earlier generation can take advantage of the future without the unpleasantness of admitting it – either to others, or, perhaps more importantly, to itself." (Gardiner, 2011, p.48)

The specific case of responses to climate change can be situated within the wider context of general processes of reasoning. As Ziva Kunda argues: "There is considerable evidence that people are more likely to arrive at conclusions that they want to arrive at, but their ability to do so is constrained by their ability to construct seemingly reasonable justifications for these conclusions" (Kunda 1990). Because of the importance our decisions about fossil fuels and climate policy will have for thousands of years in the future, the psychological phenomena identified by Gardiner are worthy of analysis. The danger of self-deception is especially acute in this context because the likely victims of bad decisions are not present to argue their own case (Gardiner, 46). Those alive now must make choices on behalf of those who will follow them and, if these choices are to be just, the current generation must avoid deceiving itself about the key moral elements of the problem. Motivated reasoning and moral corruption may undermine the ability of those making choices now to avoid such self-deception.

Some of Gardiner's terminology deserves elaboration. By "the perfect moral storm", he is referring to the combination of factors that make climate change an especially intractable political problem. These include the dispersal of effects across time and space, the delay between when greenhouse gas pollution occurs and when the full effects are felt in the climate system, the failure of our political and moral theories to deal with problems involving the long-term future

(Gardiner, 2011, p. 41), and what he identifies as "the problem of moral corruption" (Gardiner, 2011, p. 45). Gardiner theorizes that a generation of decision-makers that is unwilling to accept the costs of taking action on climate change, but which is willing to impose the costs associated with unmitigated climate change on future generations, will be "likely to welcome any rationale that appears to justify its behavior" (Gardiner, 2011, p. 41). He argues that it may employ strategies to "avoid real engagement with the issue" including "distraction", "selective attention", "unreasonable doubt", "delusion", and "hypocrisy". These mechanisms may be closely related to the "biased set of cognitive processes" described by Kunda (Kunda, 1990). Kunda argues that: "when one wants to draw a particular conclusion, one feels obligated to construct a justification for that conclusion that would be plausible to a dispassionate observer. In doing so, one accesses only a biased subset of the relevant beliefs and rules" (Kunda, 1990). The arguments used by climate change deniers (those who argue that climate change isn't happening, isn't caused by humans, or isn't a problem) display many of these strategies of self-deception and moral corruption. Individuals are clearly vulnerable to these arguments, and they have been highly effective at preventing effective climate change action on a scale commensurate with the severity of the problem.

The most nefarious activities of climate change deniers are probably those that exploit self-deceptive tendencies within the public at large. There are countless examples of pro-fossil-fuel individuals making use of erroneous factual statements for years after they have been thoroughly discredited. Strategies once used to deliberately foster public confusion about the connection between smoking tobacco and lung cancer are now being used to sow doubt about the need to take action on climate change. (Hoggan, 2009; Oreskes, 2010). For outside observers, it is impossible to know if deniers are deceiving themselves into rejecting definitive contrary

arguments and evidence, whether they are cynically deceiving others by making use of arguments and empirical claims which they know to be false, or whether they are simply not interested in whether their arguments are sound and well-justified or not. A better psychological understanding of such individuals and their audiences could contribute to the development of more ethical and evidence-driven policies on climate change.

Some of the cognitive shortcuts that people use routinely to survive in a world that is complex beyond their understanding (See: Peterson 2002) may contribute to the inability to comprehend the nature and consequences of climate change. The necessity for such shortcuts is inherent to the bounded rationality possessed by human beings (See: Doyle 1999), but some of these simplifications raise major problems for reaching a reasonable understanding of our ethical obligations in relation to climate change. In some cases, people may simply assume that the planet is too ancient or massive to be meaningfully altered by human behaviour. This assumption could help explain the frequent use of misleading arguments about how humanity's net annual contribution to atmospheric carbon dioxide levels is small relative to the (largely self-nullifying) annual flux of carbon into and out of the oceans and atmospheres, or the assertion that just because the planet has been around for a long time, humanity has nothing to fear from rapidly altering the climate. An article by Nobel Prize-winning physicist Robert Laughlin in *The American Scholar* provides a particularly strange example of this argument:

> "Common sense tells us that damaging a thing this old is somewhat easier to imagine than it is to accomplish – like invading Russia. The earth has suffered mass volcanic explosions, floods, meteor impacts, mountain formation, and all manner of other abuses greater than anything people could inflict, and it's still here. It's a survivor. We don't know exactly how the earth recovered from these devastations, because the rocks don't say very much about that, but we do know that it did recover – the proof of it being that we are here." (Laughlin, 2010)

The most serious logical error here is equating the resilience of the Earth as a big ball of iron

with some kind of life on it with the capacity of human beings to endure major climatic change.

As I explained in a letter written in response to Laughlin's piece: "By pointing at the robustness

of the planet as a reason not to worry about climate change, Laughlin commits an error

comparable to seeing a baby driving around on a bulldozer and saying, 'There's no need to worry;

that bulldozer will be just fine.'" [1] In the same piece, Laughlin later adopts a fatalistic tone, while

suddenly according agency to the Earth itself:

> "Climate change, by contrast, is a matter of geologic time, something that the earth
> routinely does on its own without asking anyone's permission or explaining itself. The
> earth doesn't include the potentially catastrophic effects on civilization in its planning."
> (Laughlin, 2010)

Obviously, the Earth does no planning. Ironically, by throwing up our hands at the idea that the

Earth might have plans for us we cannot stop, we might cause ourselves to fail to prevent a

predictable catastrophe. This is precisely the kind of moral corruption that Gardiner expresses

profound concern about – the kind that undermines our moral faculties by subtly shifting the

grounds of discussion. Laughlin rejects the cognitive frame in which we have identified the

connection between greenhouse gases and warming, as well as the associated dangers, and

substitutes a frame in which the planet is capricious and not meaningfully subject to human

alteration. Given the growing body of evidence that this perspective is wrong, using it as the

basis for an argument for inaction on greenhouse gas pollution is increasingly unconvincing.

        Gardiner's reference to geoengineering draws attention to an area in which the

generations alive now face another choice between taking an unpopular and costly action with a

fairly predictable outcome (mitigating climate change by reducing greenhouse gas pollution) and

imposing another set of dangers upon future generations (geoengineering – or the deliberate

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[1] Available at: http://theamericanscholar.org/response-to-our-summer-issue/

manipulation of the climate system, usually proposed as a mechanism for reducing the severity of anthropogenic climate change). By altering the climate with greenhouse gas pollution, humanity is already engaging in at least one vast "uncontrolled experiment" (Baes, 1977). If we choose to introduce deliberate geoengineering in addition to the accidental though increasingly well-understood consequences of burning fossil fuels, we choose to add an additional layer of uncertainty to be dealt with by those in the future. There are a number of technical characteristics of geoengineering which are essential to bear in mind in order to evaluate arguments about how the possibility of deliberate climate modification alters the choice before us now. Geoengineering could fail, leaving humanity with inadequate time to stave off the worst effects of climate change by other means. This possibility is especially serious if we acknowledge the risk of powerful positive feedback loops driving massive and irreversible changes in the climate system (Hansen, 2010). It is also possible that geoengineering will have severe 'side effects' such as producing major changes in global patterns of precipitation. These could increase the difficulty associated with dealing with whatever unmitigated climate change effects persisted despite geoengineering. For instance, many proposed geoengineering schemes are based on the idea of using particles in the upper atmosphere to reflect incoming shortwave radiation from the sun directly back into space. Done at a sufficient scale, this could counteract the net warming effect from accumulating greenhouse gases, just as previous major volcanic eruptions caused acute episodes of cooling globally. That being said, this approach would no nothing to check the accumulation of carbon dioxide in the atmosphere as the result of burning fossil fuels. One important but highly uncertain such effect is the gradual acidification of the oceans, which could have unknown consequences for marine and terrestrial food webs. All in all, the possibility of geoengineering is accompanied by a spate of new risks, all of which would be imposed on

generations that will already need to contend with the unknown but potentially severe consequences of climate change.

Setting aside technical questions about the feasibility and consequences of geoengineering, there are also important psychological issues to consider. The very existence of such options allows people to argue that it will be easy and affordable to correct the damage done by climate change in the future. It removes some of the urgency of deciding now what course to follow in terms of greenhouse gas pollution. Arguments for inaction are also frequently strung together, permitting several arguments that are individually weak to gain the appearance of strength in combination. For instance, the argument that geoengineering excuses us from making immediate decisions about climate policy can be linked up with both weak arguments about our uncertainty about the preferences of those in the future and other weak arguments that assume that economic growth and technological progress must continue, meaning members of future generations will automatically be better-equipped to address climate change than we are. In combination, such arguments can leave people with the impression that continuing with business-as-usual is a reasonable strategy, despite a strong scientific consensus that all that is necessary to produce an unprecedented climatic catastrophe is to continue burning fuels as we are today.

Comprehensive and authoritative scientific statements on the key elements of climate change date back at least to the 1979 U.S. National Academy of Sciences report (National Academy of Sciences, 1979). The report concluded that human activities – particularly greenhouse gas emissions – are altering the climate in potentially dangerous ways. These conclusions have been subsequently re-affirmed in the four major reports of the Intergovernmental Panel on Climate Change in 1990, 1995, 2001, and 2007. They are also

affirmed in a notable statement from the national science academies of the G8 countries, Brazil, India, and China (National Academy of Sciences, 2009). The facts are clear: burning fossil fuels alters the climate, and there is a sufficient quantity of coal, oil, and gas available to push the climate into a state never experienced by anatomically modern humans, much less by members of human civilizations. The decisions made in the next few decades will determine whether the planet as a whole experiences relatively tolerable warming of less than 2˚C above pre-industrial levels, or whether humanity will strike out into uncharted climatic waters, warming the world by 5-6˚C by 2100, and perhaps by much more (Hansen 2010).

Climate change is also linked to the psychology of self-deception due to our willingness to assume that our future selves will be more conscientious than our present selves are. Politicians have been reasonably quick to commit themselves to ambitious long-term action, based around target dates like 2020 and 2050 (Gardiner, 2011, p. 314). It is possible that these commitments were made in good faith, with the intent of developing credible implementation procedures to achieve the deep pollution reduction promises made. That being said, the general failure of countries to meet nearer-term targets, or to make substantial progress toward their longer-term objectives, suggests one of three possibilities. In one case, decision-makers are simply continuing to assume that a cheap and easy solution will emerge at some unknown future date, before the consequences of climate change become severe. In another, the promises were always hollow and made in bad faith, designed to placate concerned individuals and groups in the short term while not actually doing anything substantial. Finally, it could simply be that decision-makers genuinely intended to implement their promises but were caught up by tasks which seemed more urgent. Here, the major cognitive failing would be an inability to take the most severe climate change scenarios seriously, resulting in a distortion of how urgent and

important different priorities seemed. Indeed, evaluating the relative relevance of various

complex phenomena is an activity known to tax human faculties (Peterson 2002, p. 432).

Kunda concludes that: "motivated illusions can be dangerous when they are used to guide

behavior and decisions, especially in those cases in which objective reasoning could facilitate

more adaptive behavior" and that "once the mechanisms producing such biases are fully

understood, it will be possible to help people overcome them" (Kunda, 1990). In the climate

context, the forces operating in favour of the status quo option seem to be supported by the

capacity of human beings to deceive themselves, particularly in situations where they can grant

themselves benefits while imposing the associated harms on distant and invisible others. As

such, the mechanisms through which human beings deceive themselves, particularly when they

are tempted to accept weak arguments as though they were strong, are critical for understanding

the emergence and evolution of this crucial global issue. Effort must be dedicated to fighting

moral corruption in this sphere (Gardiner, 2010, p. 308). Alongside the challenging physical

aspects of the problem of climate change, it is plausible that it falls into a kind of cognitive sink-

hole in which the appropriate response to making decisions under circumstances of uncertainty is

misunderstood.

References

Baes, C.F. & Goeller, H.E. & Olson, J.S. & Rotty, R.M. (1977) Carbon Dioxide and Climate:

    The Uncontrolled Experiment: Possibly severe consequences of growing CO 2 release

    from fossil fuels require a much better understanding of the carbon cycle, climate change,

    and the resulting impacts on the atmosphere. *American Scientist, 65, 3, May-June.*

Doyle, J. (1999) Bounded Rationality. In Wilson, R.A. & Keil, F. (Eds.), *MIT Encyclopedia of Cognitive Sciences*. (Cambridge: MIT Press)

Gardiner, S. (2011). *A Perfect Moral Storm: The Ethical Tragedy of Climate Change.* (New York: Oxford University Press)

Hansen, J. (2010). *Storms of my Grandchildren: The Truth About the Coming Climate Catastrophe and Our Last Chance to Save Humanity.* (New York: Bloomsbury)

Hoggan, J. (2009). *Climate Cover-Up: The Crusade to Deny Global Warming.* (Vancouver: Greystone)

Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108, 480-90.

Laughlin, R.B. (2010). What the earth knows. *The American Scholar*, Summer 2010. http://theamericanscholar.org/what-the-earth-knows/

National Academy of Sciences (1979) Ad Hoc Study Group on Carbon Dioxide and Climate. http://www.atmos.ucla.edu/~brianpm/download/charney_report.pdf

National Academy of Sciences, United States of America et al. (2009). G8+5 Academies' joint statement: Climate change and the transformation of energy technologies for a low carbon future. http://www.nationalacademies.org/includes/G8+5energy-climate09.pdf

Oreskes, N. & Conway, E. (2010). *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming.* (New York: Bloomsbury)

Peterson, J.B. & Flanders, J. (in press) Complexity management theory: motivation for ideological rigidity and social conflict. *Cortex*, 38, 429-458