SERRC
Social Epistemology
Review & Reply Collective

http://social-epistemology.com
ISSN: 2471-9560

Climate Change Disinformation and Culpability: A Sympathetic Reply to Pongiglione and Martini

Lawrence Torcello, Rochester Institute of Technology, lgtghs@rit.edu

---

Torcello, Lawrence 2022. "Climate Change Disinformation and Culpability: A Sympathetic Reply to Pongiglione and Martini." *Social Epistemology Review and Reply Collective* 11 (9): 29-37. https://wp.me/p1Bfg0-7ac.

SERRC
Social Epistemology
Review & Reply Collective
11 (9): 29-37. 2022.
https://wp.me/p1Bfg0-7ac

Misinformation has hampered action on climate change for decades. Climate researchers who have been concerned with the dissemination of climate science in the public sphere know the problem well. Not least of all because it often confronts them directly, in the form of targeted harassment. In 2014 I experienced this firsthand with an avalanche of hate mail (electronic and physical) peppered with threats of violence, as well as an attempt to have me fired (Readfearn 2014). I had published a brief essay in *The Conversation UK* raising the question of culpability for funded disinformation campaigns that intentionally undermine public understanding of human caused climate change (Torcello 2014).

In part, my relative vulnerability at the time as an untenured assistant professor encouraged some of those who sought to have me punished for the question I posed in that essay. But before I describe the evolution of my question about disinformation and culpability, I want to flag what a welcome point of connection I find between my work and that of Francesca Pongiglione and Carlo Martini, as it appears in "Climate Change and Culpable Ignorance: The Case of Pseudoscience" in *Social Epistemology* (2022). In what follows, I'll use my own experience to describe a typical pattern of corporate funded disinformation and the attempt to silence people who challenge it, and I'll review my initial argument as well as its development since it first appeared in 2014. Then, I'd like to delve into the point of overlap between Pongiglione's and Martini's work and my own, and I will finish by returning to the pressing question of corporate culpability for sponsored disinformation. A subject that Pongiglione and Martini flag in their article as deserving more attention. I will show, nonetheless, how they have already made an important contribution to the subject with their present paper.

Culpable Disinformation

In the 2014 essay mentioned above, I raised the question of criminal negligence in the context of corporately funded disinformation. I asked whether the funding by corporations of disinformation campaigns was not best understood as a form of criminal negligence, and comparing a relevant case of misinformation, I suggested that it should be. Since then, we have continued to see disinformation campaigns like those I described used as delay tactics, so that corporate profit could remain high. Specifically, the delay is of widespread action to combat anthropogenic climate change, and such action is delayed by campaigns designed to weaken any public and political will to act. In this case, the delay itself has contributed to climate related deaths (Springmann et al. 2016).

Corporations funding disinformation campaigns about climate science, I suggested, might be best recognized as criminally negligent. Here I will repeat explicitly what my 2014 *Conversation* essay suggested: in taking on corporate criminal negligence, we must start by making a distinction between corporately financed PR-campaigns, designed to undermine the general public's ability to make informed decisions about climate warnings, and the speech of private citizens speaking on their own behalf, however publically. Our individual freedom of expression on this topic should not be up for question.

Laws regulating speech differ between nations, and my argument is not intended merely for citizens and corporations within the United States. Most democratic nations, for instance, have laws against hate speech, and it may be that the kind of disinformation with which I am concerned should be understood as analogous to hate-speech. Hate-speech adds nothing of value to the public sphere but seeks to intimidate and mute the civic engagement of those it targets (Waldron 2014). Like hate-speech, disinformation sabotages productive public discourse. Yet unlike hate-speech, to the degree that they succeed in delaying the abolition of greenhouse gas emitting fuels, campaigns of climate science denial and disinformation endanger life on a planetary scale.

There is no public good served by tolerating corporate funded disinformation. On the contrary, this form of epistemic sabotage places vulnerable communities and future generations in harm's way. Legally speaking, in its model form, the charge of criminal negligence does not require proving intent to harm. Prosecuting the charge hinges on showing a careless disregard for the reasonably foreseeable harms to which others will be exposed because of one's actions. Such charges are usually aimed at individuals whose actions can be traced directly to a specific injury. How then, I've come to ask, should we understand a harm so immense that it changes the global environment on which life depends?

I've consistently argued that a key condition for facing the harm is, first, the open recognition that we know beyond a reasonable doubt that climate disasters including casualties are the result of global warming. We know this just as we know that cigarette smoking increases the occurrence of certain illnesses, even if we do not know the exact cigarette that triggers a particular disease (or by analogy the exact emission that outstrips a given environment's ability to stabilize). Given what we already know about the harms of global warming, and considering their massive, global scale, I have come to argue that the best way to understand the foreseeable, reckless action of funding a disinformation campaign is as a crime against humanity (Torcello 2018). This is one reason I appreciated Pongiglione and Martini's unequivocal insistence on recognizing the culpable nature of corporate funded disinformation.

In hindsight, having now studied the playbooks of corporate disinformation outlets, it is no longer surprising that my 2014 essay in *The Conversation* was noticed and then distorted by conservative media outlets. These tended to lead with a headline about how I wanted scientists and climate "skeptics" to be arrested. Nor is it any longer shocking that Lord Christopher Monckton, as famous for his advocacy of climate disinformation as he is for touting his own hereditary membership in the British peerage, wrote to my university encouraging my dismissal. As unsettling as that was at the time, it was little compared to the campaigns of harassment against climate scientists like Michael E. Mann, and ultimately the whole episode united different groups of people who were drawn into it and schooled on the typical patterns of harassment that tend to follow corporately sponsored and ideological disinformation campaigns. Given an intentionally confusing mix of character assassination and science disinformation I am impressed and encouraged that Pongiglione and Martini do such an admirable job of identifying the intended victims of organized disinformation

SERRC
Social Epistemology
Review & Reply Collective
11 (9): 29-37. 2022.
https://wp.me/p1Bfg0-7ac

campaigns. Not those of us who research climate change philosophically or scientifically but the larger lay-public being misled and manipulated by pseudoscientific contrivances.

The Ethics of Inquiry and Public Discourse

I have argued that we have a moral obligation to be mindful of the methods of inquiry that buttress our belief formation (Torcello 2016). This is because our beliefs carry a moral hazard that may impact others in harmful ways we might not discern ourselves. We live in an increasingly connected global society. Social technologies allow us to receive algorithmically targeted messaging and to communicate our least considered gut reactions with the tap of a finger. As we've all seen, social media connects those in the most remote rural areas and those in major metropolitan areas, and everyone with access in between. As such, our ability to influence strangers for good and for bad is quantitatively greater now than at any other time in human history.

Moreover, the patterns of thinking that inform the beliefs we so easily spread create the cognitive pathways for related beliefs to follow. For instance, if I am willing to accept a pattern of fallacious reasoning in one context, it ups the odds that I will be willing to accept the same pattern of fallacious thinking in subsequent situations. Rene Descartes said the same in 1641, as did WK Clifford in 1877, but our contemporary social scientific data has borne them out (Lewandowsky 2013). If I believe that a failure to disprove a particular claim amounts to positive evidence for that claim, then I am more likely to accept fallacious arguments from ignorance in multiple domains. For example, if I am likely to believe a conspiracy about COVID-19 being introduced as a mode of social control by a shadowy deep state, then I am likely to believe a conspiracy calling into question the 2020 presidential election results in the United States. The fact that there is no coherent evidence for such conspiratorial thinking is beside the point, because of how patterns of thinking, including fallacious thinking, guide our belief formation, as the growing body of research on belief formation shows (Mendoza 2015, van der Linden et al. 2015, Lewandowsky et al. 2016).

That (1) our beliefs are both informed by cognitive patterns or styles, and that (2) we almost inevitably influence one another through our beliefs and can do so in harmful ways supports the conclusion that there is an ethical obligation of due diligence and reasoned circumspection regarding everyday inquiry. As a corollary to this *ethics of inquiry*, I argue that we have an *ethics of public discourse* reflecting the same circumspection when making political arguments in the public sphere—one that pertains especially to those with greater professional access to public venues.

As quoted by Pongiglione and Martini, I argue in an earlier essay:

> [A]ny political advocacy concerning scientific inquiry implies, and ought to be interpreted as implying, a circumspect due diligence in preparation for public discourse. [. . .] such an extension places a special communicative obligation [. . .] upon all professional academics, politicians, journalists, or anyone who may play a prominent role in framing and informing public

> discourse. Such citizens ought to place special emphasis upon the appropriate scrutiny of evidence, upon rational circumspection, and upon their own professional limitations in asserting public arguments (Torcello 2011, 198).

An obstinate refusal to accept a scientific consensus for political and ideological reasons is what I then and now call *pseudoskepticism*—which I argue is a component of pseudoscience. In a number of subsequent essays, I use climate change as a primary example in illustrating how pseudoskepticism breaches the ethics of inquiry and public discourse.

Culpable Ignorance and the Victims of Disinformation

To some, my argument that corporations which mislead the public on climate change are morally and potentially criminally negligent might appear to be at odds with my promotion of an ethics of inquiry and public discourse. If the citizen is morally responsible for their methods of inquiry, then isn't the ultimate responsibility for their belief formation also theirs alone? And if this is a matter of individual responsibility, then why should we prevent corporations from making whatever claims they wish about climate science?

It is precisely on these questions that the contribution of Pongiglione and Martini is so vitally important. As they show, it is possible for the most careful of inquirers to end up with misinformed views on climate change, in large part because of the ubiquity of disinformation in the public realm. It is also possible, as they point out, to be careless epistemologically, but to end up holding essentially correct views on climate change. This might be simply because one's views align with one's political identity—which in this case would be a form of moral luck, but still not itself a sign of epistemic virtue.

Again, the reason that a careful inquirer can arrive at erroneous beliefs about climate change is specifically because there is so much intentional disinformation in the public sphere—disinformation that is designed with the goal of fooling non-experts. Most pseudoscience is packaged to mimic the trappings and authority of legitimate science, and climate science denialism is no exception (Torcello 2012).

To help illustrate these points, Pongiglione and Martini offer the example of two different non-experts named John. The first John is introduced as follows:

> You are talking to your friend John about climate change, trying to emphasize the importance of taking action to curb emissions. John says that he was also concerned about climate change but has recently rethought the issue after reading what he refers to as a "scientific report." This report explained how there would be no point in cutting emissions since it is uncertain that global warming will bring more harm than benefits. Since then, John continues, he feels confused, believes that there is substantial disagreement in the scientific community, and that perhaps climate change may be beneficial. As a consequence, he has lost interest (2022, 425).

SERRC
Social Epistemology
Review & Reply Collective
11 (9): 29-37. 2022.
https://wp.me/p1Bfg0-7ac

It is difficult to feel much sympathy for this John. He begins with the assumption that climate change is worthy of concern. He claims to have decided that the topic deserves further investigation, but then allows a single dubious report to change his mind. John seems intellectually lazy and lacks any real sense of cautious due diligence in the face of one "scientific report" contradicting his prior beliefs. If anything, the contradiction ought to encourage John to investigate even more.

The authors draw on the work of Quassim Cassam, among others, to help illustrate why this John could be intellectually culpable. Cassam argues that intellectual character traits are important in judging culpability (Cassam 2016). These character traits are described by Cassam as "habits or styles of thought or inquiry."

As Pongiglione and Martini explain, Cassam is cautious about definitively assessing moral culpability under the influence of such character traits. This is due to uncertainty over how much control one has in the development of character traits. Still, it is non-controversial to assume that within the bounds of normal human intelligence, it is possible to cultivate both good and bad habits of inquiry. The value of an education is premised on this supposition, and there is a great deal of human experience supporting the idea. Others, such as James Montmarquet, argue that one can be held accountable for closing one's mind to truth, even when biased by epistemic vice (Montmarquet 1999). Pongiglione and Martini argue that such a lack of openness helps to explain the first John's culpable ignorance. They then offer a juxtaposition:

> In blaming the first John for his false beliefs, the moral culpability concerned the way he ran his inquiry, which involved some apparent epistemic vices. Imagine a different scenario in which we have a second John who, instead of being haphazard, lazy, and careless, is mindful, attentive, and thorough. He runs a proper inquiry using the best of his capacities, but concludes that probably climate change is neither harmful nor anthropogenic (2022, 429).

The idea that one could fulfill one's obligation to the ethics of inquiry and still get things terribly wrong is disheartening. We would rather conclude that surely the evidence for human caused climate change is so robust and so widely available that to arrive at an erroneous rejection of it must be a sign that the inquiry was haphazard or ideologically motivated.

Pongiglione and Martini go through a number of reasons offered by various thinkers, all suggesting that the fact that a scientific consensus exists means that a truly responsible inquirer is especially likely to come to the correct conclusions about climate change. It would seem that in the United States, for instance, where access to basic education and an internet connection is relatively widespread, people who are motivated by an honest desire to find accurate information about anthropogenic climate change can do so.

The authors go on to cite Elizabeth Anderson, who argues that (as quoted by Pongiglione and Martini):

> [T]he layperson ought to be able to tell the difference between the genuine claims of an expert and the ones of a non-expert. Since, as we know, the experts are to a very large majority in agreement on the matter of climate change, it seems to follow logically that the layperson should also be able to form the correct beliefs about the climate (Anderson 2011).

We don't expect the non-expert to be able to survey all the available science or even if they could, to understand it all. However, can we not expect that a responsible and intellectually honest layperson will be able to recognize that an expert consensus exists? Not necessarily, as the authors make clear in their discussion of the disadvantages non-expert face when it comes from telling the difference from legitimate scientific reports and pseudoscientific disinformation.

As Pongiglione and Martini underscore, the non-expert is not always competent enough to assess what constitutes appropriate expertise. Crucially, disinformation exists to mislead non-experts. This is its deliberate design, by definition. Disinformation would not be a problem if it were ineffective. It is because disinformation is effective and indeed often sophisticated that we cannot assume citizens who conduct an honest inquiry will come to the right conclusions on climate change.

We can and should balance the duty of citizens to conduct responsible inquiry against the culpability of bad actors who seek to sabotage their best efforts to do so. Yet the problem with emphasizing the epistemic responsibility of citizens almost exclusively, when it comes to climate change, is that the individualized emphasis distracts from corporate and political responsibility—and disinformation culpability. This disequilibrium lets powerful, vested interests off the hook in a way that can become a sort of "disinformation victim blaming." And this is similar to the shifting of burden that occurs when people are encouraged to focus too much on their own carbon footprint, even while a forceful charge of corporate responsibility is dimmed. The concept of a personal carbon footprint is, as Michael Mann points out, heavily and self-servingly promoted by the same corporations which fund climate disinformation (Mann 2001). Individual actions are useful in the fight against climate change, but only insofar as they inspire social and political pressures on industries and governments to enact systemic changes.

Similarly, epistemic responsibility is crucial in part because it is a line of defense against those working to sow doubt and confusion about climate change in the public sphere (Oreskes and Conway 2010). However, it is not a perfect defense, and its overemphasis can foster a disequilibrium in which the culpability of disinformation-mongers is ignored.

Pongiglione and Martini provide excellent real-life examples of the confusing disinformation faced by responsible laypeople like their imagined second John. One such example is a paper whose author, Patrick Moore, works for an institute known to be a front for the dissemination of corporately driven climate disinformation (Pongiglione and Martini 430-431.). Contrary to the established science, Moore makes the value judgment that climate change will be a net benefit to the world, ignoring most of the globe to make his case.

SERRC
Social Epistemology
Review & Reply Collective
11 (9): 29-37. 2022.
https://wp.me/p1Bfg0-7ac

Because it is so important for understanding and addressing climate disinformation, I want to repeat that as a pseudoscientific endeavor, disinformation campaigns tend to mimic the trappings of science in ways that non-experts cannot always be expected to uncover. Non-experts, especially those unfamiliar with scientific or academic norms and standards, cannot be expected to recognize that "think-tanks" are often sponsored by corporate and ideological interest groups with specific, non-scientific agendas. The fact that some "think-tanks" are attached to prestigious universities and do put out legitimate research only makes the issue more confusing for the lay-person.

It is worth quoting Pongiglione and Martini once again as they describe their example of Moore's climate disinformation, in order to illustrate the challenges faced by non-experts personified by John the second:

> The author works for the Frontier Centre for Public Policy, an independent think tank known to be a front for the corporate climate denial agenda. Furthermore, the report is not listed in any major scientific repository; while found in the ResearchGate repository, ResearchGate papers are self-published. There is therefore no guarantee that the report has been in any way peer-reviewed. The report is also single-authored, which is rather anomalous for scientific reports of similar breadth and scope. The author himself has received a number of criticisms from the scientific community, of which he is not part, for climate change and science denialism (2022, 431).

This context may look glaring to an academic or a climate scientist, but none of it will be obvious to a non-expert.

Taking seriously the idea that disinformation crafted to mislead the public is a moral problem, we must accept the corollary that such disinformation *can* epistemologically sabotage responsible inquirers. Again, to deny this is a form of blame shifting, akin to the way some corporations would like to shift their own responsibility for climate change to isolated individuals.

Concluding Remarks

As Pongiglione and Martini point out, when researchers turn their attention to epistemic culpability the emphasis is typically on individual responsibility. But to do so ignores one of the more troubling problems of our time: the pervasiveness of corporately funded, intentionally designed disinformation. In showing that even the most careful and responsible of citizens still stands a good chance of being misled by disinformation, Pongiglione and Martini force us to look at disinformation as a serious social harm. Disinformation does not just undermine public discourse, it leaves actual victims in its wake. Rather than blame the victims of disinformation for not seeing through a sometimes sophisticated and always pseudoscientific façade, we ought to turn our attention to the moral and legal culpability of

corporations and their supporting institutions for actions that affect every lifeform on the planet.

References

Anderson, Elizabth. 2011. "Democracy, Public Policy, and Lay Assessments of Scientific Testimony." *Episteme* 8 (2): 144-164

Cassam, Quassim. 2016. "Vice Epistemology." *The Monist* 99: 159-180.

Clifford, William Kingdon. (1887) 1999. "The Ethics of Belief." In *The Ethics of Belief and Other Essays* edited by Timothy J. Madigan, 70–96. Amherst, NY: Prometheus.

Dicker, Georges. 1993. *Descartes: An Analytical and Historical Introduction*. New York: Oxford University Press.

Lewandowsky, Stephan. 2016 "Future Global Change and Cognition" *Topics in Cognitive Science* 8 (1): 7-18.

Lewandowsky, Stephan, Klaus Oberauer, and Gilles E Gignac 2013. NASA Faked the Moon Landing—Therefore, (Climate) Science is a Hoax: An Anatomy of the Motivated Rejection of Science. *Psychological Science* 24 (5): 622–633.

Mann, Michael. 2021. *The New Climate War: The Fight to Take Back Our Planet*. Public Affairs, New York.

Montmarquet, James. 1999. "Zimmerman on Culpable Ignorance." *Ethics* 109 (4): 842-845.

Oreskes, Naomi. and Erik M. Conway. 2010. "Defeating the Merchants of Doubt." *Nature* 465 (7299): 686-687.

Pongiglione, Francesca and Carlo Martini. 2022 "Climate Change and Culpable Ignorance: The Case of Pseudoscience" *Social Epistemology* 36 (4): 425-435.

Readfearn, Graham. 2014 "Climate Science Sceptics Target Philosopher with Toxic Hate Mail." *The Guardian* 27 March. https://www.theguardian.com/environment/planet-oz/2014/mar/27/climate-science-denial-funding-criminally-negligent-philosopher-hate-campaign. Accessed 8/30/22.

Springmann, Marco, Daniel Mason-D'Croz , Sherman Robinson, et al. 2016. "Global and Regional Health Effects of Future Food Production under Climate Change a Modelling Study." *The Lancet* 387 (10031): 1937-1946.

Torcello, Lawrence. 2018 "The Acceleration of Global Warming as Crime Against Humanity: A Moral Case for Fossil Fuel Divestment" In *The Palgrave Handbook of Philosophy and Public Policy*. Springer edited by David Boonin, 779-79. Cham, Switzerland: Springer Verlag.

Torcello, Lawrence. 2016. "The Ethics of Belied, Cognition, and Climate Change Pseudoskepticism: Implications for Public Discourse." *Topics in Cognitive Science* 8 (1): 19-48.

Torcello, Lawrence. 2014. "Is Misinformation about the Climate Criminally Negligent?" *The Conversation* March 13. https://theconversation.com/is-misinformation-about-the-climate-criminally-negligent-23111. Accessed 8/30/2022.

Torcello, Lawrence. 2012 "The Trouble with Pseudoskepticism" *Skeptical Inquirer* 36 (3): 37-41.

Torcello, Lawrence. 2011. "The Ethics of Inquiry, Scientific Belief, and Public Discourse." *Public Affairs Quarterly* 25 (3): 197-215.

11 (9): 29-37. 2022.
https://wp.me/p1Bfg0-7ac
van der Linden, Sander L., Anthony A. Leiserowitz, Geoffrey D. Feinberg and Edward W. Maibach. 2015. "The Scientific Consensus on Climate Change as a Gateway Belief: Experimental Evidence." *PLoS ONE* 10 (2): e0118489. http://dx.doi.org/10.1177/1075547015614970.

Waldron, Jeremy. 2012. *The Harm of Hate Speech*, Harvard University Press.