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Ethical Silence, Moral Framing, and Role of the Humanities against Disinformation: A Final Reply to Pongiglione and Martini

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Venus may once have had an atmosphere more congenial to life than its current greenhouse conditions. This is, however, without ethical consequence. We have no cause to believe sentient beings ever lived on Venus, let alone that an intelligent variety of such beings were responsible for climactic changes that made the planet inhospitable to them. In contrast, here on Earth, human beings are both causing climate change and are among the many morally relevant species vulnerable to climate change. Moreover, not every human is equally accountable for climate change.

As Pongiglione and Martini (2022) succinctly write:

While industrialised and developing countries are all affected by climate change, certain areas of the world are experiencing far more dramatic consequences than others. Some countries are particularly vulnerable because of their geographical position, which makes them especially subject to events such as droughts, heat waves, cyclones, storms or floods. Other countries' increased vulnerability is due instead to poor resilience, caused by political instability and poverty. Certainly, the most severe consequences of climate change will have the greatest impact on the most vulnerable countries or regions and will be more pronounced in the medium to long term, causing grave harm to future generations (43).

Taken together, these facts mean that anthropogenic global warming and associated climate change are first and foremost, an ethical crisis. Otherwise, climate change on Earth would be of no more ethical concern than climate change on Venus.

In this final reply, I would like to build on the human focus Pongiglione and Martini have emphasized consistently in our exchange. I wish to do so in order to press the necessity of treating human caused climate change and related disinformation in terms of morality. Despite the ethical dimensions of the climate crisis, it is relatively rare to hear climate change spoken of in terms that publicly convey its moral implications. I will examine the relationship between disinformation and the public's relative lack of ethical engagement on climate change. I will end with suggestions stemming from the crucial role that the humanities need to play in addressing climate change and other crises exacerbated by disinformation.

### **Ethical Silence and Disinformation**

When I speak and write publicly on moral issues related to anthropogenic global warming, well-meaning people, sometimes tell me that they have never thought of climate change as an ethical issue. I've had cause to wonder about these comments, especially when they come from individuals otherwise invested in climate awareness and action. I have found that in addition to the more obvious ways that disinformation about the science has undermined action on climate change, disinformation campaigns also foster ethical silence. Insofar as climate change is mentioned in news reports at all, it is occasionally mentioned in connection with extreme weather events. Otherwise, the issue of moral or ethical impact is typically only

raised when a new Intergovernmental Panel on Climate Change (IPCC) report is released, and includes details about populations severely negatively impacted by climate change. (I am only concerned here with responsible references to climate change—not the denial and disinformation of fossil fuel advocates and their affiliates in various government bodies.)

Even when climate science is being discussed in public without the direct contamination of disinformation, it is seldom discussed in terms of justice and morality. In part, this is probably a result of disinformation's distracting influence: the need to debunk disinformation or junk science has been constant in the last several decades. The more the scientific consensus on human caused climate change has to be defended in response to the onslaught of disinformation, the less discussion there is on the ethical consequences of climate change in particular.

I believe this is one reason we now ought to focus attention on the ethical implications of disinformation. Not only must this involve ethical attention to corporate manipulation, and to the individual duties of responsible belief formation, but as Pongiglione and Martini (2022) point out, it must also involve recognizing that citizens who spread misinformation are often the first victims of corporate disinformation campaigns.

Disinformation undoubtedly generates harm in the sense of an inadequate response to climate change, which, as shown, puts vulnerable communities at risk; we could call this a global, intertemporal harm. However, it is worth emphasising that climate change disinformation also causes significant harm to the very individuals it reaches—a local and immediate harm. This harm consists in a worsening of people's doxastic conduct and their estrangement from the truth; in their developing distrust in institutions and becoming sceptical of authorities; and ultimately in the obstruction of their deliberative processes. Some of the consequences of their poor deliberation regarding climate issues, in turn, fall directly on these individuals themselves (43).

This is a crucial ethical insight and it deserves far greater attention—I will return to it in the final section. Because so little attention is paid to the ethical dimensions of climate change in the public sphere, people tend to think of the issue as a technological and economic challenge. Yet arguably, with climate change, humanity is now facing its greatest ethical crisis. Without diminishing the atrocities that are a hallmark of our historical record, there is no other action of individual, state, or corporate body that will necessarily affect every member of the human and every other species, which is on a par with the events put into play by anthropogenic climate change (Torcello 2017; 2018). As I have written elsewhere: “There can be no greater crime against humanity than the foreseeable, and methodical, destruction of conditions that make human life possible” (Torcello 2017).

Given the moral gravity of climate change, humanity's general blindness to its ethical dimensions is analogous to viewing slavery as solely an economic problem, instead of a disavowal of human decency and justice. Rather than effectively penalizing fossil fuel companies, who we know to have done everything in their considerable power to prevent and delay action on climate change, our governments have allowed the industry to expand their fossil fuel extraction with reckless disregard for human life.

A similar ethical recklessness concerning slavery was decried by Abolitionists in the United States prior to the Civil War. For example, compare the thoughts of 19<sup>th</sup> century abolitionist William Lloyd Garrison (1845) to what we might now say of the fossil fuel industry and those who address its injustices:

So profoundly ignorant of the nature of slavery are many persons, that they are stubbornly incredulous whenever they read or listen to any recital of the cruelties which are daily inflicted on its victims. They do not deny that the slaves are held as property; but that terrible fact seems to convey to their minds no idea of injustice, exposure to outrage, or savage barbarity. Tell them of cruel scourgings, of mutilations and brandings, of scenes of pollution and blood, of the banishment of all light and knowledge, and they affect to be greatly indignant at such enormous exaggerations, such wholesale misstatements, such abominable libels on the character of the southern planters! As if all these direful outrages were not the natural results of slavery!

When scientists and others working on issues of climate change warn of its dangers, they are often treated as if they were fevered exaggerators. As if the global community of climate scientists and academics researching the topic of climate change were prone to exaggeration and politically nefarious misstatements. Much time has been lost correcting disinformation and denialism—though this is no criticism against those who do so dutifully—while these years could have been spent educating the public on the basic injustices of climate change as well as its solutions.

### **The Effects of Moral Framing**

Moral language and argumentation can galvanize social and political progress in such a way that change comes to be seen as a social necessity. A survey of social justice issues from civil-rights to labor reforms reveals a history of moral arguments effectively mustered to rouse social and political change. Recent examples are the #Me-Too movement and LGBTQ+ rights, including same-sex marriage; these two movements show how quickly public perception can change, once public awareness is re-centered on a movement's claim to *justice*. Indeed, the context of the above Garrison quote was praise of Frederick Douglass's ability to arouse unambiguously *moral* indignation.

Social progress as well as its opposite are frequently fueled by moral resolve. Consider that the strongest resistance against reproductive rights, as well as gender equality, comes from those who perceive these issues in terms of morality. Notice too that regardless of whether or not one's ethical commitments are misguided, as I believe is the case with opposition to reproductive rights and gender equality, the social and political incentive is no less genuine. When ethical framing is coupled with well-reasoned, public, and generally understandable arguments supported by reliable evidence, then ethical framing can be an exceptionally powerful motivation, standard, and guide for social, political, and legal reforms.

In his article “Climate Silence, Moral Disengagement, and Self-Efficacy: How Albert Bandura's Theories Inform our Climate Predicament,” Seth Heald analyzes the lack of

ethical framing in most climate change discourse. Heald draws attention to a related observation by made by philosopher Dale Jamieson:

Failure to discuss climate change as a moral issue is itself a form of implicatory climate silence. Dale Jamieson noted a decade ago that moral arguments rarely come up when climate change is discussed: “The language of morality is the language of care, empathy, responsibility, and duty. This language has largely been absent from discussions of climate change. Instead the language of science, economics, and technological development has been dominant.” This moral silence matches the recent finding that most Americans think of climate change as an environmental, scientific, and economic issue, but fail to see it as a moral, poverty, social justice, or religious issue (Heald 2017, 9).

As a step toward remedying such silence, philosopher John Nolt proposes that IPCC reports emphasize climate change in terms of human casualty numbers. (Nolt, 2014) This would be a step forward in beginning to understand the ethical injustice of climate change and a powerful counter to moral silence. Such numbers will necessarily be approximate estimates, but given the fact that climate related deaths and injuries are inevitable, estimates are sufficient to reflect this reality. And after all, weather forecasts and climate projections are themselves approximations, as are economic forecasts.

Framing the climate crisis in terms of morality and justice is critical precisely because thinking of things in terms of ethics, as previous examples illustrate, is a key to motivating actual support for social change and public policy (Van Zant & Moore, 2015). Climate science denialism undermines the social pressures and political actions needed to address climate change in large part because it interrupts the public’s ability to consider the ethical consequences of climate change. The political, and corporate architects of disinformation appear to have been aware of this from the start. Indeed, being aware of the realities of such “marketing,” those who wish to delay action on climate change will want keep the focus on science over justice. This insight is implied by the well-known “Luntz Memo” in which Republican pollster Frank Luntz advises GOP leaders as follows:

Voters believe that there is no consensus about global warming within the scientific community. Should the public come to believe that the scientific issues are settled, their views about global warming will change accordingly. Therefore, you need to continue to make the lack of scientific certainty a primary issue in the debate (Burkeman 2003).

As long as we focus on climate change primarily as a scientific or technical problem, we are diverting our focus from serious consideration of the social and political challenges that hamstringing the action on climate change we desperately need. As climate scientist Michael E. Mann explains: “There are no physical obstacles to 2C stabilization. Only political ones—at this point” (Mann, 2020). Yet if the obstacles to addressing climate change are largely social and political, then our ability to halt climate change depends upon bringing pressures to bear on global leaders. A sense of moral urgency is vital to informing the kind of social and political resolve necessary to see this movement through, as a social justice movement—and the fundamental social justice movement of our time, in that it links all true social justice

movements. Each of us, and our joint social and political movements, need to frame our public discussions of climate change, denialism, and disinformation as the discourse of a morally motivated social justice movement.

### **Disinformation, Democracy, and the Humanities**

Once more, I want to emphasize Pongiglione and Martini’s astute reminder that the ordinary, nonprofessional spreaders of misinformation are also the first victims of disinformation. To quote from the heart of their argument again:

Disinformation undoubtedly generates harm in the sense of an inadequate response to climate change, which, as shown, puts vulnerable communities at risk; we could call this a global, intertemporal harm. However, it is worth emphasising that climate change disinformation also causes significant harm to the very individuals it reaches—a local and immediate harm. This harm consists in a worsening of people’s doxastic conduct and their estrangement from the truth; in their developing distrust in institutions and becoming sceptical of authorities; and ultimately in the obstruction of their deliberative processes (43).

In a related vein, Pongiglione and Martini point out that those who are most resistant to climate change are those with higher levels of education:

The least vulnerable to programs of climate change disinformation are those who are familiar with climate science, biology, physics, and atmospheric chemistry, together with those who work on climate change and are familiar with its dynamics: economists, social scientists, and psychologists who study environmental issues. In general, individuals with a university-level scientific background are not particularly vulnerable to scientific misinformation about climate change. In fact, the same could be said for all who work in academia, even in completely different disciplinary fields. They may not know much about climate science, but they know how to recognise a scientific text and distinguish it from a pseudoscientific one. They know, that is, what details allow one to assess the quality of a text, from the publication venue to the authors’ credentials to the sources cited. Such an assessment is clearly beyond the reach of those without higher education (45).

I want to explore further the claim that educational resources beyond those directly linked with climate change science are important means of reducing vulnerability to disinformation. It shouldn’t be the case that professional scientists and academics are the only populations noticeably more immune to disinformation. It is not naively optimistic to think that in a modern society, the education of citizens entails an inoculation against disinformation, from miracle-cures and snake oils to treacherous political propaganda and climate disinformation. But we also want our scientists, environmentalists, and citizens more generally to be informed about the ethical implications of climate change. This necessity raises broader concerns about the purpose of education.

While it might seem obvious that scientific literacy is important in order to render citizens less vulnerable to misinformation on climate change, some studies suggest that even people with a high degree of scientific literacy are prone to believing disinformation. One reason this may be the case, as I have argued elsewhere, is that the tests for scientific literacy used in such studies tend to measure only for knowledge of various scientific facts (Torcello 2016; 2020). Reviewing these results, some researchers conclude that scientific literacy is less important than an overall sense of cultural identity in relation to certain cognitive interpretations (Kahan 2012) of the world (as for example, the belief structure entailed in the claim often seen on lawn placards in the US, “we believe science is real” or the recent, pithier and cheekier standalone, “because science”).

Elsewhere, I have described the philosophical context necessary for understanding why the process of modern science holds a place of epistemic privilege, and why any individual’s scientific literacy is best measured not by knowledge of any particular scientific finding, but as an integrated form of epistemic and related philosophical literacy.

The finding that some science deniers score well on tests meant to measure scientific literacy might be mistaken as evidence that information deficits are less relevant than cultural cognition. Yet, just as reading ability is measured by one’s facility in deciphering new words rather than memorization, scientific literacy ought to be measured by one’s ability to think critically about scientifically relevant claims in order to decipher those with scientific merit from those veering toward pseudoscience—including the purposefully disorienting products of the “denial industry.” Such critical judgments are only possible with sufficient epistemic resources. The ability to understand scientific uncertainty and consensus is itself a product of epistemic- and authentic scientific literacy. More broadly, the ability to think critically involves a range of epistemic resources which underwrite the effectiveness of the scientific process in studying the natural world [...] So why are so many in the Anglosphere prone to manipulation at the hands of corporate and political peddlers of disinformation? One common assumption is a failure in STEM education. However, the rules of inference and principles of argumentation are instilled foremost through philosophy, not STEM. Becoming adept at applying them is the specialty of the humanities (Torcello 2020).

To the extent that cultural identity influences our interpretation of science, the humanities are crucial in exposing students to a plurality of views and literatures that work against culturally rigid mindsets. Indeed, this is a primary reason the humanities are under attack in some political sectors (Altschuler and Wippman 2023). I don’t minimize the importance of significant and sustained educational exposure to the sciences. Still and all, in recent decades the importance and centrality of the humanities has been downplayed in the United States, while STEM (Science, Technology, Engineering, and Math) has become an educational slogan meant to conjure the promise of economic and career success. Sometimes, almost as an afterthought, the slogan now incorporates a nod to “art,” in the guise of STEAM.

Yet just as our humanities-integrated educational models have been destabilized, so too have our democracies. A well-educated citizenry is the bedrock of any healthy democratic society, but to be clear: it isn’t just any education that is crucial to a flourishing liberal democracy. Grounding in the humanities is vital for sustained democracy. It is humanities education that provides informed historical perspectives and sharpens the ability to assess competing viewpoints. It is the humanities that promotes toleration of differences and nurtures the

ability to reflect upon and, when warranted, to change one’s own views. It is the humanities that teaches the social, philosophical, and political justifications of democracy itself.

For these and related reasons, the United States traditionally embraced the liberal arts as a core component of education (Nussbaum 2016). Unfortunately educational trends over the last several decades, as documented by Martha Nussbaum in her book *Not for Profit* (2016), have brought an erosion to this commitment. As Nussbaum shows, the model of education as a public good is gradually being replaced by a model of education for economic growth. Under the latter model, the humanities hold little to no value independently of the written and verbal communication skills said to distinguish potential employees on the job market. As a corollary, the role of education as preparation for responsible democratic citizenship has diminished, as against the model of education primarily for career preparation.

Meanwhile, ironically if not also tragically, the “grand challenges” of the 21<sup>st</sup> century—the ones universities market themselves as training students to meet—are only surmountable for citizens who understand the historical, social, and political-economic dimensions of the challenges they should meet, or in other words, for people educationally grounded in the liberal arts. This is true regarding the challenges posed by the rise of political authoritarianism in ostensibly democratic nations, by human caused climate change, or by the spread of disinformation more generally.

Not surprisingly, recent findings in social science have confirmed that one of the most useful ways of inoculating students against disinformation is preparing them to identify it in fallacious arguments and in assertions devoid of evidence. Teaching students how to think critically in this manner is sometimes labeled *prebunking* (Cook et al. 2017; 2018). In addition to analyzing ethical and social issues, this is something philosophy has been teaching since its founding moments in the works of Plato and Aristotle. *Philosophy* traditionally teaches students how to weigh evidential claims and arguments and to identify logical fallacies and inconsistencies in reasoning. Philosophy teaches students how to evaluate and identify the merits of various ethical and political claims. In sum, the most basic element of coursework in philosophy is the practice of critical assessment and thought. Whether this is taught in a dedicated logic class or a course in the history of ideas or a particular past or present philosopher, critical thinking remains the key feature of philosophical pedagogy.

As for other core humanities disciplines, *history* offers a context and timeline for one’s relationship to world events. Studying history prepares students to recognize social patterns and to identify how problems have been approached, solved, or made worse, by various human actions in other times and places. History helps to inoculate students against the kind of narrowness of judgment that works in favor of disinformation’s spread. Likewise, *literature* provides the practice of imagining ourselves beyond our own experiences and biases in a way that can develop an increased capacity for empathy. Literature also offers us the concepts, images, and frameworks for reconsidering our own experiences. Without delving into other fields and interdisciplinary approaches in the humanities, let this suffice for now to remind us of how the liberal arts help neutralize the most harmful effects of rigid cultural cognition when it comes to assessing information. In short, the humanities support the human



development goals of education embraced in Article 26:2 of the United Nation's Universal Declaration of Human Rights following World War II:

Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace (United Nations 1948).

Taken together, these core humanistic components of education nurture critical thought, historical perspective, ethical and political insight, and the increased capacity for social care and respect. Once again, it should not surprise us to find that disinformation is on the rise at a time when humanities education is on the decline in the United States and elsewhere. It should not surprise us to find liberal democracies degenerating from within as the concept of education as a broad public good is replaced with the promise of education as merely an engine for economic growth.

Pongiglione's and Martini's work is so very important because it shows us how many spreaders of climate science misinformation were first victims of educational systems that serve the needs of industry rather than the public good. The most appropriate response to Pongiglione's and Martini's findings is to conclude that a return to the value of equal education, and education grounded in the humanities, is a right, and right that we ought now to renew and fight to achieve in practice. An educated populace—that is, a people able to think critically, historically, and imaginatively—is a people best protected from becoming the victims of disinformation that Pongiglione and Martini identify. These too are the people who can help diminish the harms of both misinformation and climate change on the environment and on society as a whole.

As we struggle to find ways of coping with disinformation made more widespread by the industries that pay for it and the technologies that spread and can appear to confirm it, it is time for us to make a deep commitment to education for the public's good—realizing there will be little economic growth on a depleted and overheated planet. As I have argued, a vital step in this process is the framing of our current climate crisis in terms of morality, and as a matter of social justice. Evaluating the ethical consequences of climate change, as well as the moral culpability of the architects of climate disinformation, requires not only scientific literacy, but the critical facility learned in the study of the liberal arts.

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