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Citation

LUCZAK, Joshua. Climate denialism bullshit is harmful. (2023). *Asian Journal of Philosophy*. 2, 1-20.
Available at: https://ink.library.smu.edu.sg/cis_research/125

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Climate denialism bullshit is harmful

Joshua Luczak¹

Received: 24 October 2022 / Accepted: 23 February 2023 / Published online: 11 March 2023
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Abstract

This paper suggests that some climate denialism is bullshit. Those who spread it do not display a proper concern for the truth. This paper also shows that this bullshit is harmful in some significant ways. It undermines the epistemic demands imposed on us by what we care about, by the social roles we occupy, and by morality. It is also harmful because it corrodes epistemic trust.

Keywords Bullshit · Climate denialism · Epistemic harm · Epistemic trust · Anthropogenic climate change

1 Introduction

The harms of anthropogenic climate change are many and great. The harms resulting from climate denialism, however, are greater in number and significance than are realized by members of the general public. They are also deeply personal and insidious. Climate deniers are groups or individuals that directly or indirectly attack key conclusions of “mainstream” climate science, such as those of the Intergovernmental Panel on Climate Change (IPCC).^{1,2} Climate deniers are presently crowding out climate scientists in public discourse about anthropogenic climate change. As Petersen et al. (2019) explain, much of this is due to the proliferation of new media sources. These sources contribute to the production and consumption of

¹ The expressions “climate contrarian” and “climate skeptic” are also sometimes used to refer to those individuals and groups I, and others, call “climate deniers”. See, for example, Parker (2018: Sec. 5.3) and Coady and Corry (2013: p.3).

² It is worth noting that no claim is being made about what a climate denier believes. Climate deniers, as I am using the expression, may or may not believe the key conclusions (or their negations) of “mainstream” climate science. Rather, what is most important about them for the purposes of this paper is that they are outwardly seen to attack key conclusions of “mainstream” climate science.

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climate change disinformation at scale, and they have led to significant declines in public belief about anthropogenic climate change.³ These harms urgently need to be addressed.

Standardly, climate denialism is taken to be harmful because it has repeatedly hindered governments of the world from taking meaningful action on mitigating the harmful effects of anthropogenic climate change.⁴ While this is undeniably a horrible and very great harm, it is not the only harm of climate denialism. Some other important harms of climate denialism are a consequence of it being bullshit. These harms are being inflicted on members of the general public. This paper is about these harms.

This paper intends to show, first, that a number of claims made by climate deniers appear to be bullshit. Climate deniers seem to infect discussions of anthropogenic climate change with bullshit at every level of the debate. Bullshit seems to undermines the claim that (1) our climate is changing. In particular, that the global climate is warming. It seems to undermines the claim that (2) significant changes to the climate are primarily the result of human activities. In particular, that humans are responsible for increased concentrations of atmospheric greenhouse gases. Most notably, carbon dioxide. Bullshit seems to undermines the claim that (3) these increased atmospheric concentrations are, on the whole, bad. It seems to undermines the claim that (4) the effects of anthropogenic climate change *can* be mitigated, and it seems to undermines the claim that (5) it *should* be mitigated. Climate denialism bullshit seems to be spread far and wide. It looks like it is everywhere.

Building on this claim, this paper intends to show, second, that climate denialism bullshit is *harmful*. While not all bullshit is harmful, climate denialism bullshit is not innocuous. In fact, climate denialism bullshit is harmful in at least several ways. It is harmful because it undermines the epistemic demands that are imposed on us by what we care about. This makes the harm personal. It is harmful because it undermines the epistemic demands that are imposed on us by the social roles we occupy. For example, it undermines some of the epistemic demands that apply to citizens of democratic societies. In particular, those tied to their responsibility to vote, and to their responsibility to hold their respective governments and institutions to account. Third, this bullshit is harmful because it undermines epistemic demands that are imposed on us by morality. While the first two of these harms may not be felt by all members of the general public—given the particular things they care about, and the social roles they happen to occupy—this third form of harm is more pervasive. This form of harm concerns almost everyone. The fourth and final form of harm that will be noted concerns the general corrosion of epistemic trust. In a nutshell, the existence of this bullshit makes it, at the very least, more difficult for us to conscientiously acquire many beliefs about the world since our trust in others to speak with a

³ See Petersen et al. (2019) for more on the extent climate deniers are dominating public conversations about anthropogenic climate change using new media sources. For more on the effects their claims have had on public belief see, Leiserowitz et al. (2012), van der Linden, Leiserowitz, Feinberg, and Maibach (2015), Shi, Visschers, and Siegrist (2015), Aklin and Urpelainen (2014), and Leiserowitz, Maibach, Roser-Renouf, Smith, and Dawson (2013), for example.

⁴ Catriona McKinnon (2016) argues that, for this reason, it should not be tolerated.

proper concern for the truth is undermined. At worst, this bullshit restricts our ability to conscientiously acquire beliefs about the world to only those domains in which we can go about forming them on our own. This makes this bullshit potentially very dangerous. It may have consequences for domains of knowledge that are independent of facts about the climate. That is, for any domain that requires us to trust others to speak the truth about their conscientiously held beliefs so that we may conscientiously acquire and hold beliefs about the world.

This paper will proceed in two parts. In the proceeding section, this paper will discuss some claims made by influential climate deniers and offer good reason to think that they are bullshit. In the third section, this paper will motivate why, and explain the sense in which, climate denialism bullshit is harmful. But first, some scope restriction and a few more remarks about the aims of this paper.

This paper focuses on the harms of climate denialism bullshit that effect members of the general public who lack the time, resources, ability, or scientific expertise to engage directly with climate science or the reputable, public works it produces. It focuses on the harms done to those members of the public who, because of these constraints, form their beliefs about anthropogenic climate change on the basis of that which is published and produced by mainstream media outlets. While it is true, significant, and truly horrible, that there are harms being done to *science* and *scientists* by climate deniers, these harms will not be discussed in this paper.⁵ This paper focuses on the harms done by bullshitting members of the general public to highlight that climate denialism is more troubling than is standardly thought by them: that it is not simply a problem for science and implementing appropriate policy.

This paper is also focusing on the harms that result from claims made by climate deniers that are *bullshit*. It will perhaps come as no surprise, especially once the concept and relevant examples are offered, that bullshitting members of the public is but one tool in the climate denier's toolbox. Climate deniers often use lies and threats—among other things—to undermine beliefs and action on anthropogenic climate change.⁶ While these tactics are also harmful, and should certainly be addressed, they, for lack of space, will not properly be discussed in this paper. One of the reasons why this paper is devoted to talking about the harms that result from climate denialism bullshit is that unlike lies and threats, members of the general public do not seem to realize that bullshit is often harmful. This paper intends to argue that, contrary to unreflective public belief, climate denialism bullshit is very bad. Everyone is being harmed by this bullshit. Even those who are apathetic to climate denialism or who think that the harms of anthropogenic climate change are merely a problem for others distant from them in space or time or means are affected by it. No one is immune. It is a problem that is facing all of us, here and now.

⁵ Biddle and Leuschner (2015: p. 269) note, for example, that climate deniers impeded scientific progress “by forcing scientists to respond to a seemingly endless wave of unnecessary and unhelpful objections and demands, and that they create an environment in which scientists fear to address certain topics and to defend hypotheses as forcefully as they believe is appropriate.”

⁶ For a detailed and interesting discussion of some of many tactics used by influential climate deniers see Oreskes and Conway (2011).

2 Some climate denialism is bullshit

According to a common and widely endorsed view, bullshit is communication that does not show a proper concern for the truth.⁷ Naturally then, according to this account, bullshitters are individuals and organizations that spread bullshit. That is, they are individuals and organizations who communicate in ways that do not show a proper concern for the truth.⁸

Bullshitters do not properly care about the truth. They typically care more about other things, and they speak from a place that is motivated by that. If saying true things just so happens to coincide with what they believe to be true or with what they want to communicate, then they will speak the truth—but not because they are genuinely aiming or care to speak the truth. Similarly, they may, like the liar, say false things, but, unlike the liar, not because they are genuinely aiming or care to speak falsely. Speaking falsely just so happens to coincide with what the bullshitter wants to communicate. Unscrupulous used car salespeople are often thought to be good examples of bullshitters. They typically do not care about saying true or false things, they just care about saying whatever they need to say to make a sale.

Ok then, but what does it mean to not properly care about the truth? Well, it seems to amount to this: if caring about things other than the truth is leading someone to knowingly compromise or disregard something they conscientiously believe to be true (or what they should believe to be true, given the evidence they possess), when they communicate relevant ideas, then such a person is bullshitting. So then, if they knowingly disregard their relevant conscientiously held beliefs when they speak because of the other things they care about, they are bullshitting. If they do not hold conscientiously held beliefs about something and speak about it anyway, with a confidence that suggests otherwise, because doing so is simply in line and favorable to what they care about, then they are bullshitting. But if they are primarily motivated to communicate what they do out of care for something other than the truth, but no disregard or compromise has been made against their relevant conscientiously held beliefs in what they communicate, then they have not bullshitted. Such a person displays respect for the truth, and so properly cares about it, even if it is the case that they care more about other things, and those other carings are motivating what they communicate. And, obviously, if someone cares most about the truth when they communicate ideas to others, and it is this care for the truth that is motivating what they say, then such a person is not bullshitting.

Now while I think all of this is true as far as it goes, it fails to note an important way in which lying is distinguished from bullshit. Liars make statements they

⁷ This view is often attributed to Harry Frankfurt (2009). See, for example, his popular book *On Bullshit*.

⁸ While this is not the only analysis of bullshit on the market (see, for example, Cohen (2012) and Ludlow (2022)), it is, probably, the simplest and most straightforward one to apply. Since other accounts roughly amount to the same thing, and because none of the differences between them matter for the purposes of motivating the idea that some climate denialism is bullshit, or, as we will see in the next section, that this bullshit is harmful, we will make use of this account.

believe to be false with the intention that others believe them to be true.⁹ Bullshit-ers, in contrast, do not always make statements they believe to be false with the intention that others believe them to be true. Rather, since they are primarily motivated to communicate what they do because they care more about something else, they need not, if it does not serve their ends, make statements they believe to be false. It is also the case that bullshitters do not always make statements they believe to be false (or true) *with the intention that others believe them to be true (false)*. Rather, what they often want is for their audience to believe something that is in line with what is favorable to, or that promotes, what they care about. What the bullshitter and their audience believe about what they *actually say*, and what the bullshitter *intends* their audience to believe about what they *actually say* is sometimes less relevant than what they want their audience to do or believe about something else.¹⁰

Climate deniers undermine claims about anthropogenic climate change and its mitigation at five levels that span the entire climate debate. They undermine (1) that our climate is changing, (2) that significant changes to the global climate are primarily the result of human activities, (3) that increased concentrations of atmospheric greenhouse gases are, on the whole, bad, (4) that the effects of anthropogenic climate change can be mitigated, and (5) that the effects should be mitigated. Climate deniers use a variety of tactics to achieve these ends. One of them is to sling bullshit. In this section, I will highlight some claims made by climate deniers that undermine points (1)–(5), and I will offer reason to think of them as instances of bullshit. It will be shown that while none of their claims are false, or likely believed by them to be false, there is good reason to believe that they are not displaying a proper concern for the truth. As we will see, their claims are deeply misleading, and there is good reason to believe that the deniers that made them had a financial or political interest in communicating what they did. These facts, and these interests, strongly suggest that they care more about communicating in ways that motivate audiences into forming or maintaining beliefs that are favorable to the industry and political groups they are associated with than in ways that completely and accurately represent the truth or their conscientiously held beliefs about the climate.

⁹ This is a version of what James Edwin Mahon (2016) calls the traditional definition of lying and is the most widely accepted definition of it.

¹⁰ Bullshit also seems to be closely related to another concept that is common to talk about in discussions of climate denialism: manufactured doubt. This concept originates from, and is usually associated with, the work of Oreskes and Conway (2011). Bullshitting is one way to manufacture doubt about anthropogenic climate change. It is not the only way to achieve it though. As Oreskes and Conway (2011) document, climate deniers use a range of different tactics (such as lies and threats) to raise doubts for both policy makers and the general public about issues unfavorable to certain business and political interests. While Oreskes and Conway (2011) do not discuss bullshit, I think they would be happy to say that slinging bullshit is one tactic that can and that has been used to manufacture doubt. Something else to note about the relationship between bullshit and manufactured doubt is that bullshit is not always aimed at manufacturing doubt. Rather, sometimes it is used to induce particular actions, e.g. purchasing a used car. Other times it is used to produce confident beliefs about something, e.g. confident beliefs that our global climate is not changing in any significant way. So, in a nutshell, bullshitting is one way to manufacture doubt, and sometimes bullshitting is done for reasons other than to manufacture doubt. The two, however, sometimes coincide.

2.1 Our climate is changing

A number of climate deniers seem to undermine the idea that the global climate is changing, or that it is changing in some significant way, or that it is changing in some way that lies outside of the bounds of natural variability, using bullshit.

Robert (Bob) Carter (now deceased) was a former Research Professor at James Cook University, Queensland, Australia, and was head of the university's School of Earth Sciences between 1981 and 1999. Carter received a Ph.D. in Paleontology from the University of Cambridge, and was a marine geologist and environmental scientist. He also held a variety of other positions, including ones as a Science Policy Advisor to The Institute for Public Affairs (IPA) and as an advisor to the Heartland Institute. Carter wrote frequently about climate issues in the mainstream press. His articles have appeared, for example, in *The Telegraph*, *The Washington Times*, the *New York Post*, *The Australian*, and *The Courier-Mail*. He has also discussed these issues on television (e.g., *ABC's Meet the Panel*) and radio (e.g., *ABC Radio National's Perspective*). Over the years, and through a variety of mass media outlets, Carter has made claims that undermine the idea that the global climate is changing. For example, in 2006, Carter wrote this in *The Telegraph*:

Consider the simple fact, drawn from the official temperature records of the Climate Research Unit at the University of East Anglia, that for the years 1998–2005 global average temperature did not increase (there was actually a slight decrease, though not at a rate that differs significantly from zero).

The claims Carter makes in this passage about the temperature record are true and, given his expertise, it is very likely that he believed them to be true. It is true that in 2006, when Carter made these claims, *satellite record estimates of the temperature of the atmosphere* did not indicate a global average temperature increase during that period. What was conveniently left out of Carter's claims here, however, is that this result was in conflict with other, more useful, more trusted, and more reliable temperature measures (such as the ocean and land-surface temperature record) that gave scientists a better idea of how rapidly the world was warming during that period. These, more reliable records, showed that the Earth had been warming at a steady rate since 1998. What's more, at the time, scientists were somewhat skeptical of the accuracy of these satellite results given the challenges that come with taking and processing atmospheric satellite temperature measurements. In fact, this skepticism prompted, among other things, subsequent improvements to atmospheric temperature measurements and modeling, and these improvements led to findings that, in 2016, overturned the earlier result.¹¹ Satellite data also showed warming since 1998 that was consistent with other findings. Since many of these ideas were left out of what Carter wrote, and because it is easy to falsely think in their absence (in 2006) that the global mean temperatures are not increasing, it seems reasonable to think that his remarks undermine the idea that the global climate is changing. What is more, it seems odd to think that Carter genuinely believes the false implication

¹¹ See, for example, Borenstein (2016).

of his remarks, for if he did, he would have come out and stated it explicitly. Since all of this is not compatible with showing a proper concern for the truth, it seems reasonable to think that what Carter says about changes to the global climate in this passage is bullshit.

Further evidence for thinking that what Carter wrote does not display a proper concern for the truth comes from investigative journalists who have documented the financial interests Carter has in making these claims, and others like them. For example, as Brendan DeMelle (2012) has reported, leaked documents show that Carter was receiving \$1,667 a month from the Heartland Institute, an organization with an intense focus on climate change skepticism.¹² And as reporters from *DeSmog.com*, *The Sydney Morning Herald*, and *The Age*, have documented, the IPA has received millions of dollars of annual funding from individuals and corporations that have a direct stake in climate change. These include, among others, mining magnate Gina Rinehart, Western Mining, BHP Billiton, Caltex, Esso Australia (a subsidiary of Exxon), Shell, and Woodside Petroleum.¹³

2.2 Significant changes to the global climate are primarily the result of human activities

Another idea a number of climate deniers seem to often undermine using bullshit is the idea that significant changes to the global climate are the result of human activities. A variation on this idea is the idea that significant changes to the global climate are *primarily* the result of human activities.

Fred Singer was a physicist and Emeritus Professor of Environmental Science at the University of Virginia. He was previously Deputy Assistant Administrator for the U.S. Environmental Protection Agency, and Chief Scientist for the Department of Transportation. In 1990 Singer founded the Science and Environmental Policy Project. He is credited for having established the Nongovernmental International Panel on Climate Change in 2003, and for developing it in subsequent years with the Heartland Institute. Singer wrote frequently about climate issues in the mainstream press. His articles have appeared, for example, in *The New York Times*, *The Washington Post*, and the *Wall Street Journal*, and he has appeared on numerous occasions on *Fox News* and *ABC's Nightline*. Singer died in 2020. Throughout his life, Singer made a number of claims in public spaces that undermined the idea that significant changes to the global climate are primarily the result of human activities. For example, in 2016, Singer wrote in *American Thinker* that:

Climate change has been going on for millions of years—long before humans existed on this planet. Obviously, the causes were all of natural origin and not

¹² It is worth noting that the Heartland Institute is a conservative and libertarian public policy think tank known to have received large amounts of funding from organizations that include ExxonMobil, an oil and gas organization, Koch Industries, a petro-chemical company, and Murray Energy, a coal mining company. For more on the funding sources of the Heartland Institute see Shulman et al. (2007), Fang (2019), Friedman (2019), and Goldenberg (2012).

¹³ See, for example, Cubby and Lawes (2010), Hannan and Carney (2005), and Readfearn (2018).

anthropogenic. There is no reason to think that these natural causes have suddenly stopped.

All of the claims Singer makes in this passage are true, and, given his expertise, it is very likely that he believes them to be true. It is true that changes to the global climate have been going on for millions of years. This can clearly be seen in the graphs representing the geologic temperature record.¹⁴ And, as Singer rightly notes, the cause of these past changes must have been natural and not the result of human activities. It is also true that natural forcings still play a role in shaping the current global climate.¹⁵ What is deeply misleading, however, about what Singer wrote is that even though natural forcings have always played a role in shaping the global climate, they are no longer the primary driver of change. Human activities are primarily responsible for the changes we have witnessed to the global climate over roughly the last century.¹⁶ Since changes in the global climate occurred prior to the existence of humans, and, since natural forcings still play a role in shaping the global climate, one might easily and falsely think that current changes are the result of natural causes—or, at least, that they are primarily the result of natural causes. Now, of course, while this further claim is not explicitly made by Singer, it is reasonable to think, especially within a discussion about anthropogenic climate change, that his remarks undermine the idea that significant changes to the current global climate are primarily the result of human activities. What is more, it seems odd to think that Singer genuinely believes the false implication of his remarks, for if he did, he would have come out and stated it explicitly. Since all of this is not compatible with showing a proper concern for the truth, it seems reasonable to think that what Singer wrote in this passage is bullshit.

Further evidence for thinking that what Singer wrote does not show a proper concern for the truth comes from investigative journalists, such as Tim Dickinson (2010), science advocacy organizations, such as The Union of Concerned Scientists (UCS), and academics, such as Naomi Oreskes and Eric Conway (2011), who have documented the strong political and financial interests Singer has in making these claims, and ones like them. For example, in 2007, Seth Shulman, Kate Abend, and Alden Meyer published a report, on behalf of UCS, revealing that Singer received funding for many years from ExxonMobil, through a collection of front organizations, to manufacture doubt about the existence and cause of anthropogenic climate change.

2.3 Increased concentrations of atmospheric greenhouse gases are bad

Perhaps the most common idea seemingly undermined using bullshit by climate deniers in recent times is that increased concentrations of atmospheric carbon dioxide are, on the whole, bad. Many deniers point to the benefits increased

¹⁴ See, for example, the collection of reconstructed temperature records in Dessler (2015: Ch.2).

¹⁵ See, for example, Solomon et al. (2007) for details about the role and extent natural forcings play in shaping the global climate.

¹⁶ Evidence supporting this claim can be found, for example, in Myhre et al., (2013).

concentrations of carbon dioxide have for plant growth. Sometimes, though seemingly less often, they point to favorable shifts in some regional climates. Other times, though, again, seemingly less often, they point to economic benefits that coincide with increased human, carbon emitting, activities. All of these supposed benefits, either individually or collectively, are meant to motivate, or so it seems, the idea that, ultimately, increased concentrations of atmospheric greenhouse gases—but, especially carbon dioxide—are good.

Craig Idso is the founder, former president, and current chairman of the board of the Center for the Study of Carbon Dioxide and Global Change. He is a science adviser to The Science and Public Policy Institute, a lead author of the Heartland Institute sponsored Nongovernmental International Panel on Climate Change reports, and a member of the board of directors at the CO₂ Coalition—an advocacy group formed from the remains of the now-defunct George C. Marshall Institute whose tag line is “Carbon dioxide, a nutrient vital for life”. He holds a Ph.D. in Geography from Arizona State University, and his dissertation was titled: *Amplitude and phase changes in the seasonal atmospheric CO₂ cycle in the Northern Hemisphere*. Idso and his ideas have, over the years, featured in a number of popular news outlets. For example, he has written articles that have appeared in *American Thinker*, *The Federalist*, and the *Washington Examiner*.¹⁷ He has also co-authored several popular books, produced three feature-length documentaries, and has discussed climate issues on digital radio.¹⁸

In each of his roles, Idso has made a number of claims that promote the virtues of increased concentrations of atmospheric carbon dioxide, and undermine the idea that such increases are, ultimately, bad. For example, in a 2014 article published in *The Federalist*, Idso wrote that:

[I]t is a well-established fact that atmospheric CO₂ is the major building block of nearly all life, as it is used by plants in the process of photosynthesis to construct their tissues and grow. As numerous scientific studies have conclusively demonstrated, the more CO₂ there is in the air, the better plants grow.

While Idso’s claims here are true on at least one interpretation, and, given his expertise, very likely believed by him to be true given that interpretation, they are deeply misleading. As many learn in school science classes, plants use carbon dioxide in the process of photosynthesis. What is more, it is true that many studies have, indeed, shown that pumping extra carbon dioxide into *greenhouses* leads to faster plant growth.¹⁹ But what is typically true of the studies that show this, and, importantly, what is left out of what Idso wrote, is that the plants in these studies live in luxurious environments where they receive all the water, nutrients, and protection they need to sustain faster growth. Outside the protective walls of a greenhouse,

¹⁷ For the details of these pieces, see the “Craig Idso” entry at *DeSmog.com*.

¹⁸ For the details of his co-authored books and documentaries see Idso’s staff page on the Center for the Study of Carbon Dioxide and Global Change’s website. A link to his radio appearance on the *The Richie Allen Show* can be found on “Craig Idso” entry at *DeSmog.com*.

¹⁹ See, for example, Darling and Sisterson (2014: p.73).

plants do not necessarily have access to these resources, which means that they may not, and often do not, benefit from increased levels of carbon dioxide. Water, in particular, is an issue. As global temperatures increase, so too does the rate in which water is evaporated. This pushes the water needs of plants up even higher. Many agricultural regions are already under water stress, and climate change will both greatly increase the demand for water and hinder its ability to be supplied.²⁰ So even though there is a sense in which higher concentrations of carbon dioxide lead to better plant growth, it is not really a sense that matters, practically speaking. Though, even more important than all of this is the fact that the effects of increased levels of atmospheric carbon dioxide are not merely limited to plants. So even without these facts about plants and carbon dioxide, it is simply not the case that increased levels of atmospheric carbon dioxide, and so greenhouse gases, are, on the whole, good. As many scientists note, increased greenhouse gas emissions are raising global temperatures and significantly contributing to our oceans becoming more acidic. They are also significantly contributing to rising sea levels, and to the loss of biodiversity. They are causing extreme weather events to become more frequent and they are contributing to the spread of insect borne diseases across larger portions of the globe. All of these effects are ultimately bad for humans and other animals, as well as for other aspects of the environment.²¹

Since all of these ideas are left out of Idso's remarks, and because it is easy to falsely think in their absence that increased concentrations of atmospheric carbon dioxide are good, it is reasonable to think that his claims undermine the idea that increased levels of atmospheric greenhouse gases are, ultimately, bad. Now, of course, while the latter claim is not explicitly made by Idso, it is reasonable to think, especially within a discussion about anthropogenic climate change, that his remarks undermine it. What's more, it seems odd to think that Idso genuinely believes the false implication of his remarks, for if he did, he would have come out and stated it explicitly. Since all of this is not compatible with showing a proper concern for the truth, it seems reasonable to think that what Idso wrote is bullshit.

Further evidence for thinking that Craig Idso's claims are bullshit comes from a collection of investigative journalists who have uncovered evidence of financial ties between him, the coal industry, and conservative and libertarian think tanks. For example, as John Mashey (2012) and Brendan DeMelle (2012) have reported, leaked documents show that Idso has received \$11,600 a month from the Heartland Institute, through his Center for the Study of Carbon Dioxide and Global Change. Others have reported that Idso was paid this sum to help them advance their "climate strategy"—which, in essence, were a collection of climate denial campaigns.²² It is also worth noting that between 2001–2002 Idso served as Director of Environmental

²⁰ This issue, along with several others, is noted by Darling and Sisterson (2014: p.73).

²¹ For more on the harms that result from increased concentrations of atmospheric greenhouse gases, see, for example, Darling and Sisterson (2014: Ch.3) and Dessler (2015: Ch.9).

²² For more on the climate strategy adopted by the Heartland Institute, see Shulman et al. (2007), Gillis and Kaufman (2012), and Littlemore (2012a). Other reports also reveal Craig Idso's financial ties to the oil industry and conservative think tanks. These include those produced by Goldenberg (2012) and Harkinson (2009).

Science at Peabody Energy—the largest private-sector coal company in the world—and that bankruptcy filings from 2016 show that Idso's Center for the Study of Carbon Dioxide and Global Change was listed as a creditor.²³

2.4 Anthropogenic climate change can be mitigated

It appears that the idea undermined least often by climate deniers, using bullshit or some other tactic, is that there are things we can do to mitigate the effects of anthropogenic climate change. Perhaps this is because many people recognize the obvious fact that if you eliminate an effect's cause, you eliminate the effect. Nonetheless, there are still individuals and organizations that exist who make claims in public spaces and through mass media outlets that seem to undermine belief in this idea by communicating bullshit.

William O'Keefe is the former CEO of the George C. Marshall Institute, before it became the CO₂ Coalition in 2015. O'Keefe served as the Executive Vice President and Chief Operating Officer of the American Petroleum Institute (API) from 1974 to 1999, and has worked as a registered lobbyist for industry groups on climate change and energy issues including Exxon- Mobil and API. He has published articles about climate issues in places such as *The Hill* and *The Washington Post*. In his various roles, O'Keefe has made claims that undermine the idea that anthropogenic climate change can be mitigated. For example, at the U.S. Environmental Protection Agency Science Forum in 2004 O'Keefe said that²⁴:

Nothing we do in the short run is going to change the atmospheric concentration profile over the next few decades.

This claim is true but misleading. It also seems very likely, given O'Keefe's many years of industry and professional experience, that he believes this claim to be true. The reason nothing significant can immediately be done to quickly lower atmospheric greenhouse concentrations is that once carbon dioxide forms in the atmosphere it takes centuries for it to be naturally removed.²⁵ Since carbon dioxide is by far the most abundant greenhouse gas, we cannot expect to see significant changes in concentrations of it over the next few decades, or in the atmospheric concentration profile more generally, even if we immediately stopped all of our carbon emitting activities today.²⁶ While this much is true, it is not true that nothing can be

²³ See Surgey (2016) for more on this filing and on Idso's relationship with Peabody Energy.

²⁴ These remarks can be found in O'Keefe (2004).

²⁵ This fact about the carbon cycle can be found in many climate science textbooks. See, for example, Dessler (2015: Ch.5).

²⁶ While carbon dioxide is the most abundant greenhouse gas, it is not the most powerful. Methane, for example, another greenhouse gas, is about twenty times more powerful than carbon dioxide. Interestingly, methane is much more quickly naturally removed from the atmosphere. On average, it takes about ten years for a methane molecule to be removed from the atmosphere. Since a number of human (agricultural, petrochemical, and waste) activities produce methane that ends up in the atmosphere, most mitigation strategies include policies to reduce methane emissions. One might think then that one could, contra O'Keefe, make changes to our practices through immediate and drastic reductions in methane emissions that would result in changes to the atmospheric concentration profile over the next few decades. Whether

done presently, or in the near future, to mitigate the effects of anthropogenic climate change. Reductions in greenhouse gas emissions now will have beneficial consequences later. The IPCC's various Representative Concentration Pathways offer good reason to think this is true. These pathways represent various futures under particular emissions scenarios.²⁷ So while the effects of immediate reductions will not be felt in the short term, they will be felt on longer time scales, and, importantly, these effects matter. Also, aside from reductions in emissions, there is much that can be done at present, politically, for example, that will help to mitigate the effects of anthropogenic climate change. For example, more, stronger, binding, and punishable international agreements could be made that limit future global emissions. Also, more investments in alternate energy generating technologies could be made. So, for these reasons, it is misleading of O'Keefe to merely say that nothing can be done immediately to lower atmospheric greenhouse gas concentrations over the next few decades.

Since the longer-term effects of present actions are left out of what O'Keefe wrote, and because it is easy to falsely think in their absence that nothing can be done to mitigate the effects of anthropogenic climate change, if nothing can be done to mitigate short term effects, it seems reasonable to think that his claim undermines the idea that there is something we can presently do to mitigate the effects of anthropogenic climate change. What's more, it seems odd to think that O'Keefe genuinely believes the false implication of his remarks, for if he did, he would have come out and stated it explicitly. Since all of this is not compatible with showing a proper concern for the truth, it seems reasonable to think that O'Keefe's claim is bullshit.

Also, one need look no further than the positions O'Keefe has occupied to appreciate that what he said is bullshit. Having first worked directly for API, and then later as a lobbyist for them and ExxonMobil, it seems clear that their interests, and not a proper concern for the truth, are influencing what he said. Moreover as Shulman et al. (2007) and Oreskes and Conway (2011) have uncovered and explained, the George C. Marshall Institute has a long history of manufacturing doubt in exchange for money about issues unfavorable to certain industries and political groups. They, for example, have spread bullshit about matters ranging from acid rain and the ozone layer to the effects of second hand smoke. Their more recent focus on anthropogenic climate change is just the latest stage in a long history of trading money for bullshit. While the George C. Marshall Institute is no longer, properly speaking, in operation, it is worth noting that the branch of it dedicated to manufacturing doubt about anthropogenic climate change became the CO₂ Coalition in 2015. As a number of outlets have reported, the CO₂ Coalition and its members have, since its inception, received large sums of money from a variety of sources that have an interest in

Footnote 26 (continued)

or not we think such changes count as significant depends on what we mean by a significant change. Charitably, given the dominance of carbon dioxide over methane, we might think, in line with O'Keefe's remark, that immediate and drastic reductions in methane emissions would not change the atmospheric concentration profile over the next few decades in a meaningful way.

²⁷ See the most recent IPCC (2019) report for the details and graphics of various Representative Concentration Pathways.

frustrating environmental policy—especially those aimed at mitigating the effects of anthropogenic climate change.²⁸

2.5 Anthropogenic climate change should be mitigated

Many climate deniers undermine the idea that we should mitigate the effects of anthropogenic climate change.

Robert Balling is a Professor at the School of Geographical Sciences and Urban Planning at Arizona State University. He has written several popular books rejecting key climate claims, and he has written a number of articles on climate issues for the *Wall Street Journal*, *Nature*, and *TCS Daily*. Balling has also provided U.S. congressional testimony on the subject of global warming, and has discussed climate issues on the *Discovery Channel*. In a number of settings, Balling has made claims that undermine the idea that anthropogenic climate change should be mitigated. For example, in 2005 Balling wrote, for *TCS Daily*, that:

Life has existed on our planet for billions of years, and the climate over that time has changed from ice ages to periods much warmer than today. There is little doubt that as our cities grow, heat waves will be more severe in the urban areas. If global warming does in fact add to the problem, we will adapt to the new world, just as humans have done for millions of years.

The claims Balling makes in this passage are true, and given his expertise, it is very likely that he believes them to be true. It is true that life has existed on our planet for billions of years. Scientists have found evidence of life dating back at least 3.7 billion years.²⁹ What is more, it is true that the Earth's climate has varied significantly across its history. It has experienced periods much warmer than today as well as ice ages. Both of these facts can be seen by looking at large scale reconstructed temperature records.³⁰ It is also true that humans have adapted to a range of different climates since they came into existence.³¹ What Balling does not say, however, is that while humans and life more generally has persisted through time across a range of different climates, it is not the case that these times were pleasant or that they resembled anything like the modern world. And while it is likely true that at least some humans, and life more generally, will continue to exist long into the future, even if nothing is done to mitigate the effects of anthropogenic climate change, this is not to say anything about what such an existence would look like, or, importantly, anything about how much life will be lost or suffer under such a scenario, or whether such a future would be just. Since there is good reason to believe that unchecked

²⁸ See, for example, Carter and McClenaghan (2015), Hirji (2018), Eilperin et al. (2019), and the entry on the "CO2 Coalition" at *DeSmog.com*.

²⁹ See, for example, Dodd, Papineau, Grenne, Slack, Rittner, Pirajno, O'Neil, and Little (2017).

³⁰ See, for example, the collection of large scale reconstructed temperature records in Dessler (2015: Ch.2).

³¹ Again, see, for example, the collection of large scale reconstructed temperature records in Dessler (2015: Ch.2).

anthropogenic climate change will result in much suffering, death, destruction, extinction, and the loss of other goods (such as, say, the opportunity to hike in the same pristine wilderness our parents did) it is misleading of Balling to merely claim that humans will adapt to whatever the future climate happens to be.³² Since these kinds of considerations clearly matter to most people, it is significant that they have been omitted from what Balling wrote.

Since these considerations were left out of what Balling wrote, and because it is easy to falsely think in their absence that nothing should be done to mitigate the effects of anthropogenic climate change if humans and life more generally will adapt anyway, it seems reasonable to think that Balling's claims undermine the idea that something should be done to mitigate the effects of anthropogenic climate change. What's more, it seems odd to think that Balling genuinely believes the false implication of his remarks, for if he did, he would have come out and stated it explicitly. Since all of this is not compatible with showing a proper concern for the truth, it seems reasonable to think that Balling's claims are bullshit.

More evidence for thinking that what Balling wrote in this passage is bullshit comes from a collection of sources. For example, court documents from 1998 reveal that Balling had at that time received \$408,000 in research funding from the fossil fuel industry. This funding included contributions from ExxonMobil, the British Coal Corporation, Cyprus Minerals, and the Organization of the Petroleum Exporting Countries (more commonly known as OPEC).³³ Leaked documents obtained by *DeSmog.com* show that Balling receives \$1000 a month from the Heartland Institute.³⁴ Balling has also received \$49,500 in funding from the ExxonMobil Foundation for a study he conducted with Craig Idso titled "The 2000 United States Historical Climate Network Update: What Changed?"³⁵

3 Climate denialism bullshit is harmful

In the previous section, reason was offered for thinking that a number of influential climate deniers spread bullshit in the mainstream media. It is the purpose of this section to motivate and highlight some ways in which this bullshit is harmful. As we will see, it is (1) harmful because it undermines the epistemic demands imposed on us by what we care about. It is (2) harmful because it undermines the epistemic demands imposed on us by the social roles we occupy. It is (3) harmful because it undermines epistemic demands imposed on us by morality. And it is (4) harmful because it contributes to a broad and general corrosion of epistemic trust.³⁶ These

³² See, for example, Darling and Sisterson (2014: Ch.3) for a discussion of the impacts, but especially the impacts on humans, of anthropogenic climate change.

³³ See NA (1998).

³⁴ See, for example, the articles by DeMelle (2012) and Littlemore (2012b).

³⁵ This information can be found on Robert Balling's publicly available Curriculum Vitae.

³⁶ The collection of epistemic demands discussed here is drawn from a larger collection of epistemic demands, suggested by Linda Zagzebski (2009), that apply to epistemic agents. See her work for a good, detailed, and general discussion of the epistemic demands of epistemic agents and the problem of bullshit. See also Zagzebski (2004).

harms are presently being inflicted on members of the general public by climate deniers that spread bullshit.

While it might seem straightforward that climate denialism bullshit is harmful, it is not the case the all instances of bullshit are harmful. Sometimes we suspend speaking with a proper concern for the truth because we are engaged in acts of communication that have other important, and morally decent, goals. As Scott Kimbrough (2006) notes, wholesome jokes are a good example. Sometimes telling a joke requires us to suspend speaking with a proper concern for the truth in order for it to function as a joke. Nothing is obviously wrong with such a practice, especially when everyone participating in the joke knows what is going on. Since, on the basis of this, it is not an analytic fact that bullshit is harmful, it is important that we carefully spell out the ways climate denialism bullshit is, indeed, harmful. That is, beyond the role it has played in repeatedly hindering governments of the world from taking meaningful action on mitigating the harmful effects of anthropogenic climate change.

To begin, climate denialism bullshit is often harmful because it undermines the epistemic demands imposed on us by what we care about. If we care about anything, then we care about holding and acquiring true beliefs about the things we care about. Holding and acquiring true beliefs about the things we care about means that we are better able to show proper care for the things we care about. So, we have a responsibility to conscientiously acquire and hold beliefs about the things we care about. While the conscientious acquisition and retention of beliefs about the things we care about does not guarantee their truth, it does appear to be the best we can intentionally do to have and hold all and only true beliefs about the things we care about.

Now, if someone bullshits us, then we either identify that they are bullshitting us or we do not. If we do not recognize that they are bullshitting us, and we trust them, say, because we regard them as an authority, or because they speak from a platform that we believe to be trustworthy, then it is more likely that we will come to hold false or imprecise beliefs than if they spoke with a proper concern for the truth.³⁷ Naturally then, if bullshitters are speaking about matters that concern things we care about, then, in these circumstances, it is more likely that we will come to hold false or imprecise beliefs about the things we care about. But holding false or imprecise beliefs about the things we care about means that, at the very least, we will likely be less able to take proper care of the things we care about. This is bad for us, and it undermines the epistemic responsibility we have toward those things we care about in virtue of our caring. It is bad for us because if we are less able to take proper care of the things we care about, and the desirability of our lives is at least partially determined by how well those things flourish, then our being less able to take proper care of the things we care about will diminish the desirability of our lives. But now if, on the other hand, we identify that someone is bullshitting us, and we respect ourselves,

³⁷ This seems to be true regardless of how we understand epistemic trust. For some influential and relevant accounts of epistemic trust see, for example, Almassi (2012), Hardwig (1985), Hardwig (1991), Irzik & Kurtulmus (2019), and McCraw (2015).

then this will corrode our trust in them as a source of knowledge—especially if they bullshit us about matters that concern things we care about. But then, if instances of bullshit corrode our trust in them, or, more broadly, people occupying what we perceive to be similar positions of authority, or of the platform from which they speak, or what we perceive to be similar platforms, then we will have fewer sources of information available to us. And if we have fewer sources of information available to us, then we will have fewer sources in which we can pull facts from. This seems to straightforwardly make it more challenging for us to conscientiously acquire and hold beliefs about the things we care about, and so makes it more challenging for us to show proper care for the things we care about. This result is also bad for us since the desirability of our lives will be diminished in virtue of it being more challenging for us to take proper care of the things we care about.³⁸

Since, for example, many of us care about our children, and the desirability of our lives are at least in part determined by how well they flourish, it is important that we know facts about our children so that we can show proper care for them. It is important, for example, that I conscientiously acquire and hold beliefs about my children's possible futures so that I act in ways that display a proper concern for them and their futures.³⁹ But then climate denialism bullshit, at the very least, makes it more challenging for those of us who care about our children to achieve this. So, the existence of this bullshit makes us worse off. In this sense, we are harmed by it.

Now while some of our epistemic demands arise because we care about certain things, others spring from other sources. For example, some of our epistemic

³⁸ One might naturally wonder about what this means for our practical duties and the harms we potentially face when we possess conscientiously acquired but false information given to us by well-intended authorities. If climate denialism bullshit is harmful because it undermines the epistemic demands that are imposed on us in virtue of the things we care about, then in what sense is this harm different from what we would experience if we conscientiously acquired or held well-intended but false beliefs? Bullshit involves intentional, reckless, or negligent harms, while the well-intended cases are instances of accidental harms. So, only in the former case are harms done to us. In the latter case, harms occur, but they are not the fault of anyone. Of course, descriptions are one thing, how well off we are is something else. What may be more important than how we describe these cases is how well off we are in either scenario. In both cases we are, all other things being equal, probably equally likely to be less able to fulfill our practical duties than what we would be than if we held true beliefs. Also, epistemic trust is broken only in the bullshit case. Provided, that is, that we detect it. So, we might say that, in a sense, the bullshit case leaves us less well off than in the well-intended but false belief case because epistemic trust has been broken. Things are tricky though, because if we detect bullshit, then we may be better able to locate the truth. Our detection of it may prompt us to search for the truth again, and this time we may have better luck. This could mean that we would be, in a sense, better off than we would be if we were simply handed well-intended false information. The idea is that determining that it is false in the later situation may be more challenging (if we even think to check) than locating the truth after we discover that past information was bullshit. I take it that in such a scenario, we would likely be better able to fulfil our practical duties, despite the harms we incurred. Whether we are, all things considered, better or worse off in such a scenario is unclear to me, and it will likely depend on more the details of the case. What I think is safe to say though is that, on average, we are more likely to latch onto the truth and fulfil our practical duties if our sources of information speak with a proper concern from the truth than if they don't. And so, on average, we would be better off if people were well-intended.

³⁹ For more on the responsibilities we have to our children and to future generations with respect to anthropogenic climate change see, for example, Caney (2021) (especially Sect. 3) and the references contained therein.

demands spring, not from the things we care about, but from the social roles we occupy.⁴⁰ Many of us, for example, are citizens of democratic societies. As citizens of democratic societies, we have a responsibility to vote conscientiously. That is, to vote, say, in whatever way we determine to be in our collective best interest. This responsibility imposes epistemic demands on us. Since climate science and climate policy are relevant for determinations about what is in our collective best interest, we have a responsibility to conscientiously acquire and hold beliefs about these matters. But then climate denialism bullshit, at the very least, makes it more challenging for us to uphold this responsibility since we have fewer sources to conscientiously draw information from. At worst, it makes it impossible, since we may not be able to reach a determination of what we regard to be in our collective best interest on the basis of conscientiously acquired and held beliefs. So, the existence of this bullshit makes us worse off. As citizens, we are harmed by it. And if the desirability of our lives is at least in part determined by our ability to perform our social roles well, then the existence of this bullshit also harms us personally since, at the very least, it will be more challenging for us to perform these roles well.

While the harms that have been discussed so far either depend on what we care about or on the social roles we occupy, the next form of harm we will consider is more pervasive. Climate denialism bullshit is harmful to a great number of us because it undermines the epistemic demands imposed on us by morality. Given the inescapability of these demands, this form of harm is far reaching. Since climate change is clearly a moral issue, and because morality imposes a responsibility on us to be aware of things that are of moral concern so that we can act morally, we, as moral agents, have a responsibility to conscientiously acquire and hold beliefs about our climate. This responsibility is independent of what we care about and the social roles we happen to occupy. Since we have a responsibility to conscientiously acquire and hold beliefs about our climate, climate denialism bullshit is harmful. It undermines our ability to fulfill some of our moral responsibilities. At the very least, it makes it more challenging for us to uphold the moral responsibilities we have with respect to the climate because the presence of this bullshit makes it more difficult to conscientiously hold and acquire beliefs about the climate. If we are less able to fulfill our moral responsibilities, then, as moral agents, we are harmed by it. And if the desirability of our lives is at least in part determined by our ability to be good moral agents, then the existence of this bullshit means that we are more likely to lead less desirable lives. So we are harmed by the existence of climate denialism bullshit.

Climate denialism bullshit corrodes epistemic trust.⁴¹ Since so much of our knowledge comes from other people, we depend on them caring that they have knowledge, and on them showing, through what they communicate, that they have a proper concern for the truth. But then, if climate deniers spread bullshit, and we

⁴⁰ For a good discussion of some of the harms that arise for scientists, *qua* scientists, from dissent, see Biddle and Leuschner (2015).

⁴¹ Again, see, Almassi (2012), Hardwig (1985), Hardwig (1991), Irzik & Kurtulmus (2019), and McCraw (2015) for some influential and relevant accounts of epistemic trust.

become aware of it, then epistemic trust has been broken.⁴² If breaks in trust happen in numbers that are great enough, or from sources we depend more heavily on, or are about matters that matter greatly, then this corrosion could have consequences that extend beyond these numbers, or sources, or matters. Bullshit could lead to a much greater and more general corrosion of epistemic trust than it does in a small number of cases. If this bullshit leads the general public to more generally distrust authorities since they may be unable to distinguish between those who are trustworthy and those that are not, then the consequences of climate denialism bullshit extend much further than the climate. The same point also applies to popular news outlets, and any other venues members of the general public turn to for information. If this bullshit leads them to distrust these outlets and venues, since, again, they may be unable to distinguish between those that are trustworthy and those that are not, then the consequences of climate denialism bullshit appearing on these platforms will be much greater than merely the effect they have on matters related to the climate. This is likely true even if these platforms otherwise only publish material that displays a proper concern for the truth. So then, at the very least, in addition to the specific harms the general public is subjected to with respect to climate denialism bullshit, they are also at risk of bearing the consequences that come from a much broader corrosion of epistemic trust. At worst, if climate denialism bullshit plays a meaningful role in a genuine and general corrosion of epistemic trust, then it is some very harmful bullshit indeed.

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⁴² This is true regardless of the account of epistemic trust we prescribe to.

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