Understanding Climate Change Skepticism

Examining the Arguments of Those Who Question Climate Change

Author: Tara Meghana Kaila

Introduction:

There is broad scientific agreement that climate change is a serious environmental problem. Nevertheless, despite the general agreement, a small number of people continues to express doubt or outright denial about the existence of climate change. It is essential to understand where this skepticism comes from in order to have a productive conversation and to address issues. In this article, we shall examine some of the typical arguments posed by deniers of climate change.

1. Lack of scientific evidence and unpredictability of the climate

The fact that there are scientific uncertainties is one of the main arguments used by deniers of climate change. They claim that reliably predicting long-term trends is impossible because historical climate data may be ambiguous or open to interpretation and as a consequence the models that are based on these data cannot be correct[1]. To prove their point, they pick out instances where climate predictions and models were not reflected by the observed weather. These discrepancies, according to deniers, show the limitations of climate models and show how the scientific community's understanding of climate change is far from complete if not wrong. Thus, the climate change that the models suggest, they claim, should be questioned. And as a side effect, they add, the inaccurate and often dystopian forecasts, like excessive sea level rise or catastrophic weather, damage the reputation of climate science as a whole.

These statements, however, argue from ignorance[2]. By taking the discrepancies as a proof for the non-existence of climate change while ignoring the evidence that clearly states the opposite, the burden of proof shifts once more to the scientists who could use their time and resources better than to proof the existence of human induced climate change again and again. Additionally, the argument misuses the emotions of the listener as it suggests that by believing in climate change one harms the reputation of "serious" science – an authority in the recent world.

2. Natural fluctuation of the climate

Another argument put forth by deniers is the idea that natural processes[3] and not human activity are principally responsible for climate change. They argue that historical ice ages and warm periods are examples of natural climatic fluctuations on Earth and were unrelated to human activity. So, they claim that the same is true for the current climate change: it is only a result of natural variability rather than a consequence of human actions.

The problem with this argument is that it uses the climatic circumstances of the past to explain the climate in the present. This is called genetic fallacy[2] and the reasoning does not take the one

[1] Murphy, Robert P. 2019. Should we trust climate models? https://www.instituteforenergyresearch.org/climate-change/should-we-trust-the-climate-models-part-1-of-3/ (03.11.2023)
[2] Damer, T. Edward. 2009. *Attacking faulty reasoning: A Practical Guide to Fallacy-Free Arguments*. Belmont: Wadsworth.
[3] WMF. n.d. 10 myths about climate change. https://www.wwf.org.uk/updates/here-are-10-myths-about-climate-change (03.11.2023)

significant detail into account that distinguishes past climate changes from the one in the present: namely, mankind.

3. Political and economic motivations

According to some deniers[4], human made climate change and its consequences are only a marketing tool for politics and economy. They claim that governments gain from the "climate change" narrative by implementing laws and charges to become bigger and to intervene on the individual level. At the same time, the renewable energy sector is subsidized and can grow. People who believe in this line of argument view climate change as a weapon for economic redistribution and not as a legitimate environmental issue.

The argument, however, is a straw man argument[2]. It accuses political intervention and companies that react to the dangers of climate change to only mind the own profit – be it votes in the next election or financial profits. What is dangerous about this specific argument is also that it ultimately leads the way to conspiracy theories that claim that a limited group of people controls society. Thus, it is important to remember the role of the actors: Yes, companies are capital driven and yes, politics adapts to social debates. But why would they make up such controversial and difficult topic like climate change to profit from?

4. Bias and Data Manipulation:

Deniers frequently assert that climate data is biased or prone to manipulation[5], compromising its validity. They assume that climate scientists deliberately highlight information that backs up the notion of human-induced climate change while at the same time ignoring or downplaying opposing facts. Additionally, they underpin the argument by citing occasions where exaggerations or mistakes indeed have been made in climate change reports.

Although cases may exist, where data has been manipulated, the manipulation is not the norm. That means the argument is a so-called red herring[2], a distraction that changes the topic of the discussion which is then no longer about climate change but about manipulation in science. On top of that it is not only a distraction but by accusing scientists to manipulate on a regular basis, it suggests that climate change is made up by them.

Conclusion:

It is significant to highlight that the scientific consensus on climate change is strong and that research continues to support its existence. To claim that climate change skepticism is a hint that climate change might not exist is itself a fallacy, since it again tries to shift the burden of proof while ignoring the counterfactual. But still, just because something is questioned, it does not mean that it is not real. Let's be clear: there is urgent need for joint action to reduce climate change and its consequences such that we can make the transition to a sustainable future.
But what to do with faulty reasoning? It is necessary to understand and to analyze the arguments of climate change deniers. However, it does not help in discussions with them as they are not seeking for common ground or a common solution. The target group one should focus on are the undecided people, those, who are not sure whom to believe. By debunking the arguments of the deniers, there is a good chance that worries concerning the necessary measurements to stop climate change can be reduced. Then, respectful conversations even with skeptics can be fruitful and groundbreaking in addressing climate change as a global challenge.

[4] Durkin, Martin (director). 2007. The Great Global Warming Swindle [Film]. Tiberius Film.
[5] Waldman, Scott. 2023. A scientist manipulated climate data: Conservative media celebrated. A scientist manipulated climate data. Conservative media celebrated. - E&E News by POLITICO (eenews.net) (03.11.2023)