

Background

The American Museum of Natural History has a long and honorable tradition of enlightening the world at large with outstanding scientific exhibits and public lectures. However, on January 25th, 2018, an [open letter](#) was submitted to the museum accusing them of being “anti-science” and promoting “climate science misinformation”, and in particular, vilifying a scientifically-engaged trustee of the museum, Rebekah Mercer.

The lead signatory on the letter was Dr. James Powell, a geochemist who has written extensively about his belief that there is a secretive cabal of vested interests “attacking science” and promoting “misinformation” about climate science for sinister reasons, e.g., his 2011 book, [“The inquisition of climate science”](#). Powell and many of the other signatories have argued that those who disagree with them on any aspect of climate change are “anti-science” and that their opinions should be suppressed. Ironically, this idea of suppressing opposing scientific views is the very antithesis of scientific inquiry.

Yet, in this particular case, while the January 25th letter purports to be about an alleged example of “anti-science”, the letter’s vilification of the American Museum of Natural History, and of one of its trustees seems to be purely ideological. Powell and his co-signatories are complaining about two sentences on the label for a particular exhibit on the fourth floor of the museum.

The exhibit which was installed in 1993 summarised the scientific consensus at the time on “what caused the Ice Ages?”:

“The causes of the Ice Ages are not fully understood, but we know some factors that led to the first growth of the polar ice sheets. One was a decline in world temperatures over the previous 30 million years. Another was the formation, about 3 million years ago, of the Isthmus of Panama, which connected North and South America and diverted the oceans’ circulation to a more northward pattern. Since the first northern-hemisphere glaciers formed, 2.6 million years ago, the polar ice caps have expanded and contracted in response to variations in the Earth’s orbit around the Sun, causing cold spells alternating with warmer periods, like the one we live in now.

There is no reason to believe that another Ice Age won’t come. In the past, warm cycles lasted about 10,000 years, and it’s been that long since last cool period. Human-made pollutants may also have an effect on the Earth’s climatic cycles.”

On January 6th, a visitor to the museum, [Dr. Jonah Busch](#), objected on Twitter to the last paragraph and claimed that the museum was “[promoting misinformation on climate change](#)”. In particular, he objected to the use of the word “may” in the sentence “Human-made pollutants may also have an effect on the Earth’s climatic cycles” because the IPCC’s 5th Assessment Report (2014), concluded (predominantly on the basis of computer model studies) that “Greenhouse gases emissions are extremely likely to have been the dominant cause of observed warming since the mid-20th century”. However, when the exhibit had been installed in 1993, the IPCC was far more equivocal on the

causes of recent warming, and in their 1st Assessment Report (1990) had concluded, “The size of the warming over the last century is broadly consistent with the predictions of climate models, but is also of the same magnitude as natural climate variability.”

It is true that, while the label is still correct, the IPCC’s perspective has changed over time. However, when the exhibit had been installed in 1993, the label accurately reflected the IPCC’s perspective. Moreover, once the museum was alerted to the specific content of the label, they quickly responded (January 8th):

“Based on data, the content is not wrong – but it is showing its age (nearly 25 years). Were it written today, it would have different context and emphasis, and more recent scientific data, as current exhibitions/more recent halls do. In the more recent Hall of Planet Earth, for example, exhibits point to the rise of atmospheric CO₂ due to human activities, and to evidence for increases in pollutants from human activity recorded in ice core layers.”

This bears no resemblance to the claims of “anti-science propaganda” or “climate science misinformation” which Powell and his co-signatories are accusing the museum of. The exhibit in question was just one of many, and although now quite old, accurately reflected the scientific opinions at the time it was installed. And, Powell and his co-signatories agree that the museum’s response was both prompt and reasonable.

More importantly, Rebekah Mercer did not join the museum’s board of trustees until 2013 – 20 years after that 1993 exhibit had been installed. We appreciate that Powell and many of his co-signatories might have different political views from Rebekah Mercer. But, they are not entitled to use the false claims of “anti-science propaganda” and “climate science misinformation” for their ideological campaigns.

In response to the January 25th letter, we commend the Museum and its trustees for their promotion of science, and their efforts in science education. The signers of this letter include many scientists and we are definitively “pro-science” and are opposed to “climate science misinformation”. However, the letter by Powell and his co-signatories is itself anti-science and ideologically-driven.

All of us urge the Museum trustees not to cave in to this pressure.