

What the Boomer generation knew – and when we knew it

In previous sections, I drew attention to the fact that the climate crisis was principally brought about in a single lifetime, mine. I also noted that an unusual time delay is in part responsible here, as the consequences of our actions were not felt at the time but are only now catching up with us now, decades later.

This raises a crucial question: did we see this coming or not? In other words, did we know that our actions would likely bring about a catastrophe on a global scale that would threaten the very future of our species?

Short answer? Yes, for over fifty years, we clearly feared that this was going to happen. And by “we,” I mean not just scientists, scholars, activists, and policymakers, but the average person on the street in the US. knew and was very worried.

In order to understand what we knew and how, let’s focus on the two principal greenhouse gases, CO₂ (carbon dioxide, which is released during the burning of fossil fuels) and methane (which for the most part is emitted by the beef industry and while fracking for fossil fuels).

With respect to CO₂, if, 50 years ago (in the early 1970s), you asked the average American if we needed to end our reliance on fossil fuels by the close of the 20th century, the answer would very likely have been a decided “Yes.” Moreover, most people feared that failure to do so might well result in an existential catastrophe for the human race. In simple terms, in the early 1970s most Americans feared that if we did not quickly ween ourselves off of fossil fuels we would risk the collapse of our civilization, possibly as early as the beginning of the 21st-century.

With respect to methane, many people in the US. and the developed world by the early 1970s, as we shall see, knew that meat consumption was an environmental disaster.

In short, most Americans in the early 1970s knew that if we didn’t ween ourselves off of fossil fuels and meat then we were flirting with a global disaster of unprecedented scope, likely beginning early in the 21st-century. The interesting thing is that this concern was not directly related to climate change.

I will explain this unusual state of affairs directly, but first I want to specifically address what we knew about how CO₂ would impact the global climate – and when we knew it.

As a colleague of mine at UC Santa Barbara, John Perlin, has recently argued, Eunice Foote, notably a woman scientist, was the first person to suggest that increased levels of atmospheric CO₂ would result in global temperature rise. This was, astonishingly, in 1854.

Flash forward a century, in 1956, shortly before I was born, physicist Gilbert Plass published an article entitled “The Carbon Dioxide Theory of Climate Change,” which noted that we could expect global temperature to rise significantly in the 20th century as a result of the burning of fossil fuels. Using computer models, which were just coming on the scene at the time, Plass

predicted a global temperature rise by the year 2000 that has proven to be pretty accurate, all things considered.

In less than a decade, in 1965, the President's Science Advisory Committee, which is housed in the White House, produced an important report entitled "Restoring The Quality of Our Environment." After being presented with it, President Lyndon Johnson made reference to it and the problem of rising CO2 levels in a speech to Congress.

Here are just a few lines from that report:

"Through his worldwide industrial civilization, Man is unwittingly conducting a vast geophysical experiment. Within a few generations he is burning the fossil fuels that slowly accumulated in the earth over the past 500 million years."

"By the year 2000 the increase in CO2 will be close to 25%. This may be sufficient to produce measurable and perhaps marked changes in climate."

"The climate changes that may be produced by the increased CO2 content could be deleterious from the point of view of human beings."

So, yes, we knew about this problem from nearly the beginning, in the sense that scientists and policymakers (including the President) were alerted to the issue at the point when it was emerging as a significant global problem – right around the time that I was born.

During the past 60 years, the problem has, on and off, emerged as a significant political issue. Nathaniel Rich has, for example, outlined how, starting in the 1970s, a decade-long effort almost resulted (according to Rich) in binding treaties that would have reeled in global CO2 rise. ([source](#)) It is also now clear that fossil fuel companies like Exxon have known about the problem in great detail for decades, starting in the 1970s. ([source](#))

However, it can be argued – to be honest, I have heard it argued quite a bit – that the public (i.e. the average person on the street) really did not know about the impending climate crisis. To people of my generation, this can be a comforting stance, as in many ways it lets us off the hook. In other words, yes we did something that has proven to be environmentally disastrous, but we had no idea that it would be a problem.

This is an important issue to address. My goal is not to cast blame on my generation, but rather to see our story as a cautionary tale.

The simple fact is that we absolutely did know that what we were doing would be disastrous. Although not with respect to climate change, we nonetheless knew that we were setting the stage for a worldwide catastrophe by the early 21st-century. And yes, if you would have stopped and asked any random American on the street at that time, they would have almost certainly have told you that they knew – and were worried, perhaps very worried.

Allow me to explain.

In 1956, the same year that Gilbert Plass published his article on “The Carbon Dioxide Theory of Climate Change,” M. King Hubbert, a geologist working for the Shell oil company, introduced his theory of “peak oil.” Hubbert noted that every year we were pumping more oil out of the ground than the previous year. Eventually, he theorized, this trend would end as we began running out of oil. He predicted that this year of “peak oil” would be right around 1970. After that, the trend would reverse, as we would then be pumping less and less oil out of the earth each year as worldwide reserves were depleted.

Almost like clockwork, in the US, oil production started to decline in 1970. Consequently, we began relying more and more on imported oil, especially from the Middle East. In 1973, Middle Eastern oil producers put an embargo on the export of their oil to the US. for political reasons. This sent shock waves through America, as we were suddenly found ourselves running out of oil to heat our homes and gasoline to power our cars. As you might imagine, the cost of heating oil and gasoline soared.

This was the first “energy crisis” of the 1970s. Another would follow in 1979. The average American was profoundly, personally impacted by all this, as there were, for example, long (in some cases very long) lines to buy gasoline because of the shortage. And then there was the price: the average cost of a gallon of gasoline in the United States in 1970 was \$.36 per gallon. By 1980, it had tripled in cost to \$1.19 per gallon ([source](#)).

Consequently, most Americans not only knew about peak oil in the early 1970s, we knew that, as a consequence, we needed to quickly wean ourselves off of fossil fuels. This resulted in the first mad dash in the US. away from fossil fuels and toward the development of renewable energy sources. By the end of the 1970s, the President, Jimmy Carter, was putting solar panels on the White House.

So, even though many Americans had not heard of global warming 50 years ago, nearly everyone knew that we needed to stop burning fossil fuels and switch to renewable energy – and knew that we needed to do so quickly.

With respect to methane released during meat (principally beef) production, thanks in part to an internationally best-selling book in 1971, *Diet for a Small Planet*, the concept of “environmental vegetarianism” became widely known at the time. This is refusing to eat meat because of the harm that it does to the environment, as opposed to not doing so for other reasons, such as the ethical treatment of animals. Consequently, even though meat production had not been linked to climate change by the early 1970s, most Americans knew that eating meat was deeply problematic environmentally.

In short, fifty years ago, in the early 1970s, the average American on the street may not have known about climate change, but they definitely did know that we needed to wean ourselves off of fossil fuels and meat, and that we needed to do it quickly. If we didn’t do this, all indications were that we would bring about global catastrophe by the early 21st-century.

We knew what we had to do, yet we didn’t act on this knowledge.

We often talk about how important knowledge is, but, as this example proves, it is not as powerful as we might think.

“Knowledge is power” is an often repeated, popular phrase. In spite of its simplistic appeal, the problem with this statement is that it is just plain wrong. Knowledge is not power – not by a long shot.

Let’s say that millions of people are in possession of a profound and important piece of knowledge. For example, that our earth could sustainably feed billions of human beings, if we all would only eat a largely plant-based diet – something that the bestselling book *Diet for a Small Planet* made clear in 1971. Just having read it in a book, and thus being in possession of this knowledge, is not enough. In this sense, “knowledge is knowledge” – and little more. It’s hardly power.

For it to become power, we must act on knowledge.

Hence, a more accurate formulation would be “if acted upon, knowledge is power.” And it wouldn’t hurt to throw in a cautionary addendum: “if not acted upon, knowledge is power squandered.”

The knowledge that I have been addressing in this talk was largely squandered.

Coming when it did, fifty years ago – when global greenhouse gas emissions were just beginning to skyrocket – this knowledge regarding fossil fuels and meat had the power to change the world, to save the world. Instead, it was mostly ignored. This crucial, extraordinary knowledge never became power.

In the case of the few people who acted upon, for example, the knowledge that a largely plant-based diet could be enormously powerful – environmentally, politically, ethically and in a host of additional ways – they were often marginalized, even laughed at.

For the sake of our species, our planet, and all the life that we share it with, we cannot afford to let this happen again.

We need to act, and to act now, in response to what we know. At the risk of repeating myself, knowledge is power only when acted upon. Otherwise, knowledge is power squandered. Let my generation be a cautionary tale.

The activating of the power latent in knowledge has a name that derives from the word “action”: “activism.” Even if the extraordinary action takes place in a particularly mundane way – such as at the dinner table, or by taking the bus rather than a car – it can nonetheless be powerful climate activism.