

Talk to the Coal Miners:

Why Aren't We Concerned About Climate Change?

By Sarah Pytleski

I grew up in the mountains and deserts of Western Colorado, and there was a coal mine just down the road from our ranch. I would play on mountains of coal overlooking a brown expanse, dotted here and there with miners dressed in blue, driving machines dressed in yellow. Overlooking the mine were mountains of sandstone, with whispering aspens and sage and blue spruce carpeting the rock. Driving home on the dirt road at night through miles of untouched forest, I would occasionally point out a wavering flame seen through the trees. Oil wells, my mother explained, from the wheel of her pick-up truck.

What you have to understand about rural Colorado is that the towns and cities were not established frivolously. The invading European settlers did not have a sacred connection to the land like the Ute and the Arapaho who lived there, nor did they have an appreciation for gorgeous vistas like tourists do today. Towns in Western Colorado sprang up where resources were found and exploited. Palisade exists because of its fertile soil, perfect for growing peaches and grapes. Silverthorne was settled by miners who were drawn to the area by veins of silver. And my hometown of Hayden, Colorado has somehow survived for a hundred years as a Coal Town, with a population that has barely fluctuated from 2,000 people.

The primary issue here is not that the citizens of Western Colorado do not care about the effects of climate change. They just have a very different relationship with coal, oil, and natural gas. For these citizens, *coal* means investment in the local economy, job opportunities, and a temporary loss of land. For environmentalists, *coal* means air pollution and radiation that sicken

animals and humans alike, strip mining that disturbs ecosystems, and eventually emissions of carbon dioxide (CO₂) that strengthen global warming. For people who live in coal towns, immediate economic benefits outweigh the deadly (but so seemingly far off) consequences of burning fossil fuels. They might seem to have no concern about climate change and its effects, but really, they are just *more* concerned about their jobs and the livelihood of their towns.

I see the view of fossil fuels in Western Colorado as an excellent case study for understanding why there is not greater concern for the impacts of climate change on the earth and its people. People living there, like many of us, have constructed faulty cost-benefit analyses based what they value in the present rather than based on what will be most beneficial for everyone in the future. Citizens do not comprehend the scale of the climate change and its effects, so they prioritize economic matters over ecological matters. There is also a communication gap between scientists and the public, so many people do not know exactly what they should be concerned about, or why. This gap is exploited by public leaders who are trying as hard as possible to mislead the public about anthropogenic climate change so that they can fulfil their own agendas. In the end, I believe that communication and education will be the key to fostering concern about climate change.

Scientists have a very specific way of thinking and speaking, and that way is often much more conservative and specific than the media. The difference between the way scientists and the media communicate can be demonstrated by contrasting a headline from the Washington Post against a statement from the Intergovernmental Panel on Climate Change (IPCC).

1. The Washington Post: “Extreme weather in 2018 was a raging, howling signal of climate change”¹.

¹ Achenbach

2. The IPCC: “A changing climate leads to changes in the frequency, intensity, spatial extent, duration and timing of extreme weather and climate events, and can result in unprecedented extreme weather and climate events”².

The second quote is rather dry, yes? But it is also more accurate. Scientists simply cannot prove that any specific weather event was definitely caused by climate change. However, they can (and do) study patterns of extreme weather events, the interactions of global systems that produce weather, and how global warming would affect those systems, in order to come to the consensus that there is a strong link between extreme weather events and global warming. This is a more accurate statement than the newspaper headlines. Unfortunately, members of the public can take this discrepancy between the sensationalism of the media and the official scientific stance to mean that there is no link, no consensus, and thus, no problem.

Members of the public are also being misled by political leaders, who obfuscate the facts for their own reasons, instead of serving in the best interests of the public. Congressmember Marsha Blackburn, in a debate with Bill Nye, asserted that since there is not complete agreement that climate change is augmenting the frequency and power of natural disasters that the government cannot take action, because “you don’t make good laws, sustainable laws when you’re making them on hypotheses or theories or unproven sciences”³. This statement further displays the communication gap between the public and scientists. In ordinary speech, a theory connotes an unproven assumption. In science, a theory is a body of rigorously tested ideas and knowledge. By saying that climate change is a theory, Blackburn leads the public to believe that the connection between the burning of fossil fuels, global warming, and extreme weather events is rather tenuous. She is spreading a dangerous and false idea. Climate change and its effects

² Sheer

³ Gregory

have been proved; climate science has been developing for two hundred years, and the scientific consensus is clear. Blackburn is an excellent public speaker, and by confidently making unfounded statements like this, she can influence the views of the thousands or millions who watched this debate. The public looks up their public officials for guidance, and for accurate representation of the issues that matter to them. I cannot overstate the importance of having public officials who support science and are dedicated to reducing the impact of global warming. In the words of Bill Nye, “you are a leader. We need you to change things, not deny what’s happening”. When world leaders like Donald Trump refute the existence of climate change and its devastating effects with their words and their policies, the facts being presented by scientists are undermined.

The effects of climate change are devastating, make no mistake. One report gives the following two figures: “weather events influenced by human-induced climate change” are causing economic losses of \$240 billion per year. In the next decade, as the effects of climate change worsen, that number will rise to \$360 billion⁴. Because the Earth’s climate system is incredibly complex, these types of models can give estimates, not exact figures, about the monetary costs of inaction – that is, not taking immediate and drastic steps to reduce the greenhouse gas emissions which are leading to climate change. Some, like Congressman Blackburn, translate “estimates” as “we don’t know that these things will happen, so why should we change anything?”. Individuals and companies alike perceive immediate benefits in continuing to use fossil fuels, so predictions are swept to the curbside.

Perhaps there would be more concern over climate change if the average person had a more nuanced understanding of its impacts. As discussed, the connection between extreme

⁴ Watson, et al.

weather and climate change is often dismissed by laypeople. This brings them to conclude that climate change is really not concerning, since extreme weather is one of the more evident symptoms. One excellent example of the hidden costs of climate change is the increase in the incidence of mosquito-borne diseases like malaria. As the planet tends towards a warmer climate, mosquitos are migrating to new areas where the temperature suits them better, and they are carrying diseases with them. The populations of these new areas will likely never have been exposed to those diseases, leaving their immune systems more vulnerable to attack.⁵ Most people would never make this connection on their own because we simply do not notice or understand the environmental externalities of climate change. Climate change is not simply a matter of extreme weather events worsening, with no other impacts. The consequences of global warming will include species extinction, loss of biodiversity, outbreaks of disease and more deaths from severe heat waves and cold spells... I could go on and on.

Even if they are concerned about climate change and extreme weather, people tend to prioritize other issues, like economic growth. In order to slow down, or hopefully even reverse, the process of global warming, we must stop burning fossil fuels. For a lot of people, ordinary citizens and policymakers alike, the perceived economic cost of this measure is a deal breaker. The European Social Survey found that “about three-quarters of the public say they’re worried about climate change, yet less than a third would accept higher taxes on fossil fuels to cut emissions”⁶. And in the Blackburn debate, Gregory points out that in the United States “Conservatives [in Congress] believe many of the policies put forward to address the problem [of global warming] will lead to unacceptable levels of economic hardship”⁷. This does not point to

⁵ “This Podcast Will Kill You”

⁶ Barasi

⁷ Gregory

a lack of concern, but rather a misunderstanding of the scale of the issue that has led to misplaced priorities.

These are legitimate concerns, to be sure. I sympathize with the coal miners of Colorado who feel that their livelihood is threatened by renewable energy. And, as I write this essay, the United States government has been in shutdown for about a month over disagreements on budget issues. We do need to consider the economic costs and benefits of addressing climate change – fortunately, scientists and economists alike have produced documentation that weighs the dollar values, and the scale has tipped in favor of action. Watson et al. found that 500,000 jobs in the United States would be created by increasing renewable energy generation by 15%, even while reducing fossil fuel energy generation by 23%. Renewable energy is not a threat to those working in the fossil fuel industry. In fact, their livelihoods are already being threatened by fossil fuels. As we deplete our stores of fossil fuels, extraction will become more and more expensive, and the profit margin will thin to a razor's edge. For coal miners, renewable energy represents an opportunity to break out of a dying industry; with training programs, they can easily find new jobs that help us move closer towards sustainability. Additionally, coal mining pollutes the air of mining communities like Hayden. In Appalachia, where 25% of the US's coal is mined, treatment of health conditions related to air pollution from coal are costing \$86 billion a year⁸. Burning fossil fuels is a risk to human health, not just to the environment.

In my opinion, there is not greater concern over the effects of climate change because people do not understand the true scale, and because our political leaders are pursuing agendas that are detrimental to the Earth. Where there is concern for the effects of climate change, economic affairs take precedence because individuals do not want to bear this burden. I would

⁸ Watson, et al.

say that we are already bearing the burden – just look at those farmers whose income depends on consistent, mild weather, those poor people who lost everything in abnormally strong hurricanes and wildfires this year, and those miners whose lungs are blackened from breathing in coal dust. Humans cannot disconnect themselves from the world that we are destroying, and so each of us is doomed to suffer from climate change. Not only should we be concerned, we should place taking action against fossil fuel burning and climate change as our top priority.

Getting people to be concerned about climate change is not about attacking them; it is a matter of exposing them to the real costs and the real scope of the issue. If I could talk to all those coal miners of my hometown, of my home state, I would tell them that I understand them. We come from the same place, we share the same history, and the same hopes and fears. I would try to explain the benefits of renewable energy to them, how they could secure a new career and improve their health. Simply talking to individuals can fuel an understanding that climate change outweighs economic concerns, and lead those individuals to elect leaders who have the power to change the world.

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