

As someone who has worked on climate change for most of my professional career, I have observed the global response to COVID-19 with a keen eye. Our response can be considered a dress rehearsal for how we will respond to any number of climate-induced emergencies, catastrophes and disasters. I have, at times, reacted to the COVID-19 response with varying levels of hope, fear, disappointment, dismay, and envy. Envy may seem an odd addition to this list, but in seeing the resources mobilized to answer the challenge of the pandemic, including stimulus initiatives and emergency social safety nets, I can't help but feel a twinge of envy. Mostly, I am envious, that, unlike the climate challenge, a single, discrete intervention – vaccines -- will solve the problem.

Despite the ongoing spread of infection, mounting death toll, and lasting economic and social turmoil, there is a sense that, as a society, we have turned a corner in our response to the pandemic. While the response has varied across states, from stringent mask mandates to severe lockdowns to more laissez-faire approaches predicated on individual responsibility, we are now at a point where increasing numbers of people are getting vaccinated. The availability of multiple vaccines has broadened the pinhole of light at the end of the tunnel that existed in March 2020 into more of a noonday sun. Many of us are poised, willing, and very ready to begin collectively socializing and eating in restaurants, to stop purchasing so much hand sanitizer and consign our masks to the back of the closet.

In terms of answering the existential threat posed by COVID-19, the importance of effective vaccines cannot be understated. Without vaccines, there would be no such plans to socialize. It has been impressive to me to witness the rapidity with which various pharmaceutical companies have developed, tested, and brought to market such effective vaccines. As someone who has benefitted from one of these vaccines, I do view their existence as a vital lifeline in the midst of an existential crisis. They are the closest thing that I have seen in the real world to an actual “silver bullet”.

In the climate space, I have often heard of “the” solution to climate change. These solutions have varied from carbon filtering mechanisms to space mirrors to tree planting to veganism to good, old divine intervention. Yet as the impacts of the climate crisis mount, it is clear that, unlike in our battle against COVID-19, there is no comparable silver bullet.

This is not to say that the climate crisis is a problem without a solution. It is, however, a complex problem which requires a complex array of solutions. Indeed, I take great heart from the strides we have made on a societal level to tackle COVID-19. We have proven that we can mobilize to tackle problems, particularly when the consequences of inaction are dire. We can work locally and nationally to contribute to solving a global crisis. We have shown that we can demonstrate empathy and compassion for those disproportionately affected by the public health crisis and that we can provide solutions that prioritize equity. COVID-19 has illustrated that when confronted with immediate catastrophe, humanity can and will act. Admittedly, the response has been far from perfect. It has been haphazard, it has been reactive and it has highlighted that those staff we deem as necessary to daily life are often those paid the least and are under insured. However, as someone who often views the world through a lens of impending environmental collapse, I would consider our response to COVID-19 to be an encouraging run-through for how we may react when climatic events become more extreme and elements of the ecosystem begin to fail. In that regard, there are any number of viable technical solutions to begin reducing societal carbon emissions.

In terms of institutional carbon emissions, utility companies shifting to renewable energy sources as well as more efficient and smarter grids will be beneficial to the environment. The automotive and

transportation industries shifting to electric mobility solutions will reduce the need for individual consumers to consume as much gasoline. More farmers adopting regenerative farming techniques may help sequester a significant portion of the world's carbon emissions. The government can create and maintain an enabling environment for positive climate action through grants, regulation and policy.

While institutional actors are significant contributors of greenhouse gas emissions, there is, without doubt, a role for individual responsibility and action, in voting, and in making responsible consumer choices. As consumers, we have the power to vote. Not only do we vote in elections, but we vote with our income. Where we decide to invest our hard-earned dollars says a lot about what we prioritize and the demand characteristics that we are trying to create in the market. Likewise, our actions regarding the transportation options that we choose, the dietary choices that we make and the energy use that we engage in all contribute very significantly to our carbon footprint and are key areas where we can minimize our impact. Of course, these solutions are, sadly, much easier written about than enacted. Change takes effort.

There is, however, a problematic paradigm that exists here. There is the tacit acknowledgement that, in shifting away from fossil fuel-based energy to renewable sources of energy, we can maintain the same economic system, the same level of material comfort, and the same level of consumption in a post-fossil fuel world as we did in a world driven by abundant fossil fuel use. So far, we have not asked whether our existing systems, which have been instrumental in creating the climate crisis, are currently fit for purpose.

Given President Biden's announcement of April 22, 2021 that his Administration intends to cut emissions by 50-52% below 2005 levels by the end of this decade, I am firmly of the belief that the United States currently has the political will to promote a more climate-secure future and to facilitate a just transition away from fossil fuels. However, political will is as stable as quicksand, and it can shift in the blink of an eye. We cannot pin our hopes solely on the political system to right the wrongs of the climate crisis.

There is, however, another form of will which, though seldom mentioned, is equally, if not more powerful, than political will in combatting the climate crisis. Moral will. To act with moral will is to bring our day-to-day actions in line with the principles of morality, principles such as justice, equity, compassion, care, respect and many more beyond.

By reframing the climate crisis not as an environmental phenomenon beyond human control or as purely a technical problem which will be resolved only by technical solutions but rather as a moral challenge which will require technical and moral responses, we can begin to diversify how we respond to it. The choice to walk or bike is no longer an inconvenience but an investment in personal wellbeing and cleaner air. Wearing an extra warm sweater on cold winter nights instead of turning the thermostat up a few degrees becomes an exercise in moderation not a chilly sacrifice. Opting for a veggie burger over a cheeseburger is not an adventure in asceticism but rather a conscious choice to reduce methane emissions.

Of course, we are not divorced from the world with which we interact nor from the systems that govern it. We all have friendships, family members, hobbies, and jobs. As we individually begin to reframe the decisions we make not only to arrest ongoing climatic changes but to carry forward a morally driven and spiritually infused civilization, we may also exert a positive influence on the institutions to which we belong – corporate entities, social clubs, friend and family groups, civil society groups, etc. Recognizing that we are not individuals in isolation from the entirety of the human family but rather integral members

of communities, institutions and other such collectives may help liberate us from the individual and institutional behavior that has brought our ecosystem to the brink of collapse.

We are not yet at the point where the climate crisis has led to the death of 600,000 Americans in scant more than a year. We are not yet at the point where the climate crisis has compelled governments to completely close their borders. We are not yet at the point where the climate crisis has forced the government to make direct payments to support the income of most of the populous. As we mark Earth Day, let's commit to working to ensure none of these eventualities come to pass and that the current climate crisis does not become an imminent catastrophe.