

## It's Time to Rebel Against the Existential Threat of Climate Change

When the fate of the human species is at stake, panic is the right response—if it's followed by action

[Phil Torres](#) Jun 3, 2019



*Credit: Mike Kemp/Getty Images*

During a [recent speech](#) at the European Union parliament, the teenage activist Greta Thunberg began her talk as follows: “My name is Greta Thunberg. I’m 16 years old. I come from Sweden. And I want you to panic.”

Her reasoning goes like this: While panicking is counterproductive when there’s nothing to panic about, it serves an important purpose when there’s a genuine cause for alarm. Panicking about vaccines

causing autism or commercial airliners leaving chemtrails at 35,000 feet is an obvious waste of energy. But if you find yourself alone in the Alaskan wilderness and an angry grizzly charges at you, it would be suicidal not to freak out.

There’s a catch, though. Certain forms of panic can lead to paralysis rather than action. This may especially be true with respect to climate change: The threat is so massive and our individual potential to



effect change so miniscule that it's easy to throw one's hands in the air and, to [quote](#) the philosopher Peter Singer, just “party our way into extinction.” Jennifer Jacquet, a professor of environmental studies at New York University, has dubbed this the “[anthropocebo effect](#),” on the model of the “[nocebo effect](#),” whereby merely “mentioning the side effects [of a drug] makes them more likely to occur.” In this case, merely mentioning the catastrophic consequences of climate change can make it more probable that they'll occur.

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But the truth is that our environmental situation really is dire. Our species emerged about 2,000 centuries ago in the grassy East African savanna, where we evolved to meet the challenges of that specific environment. To survive—meaning survive long enough to pass on our selfish genes—we needed to think about the future on timescales of hours, days, and weeks. There was no reason to worry about the well-being of people beyond the perimeter of our tribe. Our motto could have been “Think locally, act locally!”

The environmental crisis, though, is transgenerational and global in scope: It will affect virtually everyone around the world for hundreds of generations to come, assuming the human race exists that long. The sheer enormity of the problem boggles even the most capacious minds, a problem that the education scholar Christopher Williams [refers to](#) as “brain lag.” Quite simply, our brains lag behind the times: They're evolutionarily incapable of comprehending the consequences of present human actions, nor are they able to muster the moral sympathy needed to change our behaviors to avoid catastrophic harm to people in the far future.

Indeed, one of the most significant consequences of climate change is biodiversity loss, which will be our single greatest legacy on this planet after the final chapter of *The Biography of Homo Sapiens* has been written. According to the [2018 Living Planet Report](#), the global population of wild vertebrates declined by

a shocking 60% between 1970 and 2012. We are watching, in real time, a major mass extinction unfold, one could that be no less devastating than the mass extinction that obliterated the dinosaurs 66 million years ago. Except that extinction event was caused by an asteroid merely obeying the fixed laws of nature. There is no law of nature that forces humans to destroy their only home in the universe.

We didn't always need to panic. If I were writing this in the 1980s, my fingers would be trembling a lot less—although then I'd be worried about a nuclear conflict, a risk that [still haunts us today](#). But today, panic is the only option left.

If you find the need to panic objectionable, don't blame me—or Thunberg, or anyone else—for delivering the message. Blame the climate-denying politicians, blame the misinformation campaigns by big media outlets like Fox News, blame the fossil fuel industry and its powerful Washington lobbyists, blame the anti-intellectual foolishness of half the American population—a demographic of people who are, as Shakespeare [might have said](#), most ignorant of what they're most assured about. If only we'd acted decades ago, when scientists sounded the first alarm, we wouldn't be in a predicament that requires schoolchildren to strike once a week for reasonable climate policies.

Yet the news is even grimmer than this, because we don't just need to act on climate change and biodiversity loss, both of which could render the planet uninhabitable for a large portion of the population. There is a [blizzard of additional risks](#) associated with emerging fields of research like synthetic biology, nanotechnology, and artificial intelligence. Moving forward, these will pose increasingly menacing hazards to human prosperity by, for example, enabling terrorists to create designer pathogens that globe-trot at the speed of a commercial jet and propagate with ease through dense urban areas like the mega-slums around Mumbai, Cape Town, and Nairobi.

Every generation has declared itself to be the last, usually for religious reasons. But this time really is different: We live in the Age of Anthropogenic Apocalypses. It commenced in the early 1950s when



the United States stockpiled enough nuclear weapons to bring about a global-scale nuclear winter, and it's unlikely to conclude until we safely get off this planet—although even that [might not save us from ourselves](#).

How one responds to such news is obviously important. Panic must not lead to defeatism, if only because defeatism is unwarranted by the evidence. Yes, we face a veritable avalanche of risks to our survival. But the truth is that not a single one of these problems is unsolvable. We can redirect incoming asteroids, defuse supervolcanoes, stop climate change by transitioning to nuclear power and renewables, and avoid a bioterrorist attack through effective counterterrorism measures. We just need the motivating wisdom to actively find the solutions.

A [study from 2015](#) usefully identifies three responses that people have to thoughts about the “end of the world.” The first is fundamentalism: They view this possibility through the prism of religious eschatology, or “the study of last things.” The second is nihilism: They succumb to the anthropebo effect, declining to act because the problems are just too big. And the third is activism: They convert their fear of global destruction into energetic action aimed at mitigating the threats before us. What we need is panic that turns people into activists. As Henry David Thoreau [once declared](#), “To affect the quality of the day, that is the highest of arts.” We could update this as follows: “To ensure that future people flourish, that is the highest of moral acts.”

Such activism is precisely what we're seeing in the U.K.-based movement known as “[Extinction Rebellion](#),” or XR. I recently attended a massive protest in London during which multiple people, including a pregnant woman, superglued themselves to the road in an effort to disrupt traffic. It worked, and after hours of lying under a hot sun on the even hotter pavement, they were removed and hauled away by police. Meanwhile, a crowd of thousands chanted, “We love you,” followed by a call and reply that began with a man standing just next to me who bellowed, “Extinction!” to which everyone in earshot screamed, “Rebellion!”

Although XR has been criticized for its tactics, with some arguing that non-violent disruptions like those I witnessed could repel potential allies, it's hard to know what else to do given that, as Bob Dylan might [say](#), “It's not dark yet, but it's getting there”—indeed, at a frighteningly accelerating pace.

We need more activists. We need people who hear the wailing sirens of imminent calamity but reject the dual failures of fundamentalism and nihilism.

The reality is that those of us on what I call the “right side of futurity” (not just history) have argued with politicians to no avail. We've made speeches, written articles that have gone viral, and published award-winning books on the topic. We've lamented that it's easier to imagine civilization collapsing than capitalism coming to an end. And some have increasingly resorted to colorful language not usually employed by professional scientists, such as when the geophysicist Brad Werner [gave](#) a conference talk that he titled, “Is Earth Fucked?” A reporter later asked whether he thinks we really are screwed, to which he answered, “More or less.” The answer today is “more than less.”

Indeed, the general consensus among experts of existential risk is that there's about a 20% chance of human extinction before 2100. To put this into perspective, imagine that planes had a 20% chance of crashing every time they took off. Would you board the plane? I certainly hope not. But here we are, midflight, and it's too late to get off. Let's hope we have some good pilots.

Right now we need more activists. We need people who hear the wailing sirens of imminent calamity but reject the dual failures of fundamentalism and nihilism. We need people who understand that this is our best shot ever to prove that we really are, or at least can become, *Homo sapiens*, despite our long history of being something closer to *Homo halfwitius*.

This being said, there are several important strategies for persuading people to become activists. One is forward-looking and, as such, it emphasizes how good the future could be if only we play our cards right today. If we avoid a terminal catastrophe, there's every reason in the world to believe that the future could be not just better, but much better than the



present. The prescient science fiction writer H.G. Wells predicted this possibility way back in 1902, [writing](#):

All the past is but the beginning of a beginning, and that all that is and has been is but the twilight of the dawn. It is possible to believe that all that the human mind has ever accomplished is but the dream before the awakening... We are creatures of the twilight.

Wells is right. The fact is that medical advances could eliminate all disease—cancer, diabetes, heart disease, Alzheimer’s, and more—and perhaps even reverse the aging process. According to the visionary gerontologist Aubrey de Grey, there’s a good chance that [the first person to live 1,000 years has already been born](#). Even more fantastical is the possibility of hooking our brains up to the internet, communicating telepathically and achieving digital immortality by simulating the microstructure of our nervous systems. Just recently researchers [announced](#) that electrodes on the brain could translate brain waves into audible speech—words and sentences produced by thinking

alone. That’s incredible, it’s exciting, and it’s worth fighting for.

So, I very much agree with Thunberg and those in Extinction Rebellion that now is the time for panic. But we can’t leave it at this. It will also do us well to underline that the future could be profoundly better than it is today—just as the present is much better than, say, hundreds of years ago during the Spanish Inquisition, when people were executed for nothing more than uttering the wrong words. This could inspire people to become activists, to strive for a world in which humanity doesn’t linger under multiple guillotine blades.

“Why should I care about posterity?” Groucho Marx [once joked](#). “What’s posterity ever done for me?” While climate change and other existential threats will indeed affect people in the very distant future, the truth is that, as Thunberg argues in her EU speech, the house is burning down right now. We have to get out, which means that, to survive, we must act with a trembling sense of panicked urgency and move.