

What to Read When the World is On Fire

The new wave of climate change writing

BY ARNO KOPECKY

ILLUSTRATION BY MARIA NGUYEN UPDATED 12:06, OCT. 6, 2019 | PUBLISHED 11:43, SEP. 23, 2019



CLIMATE CHANGE is boring. Ask any editor or publisher: there's nothing like a treatise on the atmospheric concentration of carbon dioxide to turn readers away in droves. Even so, stories of impending doom have twice startled us to the brink of changing course, but both attempts—in the mid-1980s and then in 2006—fizzled out. Now a third moment of international urgency is underway. It began last October, when the Intergovernmental Panel on Climate Change (**IPCC**) published its report on the catastrophic difference between 1.5 and two degrees of global warming. Despite the **IPCC**'s harrowing findings and the fact that more than 900 jurisdictions around the world, including Canada, have declared a "climate emergency," we haven't stopped

emitting greenhouse gases. Instead, we set a new record in 2018 by dumping nearly forty gigatons of carbon dioxide into the atmosphere—a number that has no meaning until placed beside the scenes to which it corresponds: the floods, droughts, hurricanes, forest fires, coral-reef die-offs, disappearing glaciers, disintegrating polar ice sheets, and, increasingly, human refugees and cadavers that are now a staple of our news diet.

That none of this makes us jump to the window or stare anxiously at the sky is no longer just a part of the problem. It *is* the problem—one that shackles every democratic leader who sincerely views climate change as an existential threat to humanity yet must win the votes of a public whose ignorance has given way to a state of

informed delusion as to the magnitude of what's coming.

The most useful thing humans ever discovered is also the most deadly. This is our mortal paradox, the one we're running out of time to resolve, because the consequences of burning fossil fuels are now poised to demolish two centuries of benefit. So how, this time, do we make the fight against climate change sound so much more appealing than the end of civilization that the people of, say, the country with the third-largest oil reserves in the world get radical enough to vote for it? That's the challenge at the heart of every piece of writing about climate change, in any genre. The trouble is, anyone who tries to tell this tale automatically enters a bizarre hall of mirrors: we've heard it all before and yet need to know more; it's depressing, yet it slips into propaganda if we try to inject hope.

- [Should Oil Companies Be on the Hook for Climate Change Costs?](#)
- [How NAFTA Changed the Way We Eat](#)
- [Will PEI Start a New Green Wave?](#)

Scientists have been proving that climate change is real for decades. Thousands of them, from all over the world, have written us a modern bible. There is no more precise blueprint of our planet's climate, of where it's at and how it's changing, than the Synthesis Report published by the **IPCC**, first in 1990 and then updated every five or six years since. It's all in there and has been for so long that many of the first edition's predictions have become today's observations. But this bible might as well have been written in Latin. Packed with technical vocabulary and stripped of emotion, the language of the **IPCC** reports seems calibrated to deepen our collective slumber rather than lead the masses from the temptations of oil and gas. And so, as with the bible, the apocalyptic imagery of which is

reflected by the language of climate change, you need translators.

THERE ARE no easy answers, but here's a hard one that always rings true: try learning from the past. As Nathaniel Rich makes painfully clear in his book *Losing Earth: A Recent History*, not only have we been here before but "nearly every conversation that we have in 2019 about climate change was being held in 1979." It's heartbreaking to learn how close the United States once came to leading the global fight against climate change. Like a sinner looking back on the way things could have been, *Losing Earth* zeroes in with cinematic detail on the efforts of two Americans to move climate change from fringe issue to presidential priority over the decade leading up to 1989.

One of those Americans is now the most venerated climatologist in the world, former director of **NASA**'s Goddard Institute James Hansen; when we meet him, in 1979, he is a brilliant but media-shy scientist who "was not afraid to follow his research to its policy implications." The other is Rafe Pomerance, a charismatic and Washington-savvy environmental lobbyist searching for the right messenger to tell the world about climate change. He finds what he's looking for in Hansen, whose early reticence soon gives way to an urgency verging on prophecy.

Rich follows the two men as they pierce the opaque rings of power and connection encircling Ronald Reagan's White House. It's startling to learn that, as early as 1983, "the issue [of taking action against climate change] was unimpeachable, like support for the military and freedom of speech." But Reagan wasn't having it. Pomerance and Hansen would have to wait for Reagan's second term to wind down before they got their breakthrough. In 1988, Hansen, by then a trusted household name, delivered his now famous congressional testimony on what happened to be the hottest

June 23 in DC’s history, exploding the issue of climate change into the psyche of an American public that was still congratulating itself for tackling the “hole” in the ozone “layer.” (There was never any hole, Rich explains, and no layer either; ozone molecules are evenly distributed throughout the atmosphere, but the drop in their concentration above Antarctica appeared as a void in satellite imagery. After one of the chemists who discovered this casually described it as an “ozone hole” during a slide show, the press found its catchphrase and never let go. It was arguably the most successful—albeit accidental—case of environmental marketing ever.) Hansen’s testimony spurred George H. W. Bush to campaign on a promise to fight the greenhouse effect with “the White House effect.” But, during Bush’s subsequent administration, the fossil-fuel lobby outmaneuvered its environmental counterparts, and the true White House effect was to quash aggressive climate policy both at home and abroad in the name of economic pragmatism.

Losing Earth is a masterfully crafted story, revelling in character and dialogue, loaded with narrative that foreshadows today’s climate-change debate. When Rich’s argument first appeared as an extended article that filled an entire issue of *The New York Times Magazine*, in August 2018, it went viral. But many environmentalists took issue with Rich’s conclusion that our failure to reduce emissions has more to do with human nature than it does with Republicans or companies like Exxon. In the book, Rich acknowledges that governments that don’t take climate change seriously are guilty of “crimes against humanity,” but he still insists that we’ve all been willing dupes. Climate change, he points out, has been graphically explained in major print and television media since at least 1953, when *Time*, the *New York Times*, and *Popular Mechanics* all ran articles on the subject. Every major American utility and auto company studied the problem extensively in the 1970s.

All this, and still the environmental community waited until the late 1980s to press an issue it had known about for over a decade. “Everyone knew,” Rich writes. “And we all still know.”

His point isn’t that we’re doomed by our intrinsic bias for short-term reward over long-term consequence. It’s that knowledge alone is never enough. The mistake Hansen and Pomerance made was to assume all they had to do was inform the public. But the challenge, then as now, is not merely to inform but to awaken. “When popular movements have managed to transform public opinion in a brief amount of time, forcing the passage of major legislation,” Rich writes, “they have done so on the strength of a moral claim that persuades enough voters to see the issue in human, rather than political, terms.” If you want to talk about climate change, he concludes, “The first requirement is to speak about the problem honestly: as a struggle for survival.”

THE SECOND TIME we almost beat climate change—or, at least, were united in an effort to try—was brought to us by *An Inconvenient Truth*. On one level, Al Gore’s 2006 opus could be seen as a counterargument to Rich’s point that knowledge alone is not enough: here was a movie that told us what we already knew, yet it worked. For a year, climate change shot to the top of the news. Riding the renewed wave of public concern, Gore founded the Alliance for Climate Protection, which gathered so much bipartisan support that none other than Newt Gingrich sat before TV cameras on a couch with Nancy Pelosi to declare, “Our country must take action to address climate change.”

Of course that moment sputtered, too, much more quickly than the last one and without ever reaching the same heights. But the lesson it offered was real: a good way to wake someone up is to slap them in the face. Yes, we knew all about climate change in 2006, but nobody had compiled such a cinematic collection of

apocalyptic horrors and shoved them under our noses quite like that before. It helped that the person who did so had once won the popular vote for the US presidency. An even greater boost might have come from Hurricane Katrina, which, just the year before, had primed the world's imagination with graphic and unprecedented footage of a great American city laid to waste. When it comes to climate change, seeing is believing.

That seems to have been the literary lesson that David Wallace-Wells took to heart when writing *The Uninhabitable Earth: Life after Warming*, which reads like a 228-page elaboration of his opening sentence: "It is worse, much worse, than you think." One of Wallace-Wells's central insights is that we're confusing a best-case scenario with its opposite. "As recently as the 1997 signing of the landmark Kyoto Protocol," he writes, "two degrees Celsius of global warming was considered the threshold of catastrophe." More than twenty years of unrestrained fossil-fuel consumption later, "two degrees looks more like a best-case outcome, at present hard to credit, with an entire bell curve of more horrific possibilities extending beyond it and yet shrouded, delicately, from public view."

The Uninhabitable Earth rips that shroud away. Taking two-degree warming as a starting point, Wallace-Wells assails us with a minutely detailed, relentlessly escalating catalogue of consequence. Here's a typical passage:

At two degrees, the ice sheets will begin their collapse, 400 million more people will suffer from water scarcity, major cities in the equatorial band of the planet will become unlivable, and even in the northern latitudes heat waves will kill thousands each summer. There would be thirty-two times as many extreme heat waves in India, and each would last five times as long, exposing ninety-three times

more people. . . . At three degrees, southern Europe would be in permanent drought, and the average drought in Central America would last nineteen months longer and in the Caribbean twenty-one months longer.

If only that were the bad news. According to the **IPCC**, our current emissions trajectory put us on a path for four degrees by the end of this century. "That would deliver what today seems like unthinkable impacts," Wallace-Wells writes. "Wildfires burning sixteen times as much land in the American West, hundreds of drowned cities. Cities currently home to millions, across India and the Middle East, would become so hot that stepping outside in summer would be a lethal risk."

Judging by its success, that kind of straight talk still has the power to captivate an audience. When part of *The Uninhabitable Earth* first appeared, in 2017, as a magazine article, it quickly became the most widely read story in *New York* magazine's fifty-year history. Just like with *Losing Earth*, Wallace-Wells's framing of the problem provoked criticism from some environmentalists, who accused him of sensationalizing the issue by cherry picking the darkest possibilities. The environmental magazine *Grist* responded with the emblematic headline, "Stop Scaring People about Climate Change. It Doesn't Work." Overstating the probability of worst-case climate outcomes, the thinking goes, could feed deniers the kind of exaggerations and erroneous predictions they love to wave as evidence that climate science is bogus. Worse, a relentless focus on horrific outcomes could paralyze readers by giving them a sense of helplessness. But *not* scaring people about climate change doesn't work either. Especially in the West, which hasn't seen total calamity since the Second World War, the prospect of civilizational collapse has come to seem impossible. "We suffer,"

Wallace-Wells writes, “from an incredible failure of imagination.”

That’s no slight on the **IPCC**’s contributing authors. It was their 2018 report, after all, that kicked off our present moment and continues to be interpreted and amplified by the usual globe-spanning army of translators. But they all got a signal boost from the same type of coincidence that helped ignite *An Inconvenient Truth*.

The summer of 2018 happened to be the most destructive wildfire season in California’s history, and the ashes were still smouldering when the **IPCC** report dropped on October 8; one month later, while writers were still busy disseminating its findings, the Camp Fire erupted in northern California like an exclamation mark. The fire vaporized a town called Paradise, killing eighty-five people and causing as much as \$16.5 billion (US) in damage. Nature is starting to do a lot of the translating for us. A disaster can illuminate the problem, but it takes a human imagination to articulate solutions.

ENTER NAOMI KLEIN, climate evangelist. Her latest book, *On Fire: The Burning Case for a Green New Deal*, evokes the most hopeful aspect of our third attempt: the likelihood that America’s next president will finally follow through with George H. W. Bush’s abandoned promise from 1988 and then some. “Our current moment is markedly different” from the previous two climate interventions, Klein writes, for two reasons. “One part having to do with a mounting sense of peril, the other with a new and unfamiliar sense of promise.”

Klein tracks both halves of the equation through a collection of new and previously published articles that trace a series of climate disasters and the responses they have inspired: Deepwater Horizon, a climate-change-denier conference, the pope’s radical call for environmental preservation, the hurricane that

laid waste to Puerto Rico, and, most recently, a fragile shoot of optimism called the Green New Deal, a proposed stimulus package for an economic overhaul to decarbonize society on par with the original New Deal that lifted the US out of the Great Depression.

Most of Klein’s new material is found in the book’s introduction and epilogue, which both introduce characters on the brink of becoming climate leaders. The former is where we meet Greta Thunberg, the Swedish teenager who has become a beacon of clarity for our cynical age. Thunberg, among her other accomplishments, founded the youth climate movement that united 1.6 million students from 133 countries in a global climate strike last March. However skeptical you may be of a teenager’s capacity to grasp the geopolitical complexities of decarbonization, it’s hard not to be impressed at how far Thunberg has gone since the day, in August 2018, she first skipped class to stand alone outside of Sweden’s legislature with a handmade sign. Klein’s epilogue turns to another prodigy who has exploded onto the world stage: Alexandria Ocasio-Cortez, who cosponsored the Green New Deal legislation that every front-runner for the US Democratic nomination has endorsed.

Depending on where you stand, Klein can either come off as the whole-Earth theorist we need in a time of global collapse or as a dangerous purveyor of utopia. She’s well aware of the mixed reactions she inspires. One of her more revealing essays, “The Leap Years,” ruminates on her self-described attempt to insert the Leap Manifesto—“a kind of proto-Green New Deal”—into Canadian politics back in 2015. To summarize the quixotic attempt: Klein and her collaborators got laughed out the door.

But here’s the thing about Klein and the Green New Deal both: if the far left’s call for a complete overhaul of modern capitalism carries a whiff of ludicrous overreach, how should we characterize society’s response? Consider for a

moment the global slaughter of our Anthropocene era—85 percent of wild land mammals wiped out, another million species on the brink of extinction, humanity itself now at risk—and ask yourself who is more delusional: Naomi Klein or the pragmatists minding the status quo?

“Ours is an age,” Klein writes, “when it is impossible to pry one crisis apart from all the others.” Anyone who’s paying attention must agree. This story is much older, and much bigger, than humanity’s love affair with fossil fuels. More explicitly than any other writer, Klein talks about climate change as an organizing principle for the all-encompassing crises of our age. This is both a genuine insight and a clever way to sustain attention in a media environment saturated with emergencies. Her fear isn’t that we’ll fail to tackle climate change in what little time remains (though there’s that)—it’s that we’ll replace one system of oppression with another, trade the world’s internal combustion engines for a billion Teslas, only to carry on shredding the biosphere.

Any critique of Klein’s analysis ought to begin with an acknowledgement of that central insight and maybe some appreciation of the risk involved in daring to propose solutions. After that, by all means, explain why solving climate change is a big enough challenge on its own without adding racism, inequality, and plummeting biodiversity to our to-do list. Point out that California used modern capitalism to lower emissions below 1990 levels by 2016—four years ahead of schedule—and that they’re still dropping. Feel free to believe that the just, sustainable society for which Klein has advocated all her life is neither realistic nor remotely literary. Utopia, it’s true, fails the suspension-of-disbelief test that all good writing, even nonfiction, must pass.

Just keep in mind: this is a time when real life is providing plot twists that no self-regarding editor would allow past a first draft. Many of those twists are dark and sinister, like a burned-out town named Paradise. But there’s no reason they couldn’t go the other way. No reason, for example, that something as outlandish as a Leap Manifesto couldn’t hop across the border and become a Green New Deal.

ARNO KOPECKY

Arno Kopecky (arnokopecky.com) was shortlisted for the 2014 Governor General's Literary Award in non-fiction, for *The Oil Man and the Sea*.