

SPRINGS

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THE FUTURES WE TELL

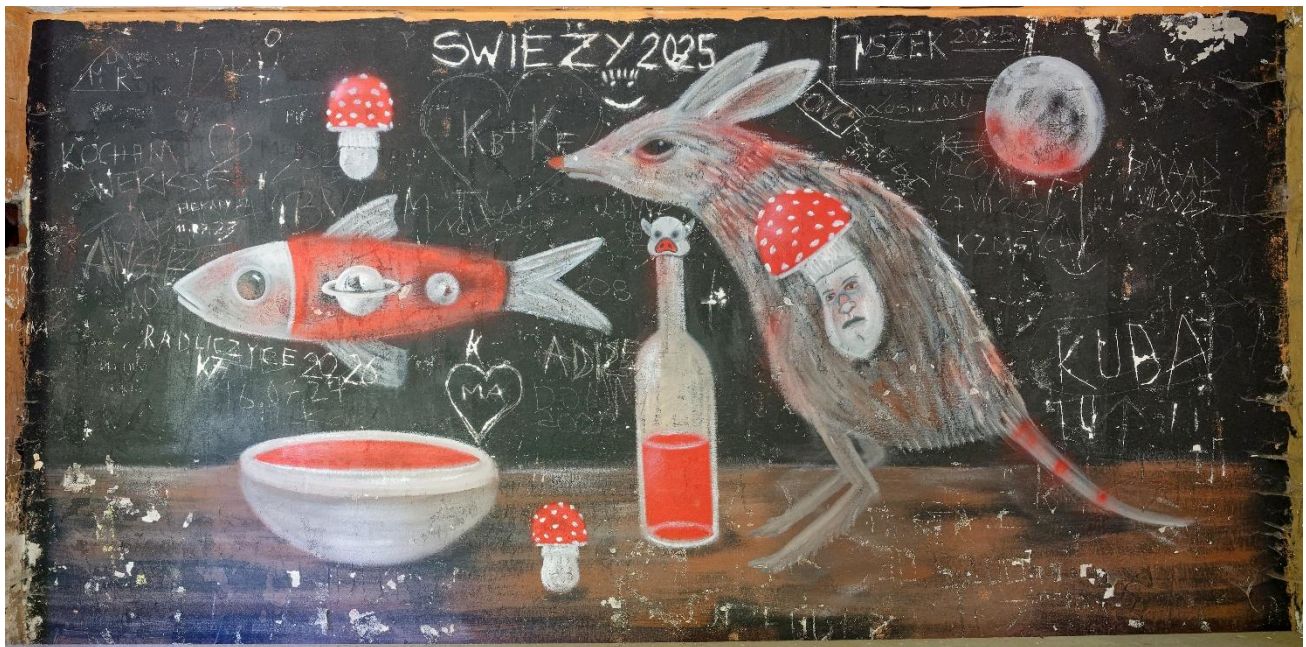
Alexa Weik von Mossner

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Keeping up with climate news has been hard recently, and not only because it is often buried beneath the screaming headlines of seemingly more immediate threats. Those who still do manage to pay attention to the climate news face another layer of anxiety as they are trying to make sense of a barrage of frightening graphs representing a world on the brink of what UN General Secretary António Guterres has called “the era of global boiling.”¹ In an article on “the risk of a hothouse Earth trajectory,” climatologists warn of an imminent “point of no return,” and a member of the European Scientific Advisory Board on Climate Change alerts Europe to prepare for three degrees of warming by the end of the century.² In my mind, these words conjure images of punishing rainstorms, scorching heat, and blazing forests—conditions even more extreme than what we already experience, and perhaps impossible to live in. Meanwhile I learn that the Trump administration decided to “erase” the scientific finding that climate change endangers human health and the environment.³ While this doesn’t come as a surprise, I find myself staring at my laptop with something like numb panic as I try to imagine the future cost of that erasure. Then I get up and go to the kitchen for a calming cup of tea with an urgent desire to dream up a less threatening scenario.



Graffiti artwork in Wisła, Poland. [Wikimedia Commons](#). CC BY 4.0.

“You can never really see the future,” writes journalist David Wallace-Wells in a 2022 article entitled “Beyond Catastrophe” in the *New York Times*, “only imagine it, then try to make sense of the new world when it arrives.”⁴ This may be true, but the role such imaginings play in shaping the future we are creating deserves closer attention. Even if they are grounded in peer-reviewed research, imaginations of the future are bound to be idiosyncratic and unstable, producing different mental images and related emotional states over time. Wallace-Wells’s own shifting imaginations of the future are a prime example, ranging from the apocalyptic, in his popular science book *The Uninhabitable Earth*, to the cautiously utopian in more recent publications—in part fueled by the “astonishing declines in the price of renewables,” and in part a response to the criticism he received for disheartening people with his doomsday visions of a ruined planet.⁵

It is not only journalists like Wallace-Wells who have been judged by the affective register and supposed psychological impact of their narrative evocations of potential future environments. Novelists and filmmakers, too, have been confronted with the expectation that their speculative

worlds should be useful in the fight against climate change.⁶ In order to cut through the noise, the argument goes, we need more engaging, hopeful, and solutions-driven storytelling, the underlying idea being that the stories we tell about the future matter because they shape people's imaginations—and ultimately, their ability to act.⁷ Although rarely spelled out, this idea rests on our innate capacity to simulate what we read, hear, or see, in both mind and body. These embodied simulations, as the neuroscientist Vittorio Gallese calls them, engage our emotions and might thus have the power to shape attitudes and behavior.⁸ Empirical research provides some evidence for such impacts but also suggests that the effects are culturally dependent and more complex than often assumed.⁹ As the calls keep multiplying for more diverse, more positive, more effective, and better imaginations of the future, we must therefore keep in mind the different modes, aims, and intended audiences of such speculative storytelling.

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A novelist is first and foremost committed to telling a compelling story. "The danger of using a story to broadcast my own politics or treating it like propaganda or argument," explains Karen Russell, "is that it can wind up sounding like a very bad Op-Ed."¹⁰ Omar El Akkad, author of *American War*, insists that literature is *art* and that "trying to take a fundamentally rational approach to . . . writing the perfect climate novel that's going to cause people to change their minds and fix the climate crisis, is nonsensical."¹¹ Moreover, raising awareness or instigating climate action may simply not be the primary motive for writing fiction. Some novelists create dystopian visions of future environments—and their utopian alternatives—to better understand the climate crisis or to process their own emotions by immersing themselves in such imaginary worlds and sharing them with readers.¹² In El Akkad's *American War*, that future environment takes the form of a United States that has lost the entire state of Florida to sea-level rise. Russell's story "The Ghost Birds" is set in a severely degraded future environment in which the only birds that can be seen during a bird-watching trip are apparitions.¹³ Such distant echoes of the avian-extinction scenario in Rachel Carson's *Silent Spring* can also be found in James Bradley's *Clade* and Charlotte McConaghy's *Migrations*.¹⁴ Other climate fiction imagines environments with a more utopian bend, such as Kim Stanley Robinson's glittering skyscrapers soaring above a flooded Manhattan in *New York 2140* and the green urban landscapes found in much of solarpunk.¹⁵ While the latter has an overtly activist dimension, it is important to recognize that—as the novelist Jeff VanderMeer puts it—sometimes fiction just "reacts or reflects."¹⁶ This does not mean that it cannot have measurable impacts.¹⁷ But it explains why writers who are confronted with expectations that telling the *right* story will help societies tackle climate change often balk at what they perceive as an implied instrumentalization of their craft.¹⁸ VanderMeer pointedly argues that "we don't need fictional extrapolation . . . to do better—we need better strategic planning, more political will, and strict regulation to avoid the worst of climate change."¹⁹

While the latter is true, the capacity to imagine human life in a future affected by climate change may nevertheless be crucial in bringing about such political will and much-needed policy changes. It can also be helpful in supporting the population adapt to the impacts of climatic changes that are already locked in for the coming decades. Many disaster-risk-reduction campaigns use storytelling to promote risk reduction in the context of climate-related disasters as well as recovery efforts.²⁰ Fictional extrapolation—a narrative technique that takes current risks and extends them into the future to imagine plausible scenarios—can be useful in such efforts. Examples of this include the comic book series *L'attimo decisivo* (Italian Civil Protection Department) as well as the educational video games *Max und Flocke* (German Federal Office of Civil Protection and Disaster Assistance) and *Disaster Master* ([US Department of Homeland Security](#)), all of which aim to help children and young people prepare for future disasters in a playful way without scaring them.²¹



Page 4-5 from *L'attimo decisivo* (Italian Civil Protection Department) narrating of an earthquake. Courtesy of the Italian Civil Protection Department. [CC BY 4.0](#).

What is often absent from these communication tools is an overt link between disaster resilience and mitigation efforts as we increasingly find it in another mode of climate storytelling: documentaries. Early films such as Davis Guggenheim's *An Inconvenient Truth* were mostly focused on mitigation as they tried to make audiences aware of the devastating future consequences of the world's unchecked carbon emissions.²² As nonfiction modes of storytelling, these films struggled to illustrate future environmental impacts, simply because no factual footage can be acquired or produced.²³ Nevertheless, their creators were convinced that such depictions could support mitigation efforts by making scientific projections perceivable through the senses. For this reason, Guggenheim uses simple animations in *An Inconvenient Truth* to show future coastlines submerged underwater, accompanied by somber music. More recent films have not only embraced the necessity of climate adaptation without losing sight of mitigation, but they have also found creative ways to use fictional extrapolation as a tool to bridge the imaginary gap between present and future environments.²⁴ Franny Armstrong's *The Age of Stupid* and Damon Gameau's *2040* are both such [drama-documentary-animation](#) hybrids; however, their affective strategies are diametrically opposed.²⁵ Chronicling global oil culture in its five interrelated documentary strands, *The Age of Stupid* foregrounds failed climate mitigation and a resulting fictional future environment so severely degraded that it resists adaptation, leading to the extinction of humanity. *2040*, by contrast, mostly avoids fear appeals and instead showcases mitigation and adaptation initiatives around the world in its documentary portions.²⁶ The fictional part of the film shows the "aged" director-protagonist and his now grown-up daughter (played by an actress) in the year 2040 as they are enjoying the benefits of a utopian environment, including decentralized solar power and large-scale reforestation introduced earlier in the film.



A still from 2040 showcasing the view from one of many wind turbines in a green landscape. © Regen Studios Pty Ltd. All rights reserved.

Despite their different affective registers and visions of the future, both films were successful in engaging viewers. After conducting a survey at a screening of *The Age of Stupid* in Edinburgh, sociologist Rachel Howell reports that “respondents emerged from the film with an increased motivation to take action, and an increased belief that they could do something to prevent climate change getting worse, along with the sense that they are not already doing everything they can.”²⁷ A survey that my colleagues and I conducted at a screening of 2040 within the context of our “Visions of Sustainability” project in Freiburg, Germany, illustrated that viewers also responded to Gameau’s affective strategies, which aimed to instill hope in them.²⁸ Ninety percent of respondents did feel hope in response to the film and 68.3 percent a “drive to action,” with some viewers stating that the utopian extrapolations had made them feel hopeful. We also observed an attitude shift toward more hope regarding ongoing climate-mitigation efforts, and the vast majority of respondents (85 percent) said watching the film had encouraged them to do more to protect the climate.²⁹ While the results cannot be generalized due to the exploratory nature of our study, they offer further evidence that imagining future environments in response to storytelling can—at least in the short term—impact attitudes and action intentions.

Imagining future environments in response to storytelling can—at least in the short term—impact attitudes and action intentions.

As I struggle to stay atop of climate news without becoming submerged by my emotional responses to it, storytelling thus not only helps me envision future environments and ways to live in them. I also appreciate the role it can play in improving how we communicate on climate change and related risks and opportunities. In one of his recent speaking engagements, David Wallace-Wells appeared to acknowledge as much as he wondered whether the world has “given up on fighting climate change” only to tell an “encouraging story” about Pakistan where people started installing rooftop solar panels from China during the global energy crises caused by Russia’s invasion of Ukraine, thereby doubling their country’s electricity capacity within a year. It is a factual story that might be called a sequel to the one—also about microgrids in Bangladesh—that excited viewers who watched Gameau’s 2040, and Wallace-Wells similarly upscales and extrapolates it into the unknown future when he speculates that other developing countries are “poised to embark on exactly the same path . . . a rapid expansion of their green electricity.”³⁰ By themselves, such stories cannot save

us from political failures and their effects on environments, lives, and livelihoods. But their ability to engage the imagination is nevertheless a valuable tool in climate-change adaptation and mitigation efforts. We cannot see the future. But how we imagine it shapes how we prepare for it—and perhaps even what it becomes.

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Notes

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Alexa Weik von Mossner is associate professor of American studies at the University of Klagenfurt. Her research explores contemporary environmental culture from a cognitive and transdisciplinary perspective with a particular focus on affect and emotion. She is the author of *Cosmopolitan Minds: Literature, Emotion, and the Transnational Imagination* (2014), *Affective Ecologies: Empathy, Emotion, and Environmental Narrative* (2017), and *Growing Hope: Narratives of Food Justice* (2025), and the (co-)editor of several academic books. She has also published a novel, *Fragile* (2023).

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