ALSO BY MAGGIE NELSON

The Argonauts
The Art of Cruelty: A Reckoning
Bluets
Women, the New York School, and Other True Abstractions
The Red Parts: Autobiography of a Trial
Jane: A Murder
Something Bright, Then Holes
The Latest Winter
Shiner

On Freedom

FOUR SONGS OF CARE AND CONSTRAINT

Maggie Nelson

JONATHAN CAPE LONDON Once inside the cab, my son places his left hand on the throttle, his right hand out the window, and, save for the occasional pause to feed the tender with imaginary coal and water, he drives that train with an enthusiasm I've rarely beheld in close quarters. WOO-HOO, WOO-HOO! DINGA DINGA DINGA! he yells, imaginary countryside flying by, imaginary wind streaming through his hair. God help the toddler who wants a turn while he's driving. "The engineer needs his space," he says, showing them the palm of his hand, not yet three.

Nearly every time we go to Travel Town together, I think, *I've never been happier in all my life.* Sometimes I say this aloud, he it to him or myself or the uncaring air. This is one of the things I've learned about happiness: when you feel it, it's good to say so. That way, if and when you say later in depression or despair, "I've just never been bappy," there will be a trail of audible testimony in your wake indicating otherwise.

"The end of the world has already occurred," writes Timothy Morton. Not only that, Morton says, but "we can be uncannily precise about the date on which the world ended. . . . It was April 1784, when James Watt patented the steam engine, an act that commenced the depositing of carbon in Earth's crust—namely, the inception of humanity as a geophysical force on a planetary scale." This era—our era—which is defined by human impact on the earth—is widely referred to as the Anthropocene.\(^1\)

It's not as if I didn't already have reservations about steam trains: in addition to the antifeminist narrative noted above (which contains within it a potent reminder of the female engine's desire to run free), nearly every train book in our house exalts the role of the railroad in what remains euphemistically called "the settling of the American West," cheerily omitting the carnage. It's not as if I don't, didn't, know the role played by slave and indentured labor in building the railroads, or the role that they have played in making possible the extraction, transport, consumption, and sale of fossil fuels over the past two centuries, all of which will surely he remembered—should there be anyone left to do so—as an object lesson of human shortsightedness, exploitation, and greed.

And yet, here I am, watching my son faux-conduct the quiescent train, admiring his beautiful face, his mouth agape at the machines he so adores, about which he knows nothing save what a human creature alive for barely three years can know: they're sensationally large and powerful; they make loud noises; they belch amazing clouds of black smoke; and when they get going, they impart a feeling of freedom—of speed, transformation, leave-taking, escape, anonymity, rush—whether you're riding or watching them speed by. (You can feel this weird reciprocity via the ministeamer ride that encircles the park, wherein waving to others is somehow irresistible, whether you're a passenger or pedestrian.) Here I am, still feeling the unprecedented (in my life, anyway) sensation of simple, total happiness in witnessing another's simple, total happiness, of beholding a new beginning in this world, while the words *The end of the world has already occurred* tick by under the scene.

Is what my son and I are doing part of that ending, even if it feels like a beginning to both of us? Is there any new beginning that doesn't already contain the seeds of its end? "When you give birth to a child, if you really want to cling to life, you should not cut the umbilical cord as he is born," writes Trungpa. "Either you are going to witness your child's death or the child is going to witness your death. Perhaps this is a very grim way of looking at life, but still it is true." Utterly unbearable, utterly ordinary.

One of the intellectual and emotional vexations of the climate crisis is that it strands us in a state of hewilderment as to whether our moment is mundane or exceptional. Sages throughout time have warned us against the delusion that our particular moment on Earth is extraordinary, reminding us that all forms of life, including the life of the planet itself, have always heen accompanied by the specter (and reality) of impermanence and extinction. "Are we not especially significant because our century is?—our century and its unique Holocaust, its refugee populations, its serial totalitarian exterminations; our century and its antibiotics, silicon chips, men on the moon, and spliced genes?" writes Annie Dillard. "No, we are not and it is not. These times of ours are ordinary times, a slice of life like any other. Who can bear

to hear this, or who will consider it?" On the other hand, there's the truly startling news, delivered by climate scientists and environmentalists to anyone who will listen, that our actions over the past 250 years have brought about a sixth mass extinction, with one million species on track for extinction within the next few decades alone, our fate linked to theirs, whether or not we feel that link or helieve in it.2 Yes, there have been mass extinctions before, including a handful of occasions on which carbon dioxide has flooded the atmosphere. But in Earth's halfbillion-year history of animal life, there have been only a few, and none was preventable in the way this one is (or was); none was caused by a single species (not to mention a species with the ability to address the threat to itself). The last sixty years have been particularly brutal: while the steam engine and founding of the modern petroleum industry may have marked the beginning of large-scale burning of fossil fuels, over half of all CO, emissions have been released since 1988, well after climate scientists—and oil executives—knew these emissions would end up trapped by the atmosphere ("the greenhouse effect"), causing irreversible warming.3

So, while no one wants to be one of Dillard's dupes, drunk on an ahistorical, spiritually unwise conviction of our era's special significance, it seems just as idiotic (not to mention genocidal, geocidal) to ignore the extraordinary facts of our moment, which, when allowed in, elicit awe (as well as fear, grief, anger, and other hard-to-bear feelings). Even if one took Dillard's sage counsel, it does not follow that everything is going to be all right. We can console ourselves that Earth or the greater universe will abide in some form without us—as theorist Andrew Culp has put it, "the combined detonation of all the world's nuclear weapons would be like a warm summer breeze to Gaia"-but such perspective doesn't necessarily help us to figure out how to contend with the "dismal picture of the future of life, including human life" the National Academy of Science confirms we face, or how to alter course. If the patenting of the steam engine marked the sealing of our fate, perhaps it's only fitting that one of the most common metaphors for our current predicament is that of being strapped to a runaway train.

Is it any wonder so many would prefer to ride the blinds? Avoid looking squarely at where we're headed, just to get through the day? Is it any wonder that the version of freedom so many seem enthralled by these days is nihilistic in nature, powered by impotence, denial, escapism, or indifference, rather than one that imagines-indeed, actually believes inthe possibility of ongoing coexistence, mutual aid, and survival? Take almost any other problem—the ravages of capitalism, racism, a more contained environmental disaster-and you might be able to argue that things getting worse is part of their getting better, in a "darkest just before the dawn" kind of way. I don't tend to buy such arguments, but even if I did, they don't apply to global warming. We might hope to burn down certain systems or ideologies and build up a better world from the ashes, but we can't burn down our atmosphere, then build it back. All the platitudes in the world about the patient labor that democracy or social justice requires crumble in the face of our current ecological dilemma, which is, as longtime climate activist Bill McKibben has it, "the first timed test that humans have ever had." Even if we stopped emitting CO, today, we have already locked in a certain amount of warming, the effects of which will continue for decades, if not centuries.4 The task before us is therefore no longer to stop climate change from happening, but "mitigation and adaptation": mitigation of the harm we've already set into motion, by means of averting, through rapid decarbonization, a further rise in temperature, and adaptation to the changes the warming we've already locked in will bring. If we don't undertake more serious mitigation soon-within a decade, most experts say-the task of adaptation becomes exponentially harder. Eventually, it may not be possible for us.

These are difficult facts. It's tempting, when confronted with them, to make recourse to apocalyptic fantasy, by which the whole human experiment (or planet) goes out in one painless flash and bang. Such fantasies relieve us from imagining, not to mention committing to, the hard work that mitigation and adaptation require. The fantasy of an equally distributed apocalypse also relieves us from grappling with the fact that the same people who always suffer worst and first will continue to do so, are already doing so, which makes any "might as well enjoy the ride" nihilism one more choice instance of off-loading risk and suffering onto more vulnerable others.⁵ As Belgian philosopher Isabelle Stengers has put it, rather than bringing about "the mythical sudden end of the world," global warming will more likely be "a long process" in which "our children and the children of our children will have to go along and live in the technologically sophisticated ruins of our dreams." What else, one might ask, is Travel Town?

GAME OVER

I wrote the preceding paragraphs several years ago. We had five years on the clock to curh CO, emissions that we no longer have; five more years of emissions have been deposited into the atmosphere, with the rate ever climbing. I don't know what's going to be happening by the time these words move into print, but if I had to bet, it wouldn't be on radical change. Never before has the time that writing takes, its patient labor giving form to our impatience for liberty, felt so painful, so patently not good enough. My son doesn't care about trains anymore—we gave away his meticulously collected heap of Thomas trains long ago; last week, when we took our hikes to the parking lot of the L.A. Zoo, which is right around the corner from Travel Town, he told me he didn't even remember the place, which I had presumed would be indelible. (We had gone to the zoo parking lot because we had heard it was completely empty, due to the pandemic; there I watched him, now eight, do donuts in the gargantuan concrete expanse, practicing how to stand up on his pedals, to pump up his speed. As there was no one else around, I let him take off his mask, so he could really feel the breeze.)

Not a day goes by that I don't wonder how I could have birthed a being so bright-spirited, so resilient, so sanguine. Don't worry so much, Mama, or else life isn't any fun! he tells me. Or, Don't worry, Mama, I got this!, this last typically delivered with all the confidence and perspective of someone who has taken a turn (or several) here before. Even when pregnant, I had the distinct impression that his was something of a repeat appearance: he had a condition the doctors were worried about; after each ap-

pointment at which the outside people would worry, I would ask him, Hey, you OK in there? BAM! BAM! he would kick. He still kicks.

Once I asked a shrink if she thought these reassurances on his part indicated that I had passed too much of my anxiety onto him, forcing him to take care of me rather than the other way around (something I had long and probably unfairly accused my mother of doing, and sworn not to repeat if I ever became a parent). The shrink offered the totally surprising thought that he might be talking to himself, as a way of teaching himself courage, self-soothing, and survival. *Imagine that, Mom—he isn't always talking to you!* He has a relation to himself. *He has a self.* He talks to it. Your anxious care, however crushing or crucial you may feel it to he, is not and will not be his everything. *What a relief.*

It is not a relief to know that he will have to find a way to live in the "technologically sophisticated ruins of our dreams" (though that sounds better than fire, fire, and more fire, as is the style in California, from where I write). But there is some comfort in knowing that this predicament is not necessarily extraordinary, insofar as investing in dreams has always courted their ruin. Cruel optimism, theorist Lauren Berlant calls it. As my son grows up, his native capacity for courage, self-soothing, and survival will no doubt he tested: just the other night at hedtime, he asked me with uncharacteristic trepidation, Mama, is it true that if we don't stop using gasoline, the earth will become as hot as Venus and kill me? Although global warming was basically all I'd been thinking about for months, I had not yet mentioned it to him. As I struggled to come up with the right response, I flashed on the galley I'd recently received of Roy Scranton's latest, We're Doomed. Now What?, whose table of contents listed a final essay titled "Raising a Daughter in a Doomed World"-page 305. I had skipped right away to page 305, thinking there might be news there that I could use. But page 305 was blank, save the words: "Essay to come in final version of We're Doomed. Now What?" Just then my son interrupted my reverie to up the ante, asking: Or will I just get shot? Finally I rushed in to reassure him on both accounts without mobilizing cruel optimism, but he quickly tired of my middle way. He patted me on the arm and said, It's OK, Mama. If that happens, we'll go together. We will have had a good life. This time, however, he had tears in his eyes.

For better or worse, the question of what we tell each other—and what we tell ourselves—has become a staple in the discourse on global warming. The field is teeming with narrative concerns, be they about genre (Are we living an apocalypse? a horror story? a tragedy? a fable? a farce? a typology?), origin stories ("It was April 1784, when James Watt patented the steam engine"), the problem of not knowing how the story ends or develops (climate scientists do not disagree on warming, but they do dehate questions of "tempo and mode"), even the value of storytelling itself (Are stories still worth telling or recording if the likelihood of a future human audience for them is diminishing? What can the stories of much earlier humans tell us about our current crisis? What is the relationship between storytelling and adaptation, or storytelling and evolution?), and so on.

This makes sense, insofar as global warming, like narrative, is a temporal problem. It is the result of the accumulation, over time, of carbon dioxide in the earth's atmosphere, put there by the actions of millions of human beings acting individually and collectively over hundreds of years, to burn material that itself took millions of years, millions of lives and deaths, to accrue. If one were in a compassionate mood, one might say that the tragedy of global warming is in part a tragedy of greed, and in part a tragedy of the human mind's—or some human minds'—failure to apprehend or care about deep time. (The two are, of course, related: caring solely for one's self-betterment does not typically correspond to caring for the future or honoring the past, though some peoples have had an easier time merging these goals than others.)

I haven't read the final version of Scranton's book, but I presume he is not likely to project, either to his readers or to his daughter, the "possibility of a new turn in the future," but to encourage us to "come to terms nobly with the irreversibility of human extinction along with numerous other species with whom it is entangled." These are not Scranton's words, but those of political theorist William Connolly, describing the

"game over" attitude shared by some—perhaps an ever-increasing number of—climate scientists, such as Guy McPherson, who predicts that human extinction will arrive sooner—much sooner—than some expect; McPherson's conservative estimate is 2030, the year my son turns eighteen, nine years after this book's publication.

Connolly is critical of McPherson—not for the implausibility of McPherson's claims, but rather for the fact that "McPherson has not yet told one old guy how to inform his children, partner, students, grand-children, and Facebook friends about such an implacable future." Theorist Donna Haraway echoes this critique when she says that the "game over" attitude "makes a great deal of sense in the midst of the world's sixth great extinction event," but she has concerns about its discouraging effects on others, including on young people, such as her students. "There is a fine line," Haraway writes, "between acknowledging the extent and seriousness of the troubles and succumbing to abstract futurism and its affects of sublime despair and its politics of sublime indifference."

When I'm feeling fearful or suspicious, I read these writers and think, A fine line, indeed. Is all that's left to us deliberating about the right or wrong way of delivering the news to ourselves and others, including those whose care or futurity we feel most responsible for? Are these thinkers practicing their own form of denial by worrying more about the "discouraging effects" of the bad news on our children, grandchildren, students, and others, than on the bad news itself? At which point I am forced to realize that my desire for the bad news—"give it to me straight, Doc"—reflects my own craving for an end to indeterminacy, an end to negotiating the interregnum between being born and dying—an end, that is to say, to the problem of living.

For however much we may want the straight news, no one necessarily has it to give. No one, not even McPherson, knows exactly what the future holds (which is decidedly *not* the same as saying we know nothing and should therefore do nothing; we act all the time hased on hest explanations, best options, best intentions). Part of the pain of our present moment, as Haraway has it, is that we "know both too much and too

little"-an epistemological quandary that can encourage us to "succumb to despair or to hope." "Succumbing to hope" may sound odd to those conditioned to believe that hope is the sole pathway to right action. But increasingly it seems that relentless hope and despair may be but "2 sides of the same emotionally immature, over-privileged coin," as climate justice writer Mary Annaïse Heglar has put it. Now that we are virtually certain to raise the earth's temperature by at least two degrees Celsius, Heglar's call for the climate movement to "occupy the space in the middle" makes a lot of sense. It pushes us away from the binary of "fucked" or "not fucked," and toward thinking of global warming as "a problem that gets worse over time the longer we produce greenhouse gas, and can be made better if we choose to stop," as David Wallace-Wells has put it. This means that, as Wallace-Wells says, "no matter how hot it gets, no matter how fully climate change transforms the planet and the way we live on it, it will always be the case that the next decade could contain more warming, and more suffering, or less warming and less suffering. Just how much is up to us, and always will be." Again, these are difficult facts. But knowing that something is still "up to us, and always will be" can inject a measure of freedom into a situation that makes most of us feel throttled.

For what it's worth—and believe me, I know gender essentialism isn't always worth very much—it interests me that many women writing on climate, especially women of color, rarely engage in the "game over" style of thinking or feeling common to "doomer dudes" (Heglar calls them "de-nihilists"), even when their apprehension of the problem—and sometimes their experience of it—is equally grave or more so. This makes sense, insofar as fears of an apocalypse come to transform or destroy one's secure, comfortable, hopefully inheritable lifestyle are nothing if not indicative of a certain class, racial, or national status, one for which civilizational collapse has been but a novel or notional threat rather than something that has already occurred. "If the Anthropocene proclaims a sudden concern with the exposures of environmental harm to white liberal communities, it does so in the wake of histories in which these harms have been knowingly exported to black and brown communities under the rubric of civilization, progress, modernization, and

capitalism," writes Kathryn Yusoff in A Billion Black Anthropocenes or None. "The Anthropocene might seem to offer a dystopic future that laments the end of the world, but imperialism and ongoing (settler) colonialisms have heen ending worlds for as long as they have been in existence." After centuries of such exportation, it might seem grotesque to turn around and seek guidance on mourning and survival from those whose pasts and presents have been ravaged by imperialism, colonialism, environmental degradation, and slavery. All the more reason, then, not to seek guidance per se, but to let those with more wisdom as to how to live past "game over" lead the way.

THE MANSION OF MODERN FREEDOMS

One of the terrible ironies of our having refused to act on the warnings issued by climate scientists for so long is that, as McKibben tells it, there once was a time—and not all that long ago—when changing course would have been relatively painless, would have required far less sacrifice, disruption, and "unfreedom" than it will now. By wantonly whipping past that point, and by squeezing the amount of time we have left to deal with the problem into a matter of years, we have managed to ensure that the necessary interventions will both bring far more disruption and make less of a dent in the problem, thus failing to obviate suffering and loss that could have heen avoided had we acted sooner. (Our national response to COVID-19, McKibben has pointed out, has followed a similar course.)9

As a problem gets harder to solve, ignoring it becomes all the more tempting. Ignore it long enough, and eventually it becomes unsolvable. Giving up can then seem to deliver a measure of relief, in that it appears, at least for a moment, to liberate us from the agonies of our failing efforts. But such relief cannot last, as the unsolved problem will continue to create problems and cause suffering. This suffering rarely feels like freedom.

In 2011, Naomi Klein attended the Heartland Institute's Sixth International Conference on Climate Change, "the premier gathering for those dedicated

to denying the overwhelming scientific consensus that human activity is warming the planet," and reported on the discourse of freedom she found there. As Klein tells it, the Heartlanders deeply believe-or at least purport to believe-that climate change is "a plot to steal American freedom." As a senior fellow told the crowd, "You can believe this is ahout the climate, and many people do, but it's not a reasonable belief. [The issue is that] no free society would do to itself what [the global warming] agenda requires." According to this logic, even if global warming were not a nefarious "collectivist" or Chinese hoax (as many Heartlanders believe it to be), it would still have to go unaddressed, as a truly "free society" would opt for a suicidal course rather than acquiesce to the "freedom-killing" modifications in fossil fuel extraction or consumption that addressing the problem requires. (Unsurprisingly, Klein reports that Give me liberty or give me death rhetoric abounds at Heartland, often cast through the lens of attachment to household appliances. "You can pry my thermostat out of my dead cold hands," one participant declaimed. COVID has brought out a similar sentiment, and not just from the fringes: as Representative Trey Hollingsworth (R-IN) told a radio reporter in April 2020, "It is always the American government's position to say, in the choice between the loss of our way of life as Americans and the loss of life of American lives, we have to always choose the latter." If only such loss-of lives, of species, of habitable regions-could be restricted to those who have agreed to it-but, alas, our interdependence stops nowhere.)

One could argue that the philosophical discourse about freedom at such gatherings—like that of the "Free Speech Week" planned and then abandoned by right-wing activists at UC Berkeley in 2017—is deliberately unserious, a means of giving intellectual and pseudoscientific cover to oil and gas executives while they pile fortune onto fortune (unsurprisingly, the petroleum industry finances the work of many of the "climate realists" featured at Heartland). One could even argue that Heartland acts as a troll within a troll, in that right-wing climate denialism is itself a sort of hoax: Exxon and other oil giants have known for decades about the science of global warming-and have believed it-with the difference being that they made the strategic decision to inculcate climate denialism in

others in order to buy more time to drill and sell-a decision McKibben calls "the most consequential deception in mankind's history."10

Klein, however, is willing to take seriously the debate about freedom on offer at Heartland, in part because she thinks that the Heartlanders apprehend the nature of the problem better than the "green capitalists" do. The Heartlanders are right, Klein says, when they say that climate change isn't really an "issue." Rather, she says, "climate change is a message, one that is telling us that many of our culture's most cherished ideals are no longer viable." These ideals-shared by people on both the right and left, Klein explains-involve a paradigm of a civilization hased on progress and expansion rather than one based on an apprehension of and respect for natural limits, including the limits of human intelligence, and the material, planetary parameters that make human life possible. The hard lesson climate change has for freedom, Klein argues, is that the only way humans can stick around to practice it is by ceasing to conceptualize it as the defying of limits, and reimagining it as the practice of negotiating with the various material constraints that give our lives shape and possibility.

This seems right to me. The fact is that our bodies can survive only within a narrow range of conditions—as McKibben has it, "When temperatures [pass] thirty-five degrees Celsius (ninety-five degrees Fahrenheit) and the humidity [is] higher than ninety per cent, even in 'well-ventilated shaded conditions,' sweating slows down, and humans can survive only 'for a few hours, the exact length of time being determined by individual physiology."11 No matter our truly impressive reserves of ingenuity and resiliency, no matter the bubblesuits a costume designer imagines we might someday wear in that fabulous Mars terrarium, no matter the celebrities taking field trips to experience weightlessness at Zero G facilities, no matter the Google executives trying to upload their consciousnesses to the cloud, we cannot and will not escape the constraints that constitute the parameters of our mortal existence, such as our need for water, food, air, shelter, and love, nor do I see why we would want to. Accepting and working with such constraints, rather than hoping to be liberated from them by some unforeseeable technofix, divine intervention, or bloody boogaloo, demands a more sensible, some might say a more grown-up, conception of freedom. (Massumi: "You can't really escape the constraints. No body can escape gravity. Laws are part of what we are, they're intrinsic to our identities. . . . Freedom always arises from constraint—it's a creative conversion of it, not some utopian escape from it.")

The divide between those who want to drill, baby, drill, and those who want urgent action on the climate, often gets posed as a struggle between those who value freedom (imagined as the freedom to excavate whatever one wants, make whatever profit one wants, consume whatever one wants, do whatever one feels like doing in the moment) and those who value obligation (imagined as the duty to be good stewards of the earth, cohabit it responsibly with the millions of life-forms whose fate is linked to ours, take into account the well-being of future generations). The problem with this binary is that it risks reducing "obligation" to moral hectoring, and "freedom" to a cheap, self-serving hedonism. Neither helps us seize the moment to shed some of freedom's more exhausted-and toxic-tropes and myths, or to experiment with its next iterations. We could imagine, for example, restraint as a choice, as in the restraint needed not to extract the 80 percent of the fossil fuel that remains underground, in order to maintain the conditions of possibility for ongoing human life. (Obviously a veneration of restraint means and applies differently depending on the circumstances: for example, the poor cannot and should not be expected to "restrain" themselves from making a living in the sole ways available to them.) As the state of addiction makes clear, repetitive, compulsive sating of our immediate desires rarely leads to emancipation. And yet, before we mock those who find freedom in air-conditioning, solitary driving, disposable wrapping, plastic straws, hamburgers, or frequent airline travel, we might note that many of us have similar feelings and attachments: the goal is to invent new norms that feel palatable—desirable, even—to people, not to shame them for their cathexis to comforts and ways of living in which we share.

Rethinking freedom in the context of climate change also invites us to consider how the concept itself—like all concepts that have itinerantly preoccupied the human mind—has been shaped not just by human-made

phenomena (slavery, technology, distinct forms of government, and so on) but also by the nonhuman materials and forces with which we've been partnering, consciously or not. Historian Dipesh Chakrabarty's 2009 essay "The Climate of History: Four Theses" is instructive here, in that in it Chakrabarty asks us to see the entire modern history of freedom in its geological context:

In no discussion of freedom in the period since the Enlightenment was there ever any awareness of the geological agency that human beings were acquiring at the same time as and through processes closely linked to their acquisition of freedom. Philosophers of freedom were mainly, and understandably, concerned with how humans would escape the injustice, oppression, inequality, or even uniformity foisted on them by other humans or human-made systems. Geological time and the chronology of human histories remained unrelated. This distance between the two calendars, as we have seen, is what climate scientists now claim has collapsed. The period I have mentioned, from 1750 to now, is also the time when human beings switched from wood and other renewable fuels to large-scale use of fossil fuel-first coal and then oil and gas. The mansion of modern freedoms stands on an ever-expanding base of fossil-fuel use.

Chakrabarty's thinking here is tantalizingly porous, insofar as he notes a temporal and structural relation between fossil fuel use and the "mansion of modern freedoms" without hammering out its exact nature. (His phrase "mansion of modern freedoms" may jar, as he's talking about the same 250 years that contained peak transatlantic slave trade, colonization, industrial pollution, and more. But Chakrabarty knows all this, so I'm guessing the mansion he has in mind is the sum total of discourse generated by human beings about freedom during this period, not the equitable distribution of it.)

Thankfully, other historians and scholars have filled in many of the gaps-Timothy Mitchell's Carbon Democracy: Political Power in the Age of Oil, 186 Maggie Nelson

for example, offers a historical account of the linked development of modern democracy and oil to demonstrate how "fossil fuels helped create both the possibility of modern democracy and its limits." "Rather than a study of democracy and oil," Mitchell writes, "[this] became a book about democracy as oil."12 As Mitchell tells it, fossil fuels created the conditions of possibility for people to gather, organize, and mount challenges to oligarchical forms of rule, thus enabling modern democratic politics, including revolutionary politics. But insofar as these movements have tended to treat ecological limits as extrinsic to their cause, and imagined the future as a "limitless horizon of growth," they, too, have not been able to keep us from the maddening situation we are now in, wherein democratic governments appear incapable of doing what it takes to ward off catastrophic warming.

The entanglement of modern democracy with fossil fuels does not necessarily mean we have to quit the former in order to wean ourselves off the latter (I remind myself of this whenever I find myself drifting toward ecofascist fantasy-like, What if we just allowed an environmentalist dictator to take power for a teensy bit of time, just long enough to force us all to stop emitting CO,, so that we have a chance of continuing any experiment in human governance). As Mitchell makes clear, just because forms of energy shape our politics does not mean they determine our politics. The more alert we are to this dynamic, the more we can engage thoughtfully and inventively with it, and wrestle with the proposition that "the building of solutions to future energy needs is also the building of new forms of collective life." (This is what Haraway is getting at when she says, "It matters what matters we use to think other matters with; it matters what stories we tell to tell other stories with; it matters what knots knot knots; what thoughts think thoughts. . . . Think we must, we must think.")

To date, we have all thought modern freedom with oil, whether we aimed to or not. Carhon powers the very equipment by which our thoughts and voices and bodies reach one another; it powers our public conversations about the nature of freedom, autonomy, justice, and self-governance, from street protests to conference panels to Twitter wars. It even powers the ways in which we love our children: "Someday I must tell my son what I have done," NASA climate scientist Kate Marvel writes. "My comfortable, safe life is in large part a product of the internal combustion engine. Fossil fuels power the trains that take us to the beach, the factories that make his plastic bucket and spade, the lights I switch off when I kiss him good night. . . . In the end, I am responsible for the gases that are changing the climate and, in raising my son in comfort and convenience, am passing on that responsibility and guilt to him." Even if our apprehension of deep time is minimal (as I believe mine to be), I believe that something inside us perceives the fundamental chasm between the millions of years it took for fossil fuels to accrue, and the mind-boggling speed at which we have extracted, consumed, and excreted them. The awe my son felt at Travel Town was justified: we should feel awe in the face of the energy we've generated by burning deep time in no time. Our own bodies have been shaped by this power, through the speed of planes, trains, automobiles, and cybercurrents, all of which have become integral to our conception of freedom. We often take freedom to mean freedom of movement—be it the freedom to leave behind a bad scene for a (hopefully) better one; the freedom to leave behind cramped origins and forge new kinships in a bigger, more anonymous, place; the freedom to choose the unknown over the known. Capitalist, abolitionist, queer, and revolutionary consciousnesses alike have depended on such dreams and desires, some of which are dear to my own heart.

I grew up, after all, in California, where my adolescent freedom was synonymous with driving my 1976 VW bug on the open road; after a long, carless sojourn in New York City, I have since returned to the gospel of solitary driving (or so I had before the pandemic-now my car collects dust in the driveway, which turns out to be its own form of freedom—the freedom of not having to go anywhere, which vibrates uncomfortably beside the feeling of there being nowhere to go). For the many years I lived in New York City-and even now, in my melancholic exile from it-poet Frank O'Hara's words from "Meditations in an Emergency" always spoke my heart: "One need never leave the confines of New York to get all the greenery one wishes—I can't even enjoy a blade of grass unless I know there's a subway handy, or a record store or some other sign that people do not totally regret life." The paid labor

I perform in the world is exclusively cultural, and I like it that way; the only two jobs I've ever really had have been that of waitress/bartender and professor/writer. I cherish the anonymity and plethora of metropolises, have no special love of "the local," and harbor no anticiv fantasy of going "hack to the land." I don't even garden. As British theorist Mark Fisher once wrote in a spasm of cosmopolitan honesty, "Hands up who wants to give up their anonymous suburhs and pubs and return to the organic mud of the peasantry. Hands up, that is to say, all those who really want to return to pre-capitalist territorialities, families and villages. Hands up, furthermore, those who really believe that these desires for a restored organic wholeness are extrinsic to late capitalist culture, rather than fully incorporated components of the capitalist libidinal infrastructure." It is intimidating, then, as well as rousing, to wonder what can and will happen to our conception of freedom when we begin thinking it, feeling it, living it, apart from so many of our current fetishes and habits. But this experiment is a necessary and worthwhile one, as only a fundamentally nostalgic, claustrophobic view of freedom would insist it stay allied to one technology of energy production, especially if and when continued reliance on that technology ensures painful new constrictions and claustrophobic new forms of suffering. (These are not abstract: I'm writing today with all the windows in my office taped shut and rowels stuffed under the doors to block out the hazardous wildfire smoke seeping in from all sides. Think we must, we must think.)

The good news for those of us whose hands stayed down is that "postciv" will not and need not resemble "pre-civ" or "anti-civ." As Bruno Latour has made clear, the opposition of the local and the global is pretty much spent: "The planet is much too narrow and limited for the globe of globalization; at the same time, it is too big, infinitely too large, too active, too complex, to remain within the narrow and limited borders of any locality." Climate change has revealed how local actions have global effects, and that those global effects are invariably experienced locally. Rather than continuing to think in terms of local/global-or right/left-Latour argues (persuasively, I think) that it would be more fruitful to think in terms of the Terrestrial/Out-of-This-World, with the Out-of-This-World signifying the abandonment of even the pretense of a

shared earth and common future and the subsequent mission of "get[ing] rid of all the burdens of solidarity as fast as possible," and the Terrestrial signifying a willingness to "come down to Earth," accept our entangled state, work with it and each other. Latour's approach encourages us to move beyond increasingly antiquated debates about freedom as hig vs. small government, totalitarianism vs. democracy, and start thinking about freedom ecologically, which involves reckoning with the limitations and possibilities of our shared environment, rather than hoping for walls, moats, ethnostates, apocalypse retreats, treasure troves, or spacecrafts to sever us from it.

None of this will sound novel to anyone who has but dabbled in feminist, environmentalist, postcolonial, or Indigenous thought, all of which has long pointed out, albeit from distinct angles, the various intellectual, ecological, and ethical errors-aka catastrophes-that have ensued from the presumption of a bounded individualism separate from and superior to a supposedly inert Nature.13 "Many humans, particularly those under the seductive spell of Western Enlightenment thought, had for centuries insisted that they existed on a plane far above the base material world around them because their ontology was one of creation and self-creation. Humans were subjects, never objects," writes historian Timothy LeCain. "Yet what happens when humans' thinking and creating results not in their transcendence of nature, but their abrupt descent back into it? This is precisely the phenomenon occurring with anthropogenic global warming." Throughout these very same centuries, however, many humans have been treated as objects. What's more, those objects did and do fight back (cf. the opening of Moten's In the Break: "The history of blackness is testament to the fact that objects can and do resist"). They resist not only their masters, but also notions of freedom or humanity that depend upon the domination or transcendence of a base material world with which they are repeatedly aligned. (Hence, Hartman's argument in Scenes of Subjection that the abstract, universal subject of liberalism has always depended upon the "fleshy substance" of castigated subjects in order to achieve and maintain its "ethereal splendor," a construction that ensures injustice even as it promises liberation.)

Acting upon entanglement—like acting on care—is more difficult than simply professing fidelity to the principle: the master-slave relation is a form of entanglement, too. Think, for example, of how feminist physicist Karen Barad's notion of "living ethically," defined as constantly "taking account of the entangled phenomena that are intrinsic to the world's vitality and being responsive to the possibilities that might help us and it flourish," mixes up with Morton's observation that "because of interconnectedness, it always feels as if there is a piece missing. Something just doesn't add up. We can't get compassion exactly right. Being nice to bunny rabbits means not being nice to bunny rabbit parasites." This notgetting-it-exactly-right means that there will always be occasions for disagreement, be it about the "we" who is to flourish (bunny rabbit or bunny rabbit parasite?), the meaning of "flourish," and so on. Even if the type of freedom we value most is that of the "nobody's free until everybody's free" variety, such interdependence cannot spare us difficult trade-offs, ethical dilemmas with imperfect and sometimes even brutal outcomes. Our entanglement is above all complex, and complexity leads to difficulty. That difficulty is easier to bear once we recognize that our desire to solve it once and for all may also signify our desire to no longer be a part of it.

OUR CHILDREN AND THE CHILDREN OF OUR CHILDREN

Given the weird temporal situation we currently find ourselves in, wherein our past actions have locked in a certain amount of warming whose effects we have begun to experience, as we barrel toward significantly more intense effects in the not-so-distant future (with the terrifying possibility of runaway acceleration), it's unsurprising that so many people writing and thinking on the climate have found themselves grappling with the dizzying notion of futurity itself. More often than not, this grappling relies upon the figure of the child. I myself performed such an invocation in the opening pages of this chapter, in part because it felt "natural," and in part to set the stage for further questions.

Many movements aiming to "make the world a better place," from Black Lives Matter to Fridays for Future to Standing Rock to Never Again to

Families Belong Together, frame their actions as service to children and the unborn. ("This moment requires you to ensure your own freedom," said BLM activist Tamika Mallory in a 2020 speech in the wake of the murder of George Floyd. "And the freedom of your children-horn and unborn.") In other words, they make recourse to reproductive futurism, defined by queer theorist Lee Edelman in his polemic No Future as the twofold idea that there is a future we can and should make better, and that the Child is its emblem. No Future provocatively posits itself against this ideology, proposing that "queerness names the side of those not 'fighting for the children,' the side outside the consensus by which all politics confirms the absolute value of reproductive futurism." Many have taken Edelman up on this provocation—some, to disagree with it (see, for example, the late José Muñoz, who argued passionately that "queers have nothing but a future," and called Edelman's antifuture stance "the gay white man's last stand"); others, to extend its lens to any number of novels, movies, environmental campaigns, political speeches, or personal decisions in which reproductive futurism can he sniffed out and rebuked.14

Given that queers have long heen punished, often violently, for being perceived as threats or outsiders to reproductive futurism-and given how much kinship and culture they have been able to construct outside of it—it makes sense that a strand of queer theory would spend time uncovering and valorizing the "queer temporalities" repressed or occluded by straight norms. Jack Halberstam's In a Queer Time and Place (2005), for example, takes on something Halberstam calls "repo time," in all its micro and macro manifestations: "Family time refers to the normative scheduling of daily life (early to bed, early to rise) that accompanies the practice of child rearing. This timetable is governed by an imagined set of children's needs, and it relates to beliefs about children's health and healthful environments for child rearing. The time of inheritance refers to an overview of generational time within which values, wealth, goods, and morals are passed through family ties from one generation to the next." In "Paranoid Reading and Reparative Reading," Sedgwick addresses the perils of "paranoid temporality"—the "dogged, defensive narrative stiffness . . . in which yesterday can't be allowed to

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have differed from today and tomorrow must be even more so"—that Sedgwick sees as intrinsic to the "generational narrative that's characterized by a distinctly Oedipal regularity and repetitiveness: it happened to my father's father, it happened to my father, it is happening to me, it will happen to my son, and it will happen to my son's son." In *Staying with the Trouble*, Haraway sets forth the anti-reproductive-futurism slogan "Make Kin Not Babies!," by which she attempts to fuse the queer capacity for nonbiological kinship with ecological concerns about overpopulation and anthropocentrism.

Such theorizing has been crucial to recognizing, and sometimes enacting, forms of kinship and temporality not based in the heterosexual, privatized, white, nuclear, or even human family. Unfortunately, however, as often happens in academia, such critiques have at times slid into a knee-jerk dismissal of anything perceived to be contaminated with reproductive futurism, which includes, at this point, most major forces in the climate fight, which is partly being led by children themselves. (Think of teenage activist Greta Thunberg, who, along with fifteen other children, lodged an official complaint to the United Nations' Committee on the Rights of the Child against nations failing to meet the emission reduction targets they agreed to in the Paris Agreement; the Sunrise Movement, "an army of . . . ordinary young people who are scared about what the climate crisis means for the people and places we love"; the twenty-one youth plaintiffs in Juliana v. the United States, a 2015 lawsuit alleging that the US government's inaction on climate science "deliberately discriminat[es] against children and future generations in exerting their sovereign authority over our nation's air space and federal fossil fuel resources for the economic benefit of present generations of adults"; the thousands of kids who have taken to the streets as part of the Youth Climate Strike; and more.) As so often happens when adults must listen to actual children rather than hide behind the pabulum of reproductive futurism (or the punk bravado of its no-future antithesis), the real difficulties of intergenerational conversation come to the fore.15

In such a context, Edelman's refusal to "[abjure] fidelity to a future that's always purchased at our expense," or Lauren Berlant's 1997 lament that

"a nation made for adult citizens has been replaced by one imagined for fetuses and children," or Andrea Long Chu's quip that "having a child, like heterosexuality, is a very stupid idea. . . . Children are a cancer," begin to sound more passé than avant-garde, insofar as they reify the division between children and adults, with adults the privileged category. In other words, it's hard to get excited about queerness as a force come to "ruptur[e] our foundational faith in the reproduction of futurity" (Edelman) when climate change is accomplishing the same goal, to catastrophic effect. Ask the kids of *Juliana v. United States* what they think about the foreclosure of generational regularity and repetition; ask the child complainants to the UN whether the real problem is that we've imagined a world made solely for "fetuses and children"; ask anyone whose homeland or livelihood has been obliterated by climate change how they feel about the fact that their yesterday will not resemble their tomorrow.

The point isn't that reproductive futurism was right all along, and now that queers have become more welcomed into its fold, we should all just pile in and swallow it whole. It's more that all replication is not created equal: environmental activists making recourse to reproductive futurism do not want to reproduce the same world that brought us radical inequity and ecological devastation. They want a world that reproduces the same or similar conditions of habitability that other human animals have been able to enjoy for the past 11,500 years. Likewise, while it's well and good to say (as does Rebekah Sheldon in The Child to Come) that we need to learn how to live "without the demand for safety and the pleading face of the child that is its warrant," all safety is not created equal either. The climate fight—like the fight for racial justice, with which it is inextricably linked-absolutely has to do with a demand for increased safety, insofar as it is about reducing the threat of premature death or extinction for those disproportionately exposed to it, be it at the hands of police, the torching of the Amazon, or a rising tide. No wonder, then, that certain queer groups have begun to shift course: see, for example, the collective Parliament of Bodies, whose most recent summit in Bergen, Norway, named its goal as figuring out "how to redefine our alliances with those who are not presently living . . . [and take] responsibility for those who are no longer, or not yet, here," or the Institute

of Queer Ecology (IQECO), "a collaborative organism" whose "mission is to make space for collectively imagining an equitable, multispecies future."

By this point I've lost count of how many people have confided to me their feeling that, since having children is a "choice," why should there be "special treatment" for those who opt to procreate (tax credits, special scheduling favors at work, universal daycare, and so on)? In response to such sentiments—which unintentionally echo the right-wing push to defund social services, including public education—opinion writers across the land churn out various entreaties as to why we should care about children, especially the children of others. These arguments vary by the writer's commitments: sometimes children matter because they are a future national citizenry; sometimes they are the bearers of tradition for a disappearing or oppressed people; sometimes they are future taxpayers; sometimes they are future revolutionaries; sometimes they are our future nurses and home caregivers. If these arguments convince some people to care more about other people's children or future lives more generally, great. But they strike me as a bit bizarre, in that it has always seemed to me that children matter simply because they matter—they are our fellow humans, alheit smaller ones with differing levels of need. They are not a separate species; they are already as well as forthcoming. In fact, they were us, they are us, even if we tend to forget it (and by forget, I really mean forget, in the Winnicottian sense that good-enough parenting allows the baby to forget the experience of being held, whereas the parent's charge is to keep remembering the baby). Championing the unborn has become understandably dicey business. But there's no reason that antiabortionists should get to rob us of recognizing and valuing the continuum between current and potential life (a continuum sometimes epitomized for me by the astonishing, if overtly biological, fact that a baby born with a uterus already has within it all the eggs it will ever have, which means that the egg cells that might one day become the grandchildren of a gestating mother have already lived inside her).

Caring for the unborn does not mean insisting that all unborn things be born. It means accepting that, by the time you have finished reading this

paragraph, about 250 more babies will have been born into a future that didn't exist when you began it. So before we bliss out on some sublime indifference to that which will postdate us, we might recognize that indifference to their fate is arguably no different from dumping a bunch of toxic waste guaranteed to poison whoever comes into contact with it, then contending that, because you won't know the sickened people personally or won't be alive when they get sick, or because you just aren't that into people anyway, especially small ones that cry on airplanes, you're off the hook. One does not need to he an advocate of fetal personhood, haby showers, the Disneyfication of Times Square, or treating present and future beings as ethically identical to recognize that this logic is morally preposterous.

The climate crisis cannot wait until we have purged people of their allegedly wrongheaded attachment to reproductive futurism. It cannot wait until everyone around the globe has embraced "Make Kin Not Babies!" Doubling down on the conviction—so common in academic and leftist circles—that if we could just agree on the correct framing of the issue (or if we could at least all agree on what frame definitively to jettison), we would be closer to forging the kind of livable collaborations necessary for coexistence and survival, has become a waste of time we don't have. Rather than seek one singular frame to mobilize people on climate issues, we would likely benefit from getting more comfortable with diversity, enacting what Félix Guattari once imagined (in The Three Ecologies) as "a plurality of disparate groups [coming] together in a kind of unified disunity, a pragmatic solidarity without solidity."

About an ecological dispute in Manggur, Indonesia, that brought parties with vastly different priorities and outlooks together to oppose a logging company, Connolly writes, "The emergent assemblage did not become a unity, let alone a community; it became a moving complex of interests, concerns, and critical perspectives with a few shining points of affinity and commonality. All, for instance, opposed the logging company, but some pursued a wilderness ideal, while others sought to retain the forests as living sites of human-forest-animal-plant intersection. Even the victory did not look the same to all the parties involved." Even the victory did not look the same to all the parties involved: this kind of dissonance

does not mean anything went wrong. It means that people are different from each other. Given that close to half the people in the United States have developed an attachment to climate denialism (and/or its twin, a me-first survivalism) so intense that some are willing to take up arms against decarbonizing, we are going to need a lot of help and wisdom in navigating these differences. Many of these folks aren't on the cusp of discovering a queer, multispecies sense of ecojustice. But they may come to feel that the freedom not to lose your home, your health, your livelihood, your food supply, or future possibilities for your children and the children of your children is also worth fighting for. They may also have things to teach us ahout freedom, care, and constraint that we don't already know, even—or especially—when we already think we do.

WHAT HAS THE FUTURE EVER DONE FOR ME?

When economists contend with global warming, they engage in a process called "future discounting," in which one "weighs future people's benefits against costs borne by people in the present." In contemplating the future, one can ascribe to it a high or low discount rate: as climate researcher David Hodgkinson explains, "If a cost henefit analysis uses a high discount rate, it discounts future henefits to a high degree, giving little weight to the interests of future people." If one uses a low discount rate, then the present generation is called upon "to make urgent sacrifices for the sake of future people." Economists and politicians have basically been future-discounting their asses off, ascribing "a lower weight to human interests the further they are in the future just because of the fact that they exist in the future." As Hodgkinson explains, "The prevailing view at the international level about action on climate change seems to be, 'Why should I care about future generations? What have they ever done for me?" One scarcely needs to point out the conflict between this prevailing view and that which would insist, as does the Iroquois (Haudenosaunee) Constitution, that we must "look and listen for the welfare of the whole people and have always in view not only the present but also the coming generations, even those whose faces are yet heneath the surface of the ground—the unborn of the future Nation."

Navigating between the extremes of obligation-to-none/obligation-to-all is no easy matter. Even if and when we lean toward the latter, our ambitions are seriously challenged by questions of scale and capacity, not to mention the fact that, when it comes to care, there is no such thing as getting it exactly right. "Being nice to bunny rabbits means not being nice to bunny rabbit parasites." What's more, the attempt to urge "species thinking" upon people without taking into account the difficulties they might face in meeting the needs of their most immediate kin has its own ethical problems (which is why organizations like the Just Transition Fund, a group devoted to communities most directly destabilized by the transition away from coal, emphasize that the "most sustainable solutions are community-driven, developed by those most affected, and built from the ground up").17

In the realm of climate negotiation, the problem of variegated obligation actually has an acronym: CBDR-RC, UN lingo for "common but differentiated responsibility and respective capabilities." CBDR-RC negotiations, which aim to address the fact that nations have distinct histories and present challenges when it comes to reducing carbon emissions, justly play a role at any international summit about climate change. Such negotiations are notoriously thorny, and contribute to rendering climate change not just a "wicked problem," defined in 1973 by professors Horst W. J. Rittel and Melvin M. Webber as one that "has innumerable causes, is tough to describe, and doesn't have a right answer," but a "super wicked problem," defined in 2012 by professors Kelly Levin, Benjamin Cashore, Steven Bernstein, and Graeme Auld, as a wicked problem with four added features: "time is running out; those who cause the problem also seek to provide a solution; the central authority needed to address it is weak or non-existent; and, partly as a result, policy responses discount the future irrationally." These four additional features, the researchers say, "combine to create a policy-making 'tragedy."

In the face of this difficulty—or, for those already there, this tragedy some thinkers and writers have started to take a different tack altogether, asking us to question the knee-jerk belief that "survival is always better than non-survival," as Morton has put it. Morton sees this preference for survival at all costs at the core of something he calls "agrilogistics"—a modality he says developed in Mesopotamia at the end of the Pleistocene/ start of the Holocene, when humans shifted from nomadic huntinggathering to settled-down agriculture. Over time, agrilogistics scaled up, "eventually requiring steam engines and industry to feed its proliferation." In this version of the story, the steam engine marks not the beginning of a new way of thinking or being, but the moment at which a much older habit or logic found expression in an energy source capable of making a geologically transformative mark.

Because agrilogistics predates industrial capitalism by thousands and thousands of years, Morton—along with some other political and earth scientists—considers industrial capitalism more a symptom than a cause of our predicament. Certainly there is no shortage of villains responsible for our current situation (a definitive cast of characters takes shape after 1965, when the American Association for the Advancement of Science delivered the news to President Lyndon Johnson about the causes and effects of accumulating CO_2 in the atmosphere). But the wider lens used by Morton, Chakrabarty, and others—along with Chakrabarty's provocatively compassionate contention that we "stumbled into" our current predicament—also seems worth bearing in mind, even if it chafes against the habit of blaming capitalism for everything.

If agrilogistics developed as a means for humans to better assure their security and survival and has led to the current crisis, then, as Morton argues, "a survival paradox emerges: the attempt to survive at any cost . . . is precisely the dynamic of murder-suicide." In the face of such a paradox, Morton thinks we would do well to shed our attachment to the axiom that "existing is better than any quality of existing" (or, more particularly, that "human existing is always better than any quality of existing"). He wants us to unsettle our unquestioned dedication to the idea that "no matter whether I am hungrier or sicker or more oppressed, underlying these phenomena my brethren and I constantly regenerate, which is to say we refuse to allow for death."

I'm up for thought experiments that allow for the reality of death, and destabilize our knee-jerk conviction that the survival of *Homo sapiens* is that

which matters most. But I scarcely think anyone should get too comfortable with white, first-world intellectuals—me included—musing about what conditions for life merit its continuation, and which forms of suffering (be it hunger, sickness, oppression, or the various deprivations certain peoples have imposed upon others) disqualify a life from perpetuation. At times people choose death rather than continue in gravely oppressive circumstances, or to avoid the near surety of a horrifying fate, or to save the life of another. But if and when someone else makes such a judgment call on behalf of another, or upon a demographic, it's justly called murder, or genocide.

Many branches of radical ecological thinking edge into this territory, insofar as grappling with systemic threats to the biosphere as we know it often demands a kind of zoomed-out perspective on humanity and planet that can prompt deeply unnerving paradigm shifts and proposals. Survival (and, some would say, reproduction) are (arguably) core instincts; philosophers excel at asking us to rethink and recalibrate rote behaviors, helping us to imagine—to feel, to know—that things could be otherwise. We could be otherwise. Our method of inhabiting the planet could be otherwise. Our attitude toward death, including our own individual deaths or that of our species, could be otherwise. Our attitude toward reproductive futurism could be otherwise. Our attitude toward nonhuman forms of life could be otherwise. Our negotiation, distribution, and conceptualization of freedom and obligation could be otherwise. Despite our instinct to preserve "civilization" (cf. Elon Musk's ethos, which he says he derived from Isaac Asimov: "You should try to take the set of actions that are likely to prolong civilization, minimize the probability of a dark age and reduce the length of a dark age if there is one"), it's absolutely worth questioning whether its preservation should be our aim no matter what. I agree that the problems before us are not thinkable unless we are willing to experiment with the type of perspective that environmental scholar Laura Watt models when she says: "As climate change shifts things in new and unpredictable ways, I have no doubt that planet Earth will survive, and that various aspects of the biological world will adapt and evolve accordingly. Change will happen, as it always does, and those changes are not necessarily 'good' or 'bad'

in a nonhuman sense; is it better or worse to have a predominance of mammals versus dinosaurs? Neither—these are just different outcomes. What gives climate change its most terrifying charge is the very real possibility that we will not survive it—although again, better or worse to have people around? From our perspective, better, but otherwise it's just another possible outcome on an ever-shifting planet."

The trick is learning how to move between the kind of open-ended thought experiments undertaken by Morton, the big-picture equanimity here evidenced by Watt, and the impassioned, fighting spirit of an activist like Heglar, as when Heglar declares: "Even if I can only save a sliver of what is precious to me, that will be my sliver and I will cherish it. If I can salvage just one blade of grass, I will do it. I will make a world out of it. And I will live in it and for it." Moving between these modes is not just an intellectual exercise. It involves letting ourselves be flooded by ferocious love, and experimenting with how that same love feels with a lessened grip.

UGLY FEELINGS, REVISITED

Talk to anyone about global warming for just a couple of minutes and you're likely to get some variation on "I just can't deal." It's too depressing, too overwhelming, too paralyzing, too sad, too frightening, too unimaginable. I get it. I don't actually think we can or should be able to contemplate in any casual way living through—not to mention causing—a sixth mass extinction that may eventually wipe out life on earth as we know it, including "our children and the children of our children." Given all the intense, daily demands on people's time and hearts, it seems fair enough to ask: When is the right time to grapple with climate-related feelings of anxiety, fear, rage, grief, and impotence—feelings that, when experienced in their entirety, threaten to feel bottomless or incapacitating? Especially since, as any student of anxiety knows, catastrophizing about the unknowable future is not a very productive or happy-making activity, and does surprisingly little to strengthen our capacity to cope. And who really cares how we feel, anyway, when the real business in front of us should

undoubtedly be action? Why on earth would I continue, at this moment in time, to perseverate on feelings, rather than lobby for the Green New Deal, advocate for reduced consumption of plastic and meat, be of service to those more vulnerable than myself, or just protest madly?

The inverse relationship between the scale of the climate problem and our difficulty in engaging with it emotionally isn't just a cruel irony, or another opportunity to squabble over the proper traffic between the personal and the political. It is one of the structural features of the crisis. So I'm focusing here on feelings, especially ugly ones, not only because I think they're standing in the way of something we like to call "action," but also because, whether we "act" in time to stave off a truly catastrophic rise in temperature or not—and we may very well not—they still matter, insofar as they shape our experience of our lives, determine how we treat others, and decide the ways we are able to "stay with the trouble," sometimes even determining whether we are able to do so at all.

We all struggle with what it means to "know" about global warming, even as we are living it. As Edward Morris and Susannah Sayler of the Canary Project point out, "knowing" is distinct from "believing" as, by their account, true belief would spur action, yet we do not act. (It would help, of course, if we felt surer about what actions to take, or if we had a stronger sense of the collective into which our individual actions poured.) As Morris puts it, "Belief is a function of feeling. We can only believe in climate change—by which I mean not the statistically created research object, and not even the hyperobject, but rather the cost in terms of pain that climate change will cause—when we are opened emotionally to it. Pierced." He and Sayler have described this awakening as a type of rupture or trauma. Those who have borne the brunt of climaterelated trauma have already been delivered unto this awakening; those who have not face something of a paradox, wherein the continued refusal to be pierced on behalf of others may be precisely what ensures that climate-related trauma will come to them as well.

And yet, once pierced, then what? Who or what is supposed to aid us in navigating this rupture? How can we learn to move in and out of these

bursts of feeling, such that we feel neither subsumed by their intensity nor driven to repression?

Asserting the legitimacy of one's feelings—including one's ugly feelings can be important, especially when one's being gaslit. And in a real, even literal, sense, we are all being gaslit, insofar as our so-called leaders are definitively not leveling with us about the facts of our ecological present or future. As the manifesto of the Dark Mountain Collective-a UK-based group of artists and writers dedicated to "uncivilization"states: "We hear daily about the impacts of our activities on 'the environment' (like 'nature', this is an expression which distances us from the reality of our situation). Daily we hear, too, of the many 'solutions' to these problems: solutions which usually involve the necessity of urgent political agreement and a judicious application of human technological genius. Things may be changing, runs the narrative, but there is nothing we cannot deal with here, folks. We perhaps need to move faster, more urgently. Certainly we need to accelerate the pace of research and development. We accept that we must become more 'sustainable'. But everything will be fine. There will still be growth, there will still be progress: these things will continue, because they have to continue, so they cannot do anything but continue. There is nothing to see here. Everything will be fine." To which the Collective replies: "We do not believe that everything will be fine."

I don't believe that everything will be fine either. I don't actually know anyone who thinks everything will be fine, or anyone who could say, with a straight face and clear heart, that we are on track to leave behind a healthy, habitable planet that will sustain the miracle of biodiversity along with our children and the children of our children. But despair and depression are not the only possible responses to this fact, however sensical they may be. Despair tends to make a disproportionate claim on our thinking and feeling, as it is "the only thing which can he understood, explained and amply justified" (Stengers). It has, or it appears to have, a truth-value that joy, optimism, and happiness do not. When we are in its grip, optimism and happiness appear foolish: when the true horrors of the past, present, or future are revealed to us—the bitter, cruel, inevitable

realities of life and death—we will rue any childish, illusory feelings of freedom, peace, or goodness we were once naive enough to entertain.

For some time now scholars and activists have tried to mine ugly feelings such as depression, fear, panic, paranoia, rage, jealousy, and shame for their political value.¹⁹ Culp, for instance, laments that "most soberminded critics find the uglier of our shared feelings unfit for something as noble as liberation," and argues that using negative affects as the basis of shared liberation is a possibility "only visible to those who have given up on the illusion that positive affects draw out the best in people." I agree that one must move through negative affects and not around them. But it seems to me there is a crucial difference between accepting their existence-being curious about them, giving them space, depathologizing them, understanding their cause and potential energy, not treating them as enemies to be purged from our psychic or collective lives-and believing that they signify the ultimate in radicalism or utility, or imbuing them with a kind of truth or use value that exaggerates both their significance and solidity. Habits of mind tend to produce more of the same habits of mind; negative affect is no different. And while positive affects may not always draw out the best in people (whatever that means), the idea that negative affects therefore do belies all of my experience of them (not to mention of those folks who merrily feed their fire).

Scholars Ann Cvetkovich, Moten, and others have noted that a lot of depression and negativity seems to coagulate in places where people are ostensibly "doing what they love," including the art world, activist circles, or the university. As Culp puts it, "Positive affects swirl through both the vortex of Zuccotti Park and the high rises of Goldman Sachs. Negative affects are caught at work at temp jobs but also at feminist conference panels. Like the ambivalence of any other form of power, affect is not a virtue but a diagnostic." Just so, people at Trump rallies seem to feel pretty good, maybe even really good, though it's worth considering whether pleasure and disinhibition shot through with scapegoating, nihilism, and odium qualifies, or in what ways it qualifies, as good feeling. Rather than trying to identify particularly miserable realms, it seems to me more fruitful simply to note that there's a lot of misery everywhere, along with an

underdeveloped ability to ask why, when things don't feel good, how we might make them feel better. ²⁰ In which case, it makes sense to ask structural questions about which conditions need to be altered so that a bad thing can feel better, while examining the bad feelings themselves, to see if they are really as immovable or inevitable as we presume them to be. The former is hard because changing conditions and structures is hard; the latter is hard because it involves recognizing that there may be things ahout our bad feelings we have become habituated to and are loathe to give up, even when we insist that's precisely what we're going for.

This isn't simple perversity. It is hard to defy the strong forces of anxiety and paranoia because they are, as Freud had it, fundamentally forms of defense. ("People become paranoid over things they cannot put up with," Freud wrote, indicating why we can't ever purge paranoia and anxiety from our psychology entirely.) We worry that, if we loosen our grip, it will mean we are not apprehending our situation correctly, that we are denying real threats. We worry that, without sustaining our anxiety, a threat will take us by surprise, and that surprise will be unbearable (hello, near extinction 2030!). We worry that, if we practice a radical acceptance of "things as they are," we will slip into repression, self-indulgence, or inaction (the standard leftist critique of Buddhism and other forms of mindfulness). But paranoia, despair, and anxiety are not known for helping us to "stay with the trouble," or to deepen our fellowship with one another. In fact, they tend to reify an already painful sense of individuation, and to constrict our imagination toward the very worst it can conjure, as if rehearsing our worst fears will lessen our future suffering. Extensive personal experience with this approach has taught me that it does not. Instead, I've come to know it as a completely understandable, extremely effective means of attenuating whatever liberation, expansiveness, or pleasure might be available in the present moment, and depriving oneself of it.

POLITICS AND THERAPY

In 2014, Guy McPherson became a certified grief-recovery specialist, and has since made a career of helping people accept their imminent ex-

tinction. McPherson frames this acceptance as a form of freedom—the only freedom left to us. In a 2019 talk, he quotes concentration camp survivor Viktor Frankl: "Everything can be taken from a man but one thing: the last of the human freedoms—to choose one's attitude in any given set of circumstances, to choose one's own way." McPherson argues that our last act of freedom should be choosing an attitude that enables us to live "fully [and] urgently, with death in mind" as our species exits the stage.

McPherson's trajectory from climate scientist to certified grief-recovery specialist may be more explicit than that of others, but many intellectuals, especially those whose work focuses on climate change, have begun to lean into-if not fully embrace-the role of therapeutic guide. Morton's Dark Ecology, for example, leads the reader on a Tibetan-Book-of-the-Dead type of journey through the many layers of difficult feelings that "dark ecology" can bring about: "We usually don't get past the first darkness, and that's if we even care. In this book we are going to try to get to the third darkness, the sweet one, through the second darkness, the uncanny one. Do not be afraid." Berardi has also been quite explicit about this turn, arguing that "politics and therapy will be the same activity in the coming time. People will feel hopeless and depressed and panicking because they are unable to deal with the post-growth economy, and because they will miss the dissolving modern identity. Our cultural task will be attending those people and taking care of their insanity, and showing them the way of an adaptation, of a happy adaptation at hand. Our task will be the creation of social zones of human resistance, intended as zones of therapeutic contagion."

As I made clear earlier, I'm skeptical about turning more and more arenas of life (teaching, activism, art) into caretaking and therapy; as always, I suspect there's more élan to men taking up the cause, insofar as their doing so doesn't reinscribe any expectation of caretaking or healing that still manages to trail women in every sphere. Many men seem quite comfortable in the role of guru, perhaps because it places them in the position of purporting to know: presenting oneself as an authoritative source for diagnosis + treatment can be a performance of mastery as well as,

or in place of, care provision. At the same time, I think it's absolutely right that, when it comes to global warming—in addition to other acute crises that we face, many of which have begun to stack on top of each other—no one can bear the burden alone; the resulting dislocations will undoubtedly scramble our roles and relations (the experience of teaching throughout the COVID-19 pandemic has made this abundantly clear).

Getting past the first darkness of ecological awareness is easier said than done. I'm ashamed to admit it, perhaps because I still don't fully understand it, but the months I spent researching and writing this chapter were accompanied by somatic freak-outs repeatedly diagnosed-to my ferocious irritation—as "anxiety related." It was as if, after reading about mass extinction, environmental racism, and dying oceans all day, my attention and anxiety would unconsciously flip onto a more local object-my body-and fixate on eye twitches, chest pain, itchy skin, overactive bladder, jaw pain, GI distress, dizziness, and more. When I wasn't fixated on my own body, I worried over the health and safety of my son. I had unexplained weeping spells. I felt, like so many feel after deep exposure to the facts, like a wild-eyed Cassandra, unable to believe that anyoneincluding my own family, or me-could spend any part of any day reheating coffee, watching the US Open on TV, or bitching about email backlogs or annoying coworkers. Watching our so-called leaders not just deny and delay, but spitefully conspire to make things worse, felt like being trapped in a cocoon of ruinous madness, a true upside down, wherein everything from hundreds of thousands of COVID deaths to police violence to mass unemployment to poisoned air and water gets reflected back to us as "terrific" and "beautiful."

If this was staying with the trouble, it sure didn't feel good. In fact, it felt quite lonely. For while many of us think and feel about the climate all the time, no one really wants to talk about it, including, quite often, me. Howling at others to partake in the conversation can end up reinforcing one's alienation ("The Arctic Circle Hit 101°F Saturday, Its Hottest Temperature Ever. The average high temp for June is 68 degrees F. So, the Arctic is running +33 degrees right now. Is anybody listening?" a journalist tweeted today, clearly feeling the desperation).

In retrospect, my fixation on my body was not just pathological displacement. Contending with our collective predicament as a species amplifies the predicament in which we each find ourselves as mortal beings, which can feel overwhelming even on a good day. What we fear is coming for our planet or species is what we already know is coming for us and everyone we love. That's hard.

None of these feelings has gone away, exactly, but I see them now a hair more clearly for what they were, or are: flailing attempts to get through the first darkness unaided by the skills or solidarity that can keep one from collapsing into the whirlpool of individuated suffering. The good news is that those skills, that solidarity, is out there. Sometimes you just have to suffer long enough or hard enough to be compelled to seek it out, or recognize its existence.

RIDING THE BLINDS

Many writers on the climate have argued that artists have a critical role to play in imagining possible futures, be they dystopian or utopian. We can't construct a world unstructured by carbon energy or endless growth, they argue, unless we have imagined it first-or, conversely, we need images of the futures we most want to avoid in order to scare ourselves off course. Novelist Amitav Ghosh makes such an argument in The Great Derangement, in which he calls for "a transformed and renewed art and literature" that engages more directly with climate change—a call echoed by everyone from Stengers ("We need to learn telling other tales, neither apocalyptic nor messianic ones . . . Tales that, together with Haraway, I would call SF tales") to the Dark Mountain Collective, which includes British novelist and "recovering environmentalist" Paul Kingsnorth ("We believe that art must look over the edge, face the world that is coming with a steady eye, and rise to the challenge of ecocide with a challenge of its own: an artistic response to the crumbling of the empires of the mind") to Scranton ("We must build . . . cultural arks, to carry forward endangered wisdom. . . . The fate of the humanities, as we confront the end of modern civilization, is the fate of humanity itself").

As much as I understand these calls for us to invent or safeguard stories that might help us reflect and comprehend our circumstances with compassion, imagination, humor, solidarity, and dignity, I also think it valuable to "drop the storyline," as Chödrön has counseled: all story lines, including "progressive" ones, which pin their hopes on the arc of history moving toward justice. For at some point in our lives, if we live long enough, we begin to feel in a visceral fashion what we've always known intellectually to he true: our life spans will not allow us to take in the whole story. Indeed, there may be no whole story. Maybe there's no story at all. Our brains may be hardwired to produce story as a means of organizing space and time, but that doesn't mean that story is the only mode available to us in experiencing our lives.

It's hard to drop the story line—not to mention our steadfast conviction of linear time—when you're staring each day at your whitening hair and bearing witness to the stunning dissolve of the polar ice caps. It's hard when your kid is asking you point-blank how we got into this mess, and how—or whether—we're going to get out. "Tell me how it ends," writer Valeria Luiselli's daughter asks her repeatedly throughout Luiselli's hook about children seeking asylum at the US-Mexico horder. "Sometimes I make up an ending, a happy one," Luiselli writes. "But most of the time I just say: I don't know how it ends yet."

Rather than make recourse to story, often I find myself returning to a certain tableau, one conjured in the opening pages of Harney and Moten's *The Undercommons*. (Tableaux have to do with story, but insofar as they are perched in time, they offer a kind of pause or suspension from it.) The authors explain their hook's title by summoning a classic Hollywood scene of the American West, in which—as political scientist Michael Parenti has noted—the colonial settlement is invariably depicted as surrounded by hostile, aggressive forces ("the natives"). This inversion is key to the settler's recasting of his own invasive, murderous colonialism as an act of self-defense. But Moten and Harney are not interested in simply repairing inversions. "The fort really was surrounded," they write, "is besieged by what still surrounds it, the common beyond and beneath—before and hefore—enclosure." Their task—and ours, if their "we" is in

fact "us" (and I think it can be, if not without some trouble; that is the profound generosity, and, for some, the controversy, of their work)—is "the self-defense of the surround in the face of repeated, targeted dispossessions through the settler's armed incursion." In an interview at the end of *The Undercommons*, Moten and Harney describe this notion of the undercommons, aka *the surround*, as "the first freight that we hopped." After that, Moten says, "we started riding the blinds."

"Riding the blinds": the hoho practice of riding between cars on a moving freight train, so as to evade capture by the train crew or police. The phrase appears often in the blues, that foundational laboratory for allowing any affect to attach to any object, alchemizing pain into sustenance, and creating zones of social resistance and therapeutic contagion. See, for example, Robert Johnson: "Leaving this morn', I have to ride a blind / Babe, I been mistreated, baby, and I don't mind dying."

Riding the blinds means you're out of the authorities' sight. It also means you can't see where you're headed. Maybe you're on a runaway train heading for a concrete wall. Maybe you're heading for a future that is simply impossible to imagine from the present. Maybe life will be better at the next stop; maybe it won't be. "Seen from the future, might the human prove nothing but a pollinator of a machine civilization to come?" ask Robin Mackay and Armen Avanessian in their introduction to Accelerate: The Accelerationist Reader. What a thought! I won't live long enough to find out, and neither will you.

One benefit of riding the blinds, or dropping the story line, is that other senses of time can become more palpable, including the feeling of *folded* or *intergenerational* time—what feminist scholars Astrida Neimanis and Rachel Loewen Walker have called "thick time": "a transcorporeal stretching between present, future, and past." "Thick time" is neither repo time nor queer time per se, though I admit to feeling it most often when I look at my son, and behold all the selves and ages he has passed through folded atop one another. (My mother once told me that, when she would go to pick me up from our town's square, she would sometimes get momentarily confused about what kind of body she was looking

for—a toddler body? A teenager body? A preteen body? At the time I thought she was a little nuts, but now I realize she was just touching the kind of thick time I experience all the time these days, when my son is explaining why a hot dog can't freeze in the freezer or how a realm differs from a world in Minecraft, and I'm distracted by noticing that his eyes look exactly as they did when he was an infant, nursing, in all that disordered time spent in the glider. My guess—my hope—is that, as I age, time will thicken further.)

All care—perhaps save hospice, though even that, in its way—has a tacit, if open-ended, relationship to futurity: you feed someone so that she will not grow malnourished; you treat a wound so that it will not become infected; you water seeds in hopes they will grow. It's not that there is no present in care, or that caring in the present is invalidated if and when the desired outcome fails to fruit. It's more that, in caring, time is folded: one is attending to the effects of past actions, attempting to mitigate present suffering, and doing what one can to reduce or obviate future suffering, all at once. Rather than tying ourselves in knots over how much value to assign to the future, or opposing an in-the-moment freedom to a future-concerned obligation, or consigning ourselves to the work of planetary hospice, we might instead recognize that "living fully in the present" always entails making choices about lessening or increasing future suffering. It always entails temporal abundance, a phrase lifted from poet-philosopher Denise Riley's beautiful, painful book-length essay Time Lived, without Its Flow, in which Riley reckons with the surprise death of her adult son. At her book's end, Riley describes this maternal temporal abundance as an "elaborate, dynamic, silent temporal abundance, even as this is also an abundance in loss." An abundance, even in loss: this sounds right to me, even if it pierces.

In an attempt to screw around with our sense of time, perhaps in the hopes of awakening us to the feeling of folded, or thick, or intergenerational, time, Morton often addresses his reader as a time traveler: "There you were, shoveling coal into your steam engine, that great invention patented in 1784 that Marx hails as the driver of industrial capitalism. The very same machine that Paul Crutzen and Eugene Stoermer hail as

the instigator of the Anthropocene," he writes. "There you are, turning the ignition of your car. And it creeps up on you. You are a member of a massively distributed thing. This thing is called species. . . . My key turning is statistically meaningless. . . . But go up a level and something very strange happens. When I scale up these actions to include billions of key turnings and billions of coal shovelings, harm to Earth is precisely what is happening. I am responsible as a member of this species for the Anthropocene."

So, here we are again, shoveling coal into the tender, or, in my son's case, pantomiming the motion in the ruins. He loves trains and doesn't care about trains anymore, ersatz wind in his toddler hair, real wind on his big-kid face as he flies through the pandemic-emptied lot. Here I am beside him, discovering, for the millionth time, the verity of joy, and how it throbs with impermanence, responsibility, and sorrow. The cord has been cut, most surely. But if I can imagine raising him, and continuing to raise myself, as those who might work on behalf of the surround—the common beneath and beyond—the already and forthcoming—if we can love all the misery and freedom of living and, as best we can, not mind dying—then my heart feels less broken, more emboldened. It feels shaped right. Morton says he wants "to awaken us from the dream that the world is about to end, because action on Earth (the real Earth) depends on it." For so long, I didn't know what he meant. I do now.