

Mark Simpson and Imre Szeman

Impasse Time

Energy transition—the shift from dirty to clean energy, from the curse named *oil* to the gift called *solar*¹—has become a mantra for the present: arguably *the* key phrase by which we name and so perform our response to the impact of fossil fuel use on the planet (see United Nations 2018). The logic contained in the phrase is simple, direct, and (supposedly) easy to grasp. Since the dirty energy of fossil fuels has played (and continues to play) a significant role in generating dangerous levels of carbon dioxide, the use of clean energy will necessarily generate a better outcome for the planet than the use of its dirty counterpart. Yet the broad and deep dependence of existing physical and social systems on fossil fuels, and the need to bring an enormous amount of clean, green energy online globally, together mean that the energy switch must take some time, occurring in measured not frantic fashion—that is, *transitionally*. Even in the face of the enormous challenges posed by global warming to communities around the world—and the need to act as quickly as possible to avoid environmental and social tragedies—energy transition as mantra and logic thus offers a reassuringly temperate, pragmatic, even *Realpolitik* answer to the question of what can be done to mitigate the

unfolding eco-crisis. For these reasons, the phrase names an approach to global warming that a range of actors—environmental groups, broad segments of the public, governments and governmental agencies, international associations, and even oil giants, many of them now mutating into corporate brokers of energy writ large—find palatable, tolerable, comforting . . . and marketable.

The language of transition contains within it all manner of assumptions, some more obvious than others. The fact that we are fated to live with existing levels of atmospheric carbon dioxide for millennia might intimate that any further use of dirty energy, and any further expansion of dirty energy infrastructure (e.g., pipelines, refineries, airports, highways, skyscrapers, suburbs), should stop immediately. Against the apparent unfeasibility of this response, which is treated as either irrational or far too radical, transition proposes a period of phase out and phase in—less the immediacy of “keep-it-in-the-ground” movements than the protraction of urban planning and boardroom decisions. Transitional change is orderly change: a measured, serene, reassuring response to the ragged urgencies of climate crisis. As such, transition must establish clear boundaries and limits. Change the type of energy we use, yes, but make sure to leave other potential alterations and alternatives unthinkable: managed, diminished, foreclosed, or stifled altogether. For the most part, the logic of energy transition thus presumes that absolutely everything else—and especially neoliberal capitalism, its structures, practices, and protocols, and the vast inequalities of power and privilege they generate—will stay much the same. If solar is renewable energy’s synecdoche, then *the solar fix* gives one name for the transitional sameness we are describing. We posit that solar-as-fix contradicts and betrays whatever *solarity* might turn out to mean.

As an idiom and a grammar, transition is intended to address the looming threat that environmental crises pose to current modes of power by draining away the energies of opposition over time, while in the process updating neoliberal governance with the shiny surfaces of renewable energy. Key here is transition’s autopoietic aura, through which it promises quite magically to realize itself and thereby guarantee the happiest of happy outcomes. And such magic serves while also charming the human: the language of transition insists on humanity’s preeminence and views ecological calamity as a problem to be addressed so that humans can continue to live on the planet. Global warming has raised fundamental challenges to ontology and epistemology, to ethics and aesthetics, to understandings of the

non-human, and more. By contrast, exponents of transition-logic have little time for the deep questions that come to light when gazing over the cliff of climate change, preferring to believe that all we need is to get on with the business of building a LEED Platinum-certified bridge across the abyss.

Energy transition thus constitutes a meek response to global warming, a scheme that status quo economic and political actors appear glad to take up as a way to save themselves from the worst of what is to come: ostensibly the ardors of climate catastrophe, but really the seismic shocks of stock market collapse, currency devaluation, resource redistribution, and the like. After all, an electric car to replace the gas-guzzler still leaves a private vehicle in every driveway and, for car manufacturers ready to make the transition, a profit in the bank. Yet the very currency of energy transition as a mantra, not to mention the relatively timid and innocuous energy changes it demands, mean that *energy impasse* is actually the defining condition of our time. Even as scientific consensus overwhelms us with evidence about the environmental consequences of oil societies, petroculture still persists and—with every new ring road, pipeline, and fracking rig—redoubles. The use of dirty energy is a reality and a concrete problem that demands our collective attention. So too does the sedimented, intensifying condition of energy impasse—a more complicated, more abstract, and perhaps ultimately more dangerous figuration of the fossil fuel era alongside its transitional supplement that requires reckoning in units of measure other than parts per million of carbon dioxide.

What do we mean here by *impasse*? For of course there are all manner of obdurate problems impeding meaningful changes in energy use, problems that slouch and brood, impassively, on the contemporary landscape. Consider, for example, the rightward tilt signaled by Trumpism and Bolsonarism: manifestly a form of impasse. The recent turn of a number of nation states (or of provinces and states within them) away from environmental policies designed to provide ecological protection and to limit the generation of pollutants and greenhouse gases underscores the hollowness of transition rhetoric. For every small country that has made commitments to wean itself off fossil fuels, there is a large one like Brazil, whose policies seem designed to deliberately upend the atmospheric apple cart, or Canada, whose lack of policies stands to have much the same impact (Cunha 2019; Rabson 2019). Or consider the privileged givenness of fossil-fueled mobility for so many in the world today, as indexed by the unrelenting expansion of automotive culture: global car sales have hovered between seventy-five and eighty million over the last five years—a 45-percent increase over average sales of fifty-five

million units between 2000 and 2015—and there have been over *one billion* cars sold this century (Statista). Or consider, more abstractly, the double bind articulating the environmental urgency of energy transition (it must happen now!) against the social difficulty of that transition (how might it happen at all?). We could add many more problems to this list. Every one of them constitutes a clear impasse that prevents changes in our energy system—and therefore a pressing concern for any viable politics today.

All the same, we invoke impasse here with something a bit different in mind. We see impasse not so much as *blockage*, that is, an impediment to a given situation that requires circumventing or dissolving or overcoming. Instead, we understand impasse as *stuckness*: the texture or atmosphere setting the conditions of possibility for a given situation that, irrespective of any overcoming of actually existing blockages, manages nevertheless to perpetuate the situation as it is. Impasse in this sense names a continuation of the same wherein the overcoming of blockages cannot solve—and may in fact compound—the abiding stuckness. We are reminded of Fredric Jameson's (1982: 153) memorable claim that “the deepest vocation” of the utopian genre “is to bring home our constitutional inability to imagine Utopia itself.” Genres of energy transition in the current moment operate in much the same way: less to provide viable means for a better future than to indicate our constitutional inability to imagine transformation itself and thus manifesting the conditions of our stuckness. Which is to say that existing genres of energy transition are all too often forms of impasse.

The stuckness to which we want to draw attention is conditioned by a narrative at the heart of transition's logic: that there have been *other* energy transitions, that the time of energy is *always* about transition. The dirty energy era began, the story goes, with an originary shift from wood to coal and, after successive periods of realignment in the dominant forms of energy used, will find its apotheosis in the transition from oil to clean energy. The conjunctive sequence from wood to coal to oil to nuclear animates this broadly progressive narrative, which is partially why it is presumed that what has to come next are renewables (though how sun and wind energy are more advanced than nuclear as sources of energetic power troubles the narrative). The prospect of transition is also imagined as if coordinated by a single sovereign entity: a global principle—whether “technological progress” or “the market” or both—that benignly and beneficently can coordinate everything.

Like so many other narratives governing our practices, this one, too, turns out to be a fiction. In *The Shock of the Anthropocene*, Christophe Bonneuil and Jean-Baptiste Fressoz (2017: 101) write:

The bad news is that, if history teaches us one thing, it is that there never has been an energy transition. There was not a movement from wood to coal, then from coal to oil, then from oil to nuclear. The history of energy is not one of transitions, but rather of successive *additions* of new sources of primary energy. . . . Energy history must therefore free itself first of all from the concept of transition. This was promoted in the space of politics, media and science precisely so as to spirit away worries bound up with the “energy crisis,” an expression that was then [in the early ’70s] still dominant.

What emerges from Bonneuil and Fressoz’s account of the messy reality of addition against and instead of the antiseptic fiction of transition is a crucial question of precisely how transition is supposed to take place at all. If history provides no example of transition, then any guiding principle of transition is merely speculative or notional at best. So why does its fiction persist? Precisely to normalize and naturalize the logic of transition as given, as just over the horizon, despite all impediments (for how could Trumpists and Bolsonaroites stand in the way of inevitable progress-to-come?). Transition’s fiction thereby makes sure that we remain stuck in a present that withholds, in the active language of its idiom, any capacity to create a genuinely different energy future.

To the extent that *solar* designates or indeed epitomizes the transitional given today—the reflex postulate or preordained synecdoche condensing within its name all hopes for energy futurity—it arguably consolidates instead of disturbing the condition of impasse. As the code word for all manner of new energy forms, practices, and relations on the horizon, solar makes us give over those unnamable, incoherent desires, impulses, and demands that might otherwise confound or discombobulate transition’s impassive logic. Enthralled by solar’s synecdoche, we forget to remember the questions we might want to ask about the narrative of energy transition and, in so doing, we settle for the given by reaffirming the progressive script encouraging us to maintain and to trust that it was always going to be solar all along. This peculiar circumstance constitutes *the solar fix*: a binding condition not just distinct from but antithetical to the promise of solarify.

Time and Impasse

Before we venture to unpack this claim, we want to dwell a bit longer with impasse in order to reckon, more particularly, the significance of time for impasse as a problem. The concepts of *present* and *future* we have been track-

ing raise in turn the issue of temporality for the matter of impasse today. If, as we assert, energy impasse is the defining condition of our time, then what is the time of impasse? What temporalities does impasse seed, and how might a reckoning with those temporalities afford us some position or perspective against the pull of stuckness? We venture that impasse has everything to do with time in relation to how we think futures, and so that the logic of transition (in energy systems as well as in ecological and environmental sensibility) has everything to do with futurity and the modes of its imagining.

Let us explain in more detail what we mean with respect to the time of impasse. We are inspired in our thinking by the compelling argument advanced by Timothy Mitchell in his 2014 article “Economentality.” Tracking the emergence of “the economy” as a discrete object in the global imaginary in the years immediately after the Second World War, Mitchell drills down in particular on the decisive significance of this new object for orders of time within liberal governance. “The economy,” he contends,

provided a more pervasive effect, one that has since then escaped attention: a way to bring the future into government. The appearance of the economy established a new temporal scheme in which past, present, and future were relocated. We can follow this shift . . . as a new prognostic structure in which a future was mobilized as a mode of adjudicating and managing claims in the present. The government of the present, as it was imagined through new forms of the future, would come to operate within a new metric of temporal change, the measurement of growth. (484)

Here the newly figured autonomy of the economy, as a discrete object that would grow, establishes a novel time signature for the work of governance: economic expansion into the future becomes an aim in and of itself.

For Mitchell, the economy as socio-political effect—what he calls economentality—served to address two conjoined problems: labor struggles disrupting global energy relays and the specter of limits that had haunted the interwar period, when blockage to growth increasingly seemed endemic to capitalism. Against labor’s agitations from below and against the Keynesian common-sense that capital had reached its limit, the economy as autonomous effect offered sovereignty a new opening for governance: a means of “embed[ding] people’s political lives in the future by bringing them to calculate according to its representation” (Mitchell 2014: 492). Thus, economentality fashioned limitlessness as the retooled fantasy of liberal progress, positing unfettered material and temporal plenitude as its future horizon. In this fantasy, eventually everyone will have everything—a promissory logic

that operates through deferral, whereby most subjects subsist in perpetual anticipation of the eventuality-to-come that never in fact arrives.

The lifespan for this mode of governance in its proper, functional incarnation was, by Mitchell's accounting, actually quite brief: "The economy worked effectively as a mode of government-through-the-future for only a couple of decades. By the late 1960s, the forms of productivity growth, energy use, cheap oil, and Middle Eastern politics on which it depended were all under pressure" (507). The ensuing shocks—often figured via the shorthand 1973—could, especially in view of the concomitant rise in environmental awareness and ecological commitment, have forced a shift in direction guided by the recognition that the mid-century discourse on the economy and economic futurity was not working. What emerges instead, however, is a desperate drive to hold on, one manifest not just in geopolitical retooling of the ways in which the US and other global northern powers access energy but also in the birth of the so-called New Economy, through which technology comes increasingly to supply the magical solution to economic and energetic crises simultaneously.

The point we would emphasize, in composing this quick genealogy, is that what we call impasse, so apparently specific to the contemporary moment, actually has a quite prolonged emergence. It proves contiguous with—and constitutes one dimension of—neoliberalism as an order and ideology of governance. Thus while the present conjuncture, overloaded with dire signs of limits breached and futures ruined, must seem very different from the mid-century moment when progressive plenitude reigned serenely supreme, we would nonetheless argue that impasse today enables the "temporal scheme" of economentality to persist in fractured form. Impasse retrofits plenitude to keep neoliberal governance going. Even as there is now an alertness to the limits of the narrative of perpetual progress, the stuckness of impasse perpetuates this narrative all the same, precisely by holding in suspension the promise of some sustainability beyond the impasse while pitching techno-utopian solutions to the problem that will take time—that must unfold across an eventual horizon.

Sustainability's Suspense

Put another way, sustainability serves the neoliberal retrofit of plenitude by synching transition-logic to austerity's more-with-less mandate. As a concept and a grammar, sustainability, so commonly used in discourse on energy and environment, thus bears in significant ways on the problems of time

and impasse we have been examining so far. If *the economy* was the mode of governing for the future for the post-war era, *sustainability* is the mode for the present moment, one in which other limits need to be accounted for alongside those of wealth and value. And what we have termed the solar fix is the energetic form of sustainability as a mode of governing in this sense.

In “‘After the Sublime,’ after the Apocalypse: Two Version of Sustainability in Light of Climate Change,” Allan Stoekl (2013) probes the limits of the idea of sustainability as a concept adequate to initiate energy shift, transition, or revolution. He offers a critique of sustainability that has by now become somewhat standard within eco-criticism. What exactly is the metric of sustainability? For precisely whom is the planet to be made sustainable (only for humans and not other species)? What exactly is the timescale of sustainability? Fossil fuels are of necessity unsustainable, which demands the creation of renewable forms of energy and energy infrastructure. But is it possible to conceptualize how much renewable energy might be sustainable? Responding to the imperative to act more sustainably put forth by the 1987 Brundtland Commission Report, “Our Common Future,” Stoekl (2013: 48) writes:

Brundtland, despite its seeming certainty, inevitably gives rise to multiple possibilities and scenarios; the future of sustainability begins to seem less like a clear roadmap of choices than a menu of possibilities, a panoply of fictions that operate on both the aesthetic and the moral plane as well as on the “practical.” In that sense sustainability is both a life-and-death matter and a literary—and literary-theoretical—practice.

It might be tempting to thus drop sustainability as a discourse that navigates the future in a manner more attuned to environmental limits. The intent of a document like “Our Common Future” is, first and foremost, to safeguard the environment only by ensuring that the open horizon of capitalist growth and liberal notions of progress remain in place via sustainability as regulatory ideal (sustainability is never linked to ideas of degrowth). However, Stoekl decides to try to re-narrate sustainability rather than abandon it, in large part because it is a concept that draws together the issues that animate environmental politics: the status of the human, the fate of the environment and resources, new understandings of community, and time. He proffers two kinds of sustainability: a first-order, general sustainability and a second-order, restrained mode of sustainability.

General sustainability constitutes a limit case. The human is just one species among others, a species that (given its practices and actions) might

persist or not. The world is sustainable no matter what humans do to it, even if it might not be sustainable for humans themselves. There is coded into the language of sustainability a humanism and an imperative for human survival that general sustainability decisively calls into question. While this might be interesting philosophy, we cannot help but characterize it as bad politics—a ceding of the earth to extant practices of capitalism, an extreme accelerationism that results not in radical social change but in the disappearance of the social altogether.

As a potential response to the stuckness of impasse, Stoekl's account of restrained sustainability is more intriguing. As elaborated by Kant, the sublime constitutes something of an epistemic parlor trick: scale unnerves sensibility only to reaffirm in the end the absolute ability of human cognition to understand even that which appeared to be impossible to grasp. The sublime that Stoekl references in the title of his paper works differently than this: when it comes to trying to calculate the vast array of externalities that would make up a sustainable society, our cognition cannot help but falter. There is no overcoming of the sublimity induced by sustainability. Instead of leading to a discounting or disinterest in life in the future and a dangerous affirmation of present life (which amounts to either a cynicism about the environment or an apocalypticism), Stoekl sees a potential opening for a different form of sustainability. This is a mode of sustainability organized around a demand for the future: "A certain world, a certain climate, a certain human population, a certain ecology with certain animals" (Stoekl 2013: 48). In restrained sustainability, narrative, morality, and the affirmation of community constitute devices that simultaneously affirm the need for something like sustainability, but recognize that it is ultimately unrepresentable. In brief: the dangerous self-certainties of sustainability in "Our Common Future," which help to foster a hope that we can continue along with a slightly muted, slightly slower version of capitalist growth, are suspended; in their place, the moral and political imperatives advanced by the sublimity of sustainability generate life practices "stripped of all illusions concerning that very sublimity" (50). Restrained sustainability doesn't anticipate the future, but takes up the ongoing, endless, and contested challenge of writing and enacting it.

We don't think either general or restrained sustainability, provocative though they are, constitutes an adequate response to the challenge posed by impasse. But note how time works in each of these versions of sustainability. The Brundtland Report names environmental limits in order to render them unimportant: the right policy decisions paired with technological advances

allow the extraction of value to continue unabated. For Stoekl, the illogic of sustainability (i.e., what could the metric possibly be for a complex and changing ecology?) generates two responses. General sustainability poses an end to the human instead of a continuation—an eschatology in place of history. Restrained sustainability opts for neither ends nor temporal continuity, but operates in a suspended time, organized around “tactics linking aesthetics, technics, (base) materialism, and fiction, which are embraced not as absolute meanings but as memes, finite structures of meaning, connected to survival practices and tactics” (54). What is so cunning about the ruling mode of energy transition is its capacity to render such suspended time itself lucrative for capital. It promises a future in which we might engage in the challenging sociality of restrained sustainability, while in fact pushing it far off into a distant future that might never come: given enough time, technology will domesticate the sublimity of sustainability, rendering null and void all the questions it cannot help but raise.

Solar offers perhaps the *ur*-example of this misplaced faith in technology, although it operates through a slightly different relation to time. There is a reason why solar has all too often been viewed as a solution not just to the use of dirty energy, but to *all* of the troubles of the social. In an unrecognized confirmation of the insights of the energy humanities about the deep links between energy and social form, solar is imagined as fully unsettling the apparent rationality and presumptions of petroculture through the temporal update it performs. Solar technology produces energy from sunlight that is minutes old, rather than relying on the ancient sunlight collected in fossil fuels: it provides the ultimate update to history, making energy fully present to the present. But there is another trick of time that solar performs. Solar energy is limitless and timeless, characteristics that allow it to negate the threat of general sustainability while rendering the difficult trade-offs of restrained sustainability unnecessary, beside the point: there is more than enough energy to go around for everyone. By negating both of the modes of sustainability outlined by Stoekl, solar puts the human back at the center of history and allows it once again to be all too human: back in the game of doing pretty much what it wants. This indefinite, timeless, limitless realm, turning on a form of suspended time that proves particularly difficult to parse, sounds more like a description of the deepest fantasies of capitalism than some new mode of sociality that might attend to the non-human and to the innumerable limits that exist outside of and beyond energy (soil and food, water and minerals, and all the rest). Put more bluntly: as time signature, solar timelessness converts the solar promise into the solar fix.

Beyond Impasse Time; or, the Impossible

We hope we have made compelling how significant time is in figuring, for political purposes, the need to act on climate crisis. One of the most powerful arguments for us on this score is Andreas Malm's description, in *The Progress of This Storm* (2018), of what we would call disjunctive belatedness: climate change as the revenge of history on the present; long-burnt carbon arriving now to imperil any version of the future.² This devastating account of the convoluted temporality in which we dwell obliterates any trace of plausibility that progressivist narratives might claim to offer. And yet somehow such narratives persist in enthralling us.

How might we interrupt the hold on time that energy impasse exerts, a hold inextricable from the one we find in these enthralling progressivist narratives? It is the temporality of impasse that generates a belief in the untrue. Undoing such belief means interrupting that temporality. Will the urgency of the immediate present, the imperative to confront the prospect of *now*, provoke us to achieve such interruption? Impasse leaves us stuck in a broken, unworkable present—a cancelled now—through its many fantasias on futurity. The order of the now contradicts impasse by wrenching us from present paralysis. As we have been arguing, the temporal schema of impasse is the cynical retooling of the progressive, eventual one. It seems to us that, by confronting the urgencies of *now time*, we might supplant this progressive temporal schema with a new time signature: not past-present-future but, instead, the now and the next.

At the moment we are writing, the now and the next seem bleak: they involve terrors of plague and trials of quarantine. Yet even in the teeth of such disorienting shocks, the progressive temporality of energy transition proves obdurate, impassive. On 19 March 2020, amidst the global uncertainty caused by the COVID-19 pandemic, BP proudly announced: "Light-source BP completes financing on 260 MW solar project in Texas." According to an executive VP quoted in the press release, "This project demonstrates that the competitiveness of solar energy means that power offtake structures widely and historically used for conventional generation are now gaining traction for solar energy projects. We see an exciting future from the increase in competitive renewable energy in the US power markets" (BP 2020).³ The retooling of fossil infrastructure ("power offtake structures widely and historically used for conventional generation," in BP's catchy euphemism) for a dawning solar era that will deliver the exciting futurity of ever more competitive power markets epitomizes exactly the tendency we observed near the

outset: that as *solar* names the transitional given today it merely consolidates instead of disturbing the condition of impasse. And while presumably Light-source BP's excellent Texas ad-venture has been in the works since long before novel coronavirus arrived to disrupt everything, it remains difficult to resist reading the announcement and its timing as a pointedly *sunny* over-correction for the perils of the now and the next by way of the solar fix.

What might distinguish *solarity* from the solar fix? The matter, we imagine, is one of orientation or, indeed, of what Keller Easterling (2014: 21) calls "disposition." In her keynote at After Oil School 2, Nicole Starosielski reminded those in attendance that "we do not look at the sun itself"—not least because to stare sunward is literally blinding (2019).⁴ This disarmingly simple insight implies that the solar fix, fixating (us) on the sun as key to the perpetuation of futurity-as-progress, is a species of blindness. Solarity, by contrast, turns on a glaring and productive contradiction: that troubling to look away from the sun so as to concentrate on social solidarities might actually allow some surprising solar alternatives against and beyond the solar fix—and with them some unforeseen social relations impossible within the stuckness of impasse—to begin to come into view.

Notes

- 1 In our usage *solar* serves as a shorthand for renewable energies of all kinds, including wind, tidal, geothermal, and hydro, even though we also want to insist on the specificity of the solar as the key sign and symbol of future energy.
- 2 "There is no synchronicity in climate change. Now more than ever, we inhabit the diachronic, the discordant, the inchoate. . . . History has sprung alive, through a nature that has done likewise. . . . Postmodernity seems to be visited by its antithesis: a condition of time and nature conquering ever more space. Call it *the warming condition*" (Malm 2018: 11).
- 3 Do not suppose that BP is oblivious to the challenges of the present moment—it's executives are nothing if not grounded realists, as the press release's concluding section, "Working safe and smart," makes clear: "At Lightsource BP, the health and well-being of our team members and partners is our top priority. We are actively monitoring updates regarding the novel coronavirus (COVID-19) and are following precautions and guidelines provided by the CDC and public officials" (BP). Under plague conditions, does working safe and smart to advance green growth and ensure transitional sameness exemplify restrained or general sustainability?
- 4 The claim of which this reminder was a part, while less literal than our riff here, drives home the larger point about disposition we are making: "Solarity can be most transformative when we do not look at the sun itself or the sun as an energy source" (Starosielski 2019).

References

- Bonneuil, Christophe, and Jean-Baptiste Fressoz. 2017. *The Shock of the Anthropocene: The Earth, History and Us*. Trans. David Fernbach. London: Verso.
- BP. 2020. "Lightsource BP completes financing on 260 MW solar project in Texas." *bp.com*, March 19. bp.com/en/global/corporate/news-and-insights/press-releases/lightsource-bp-completes-financing-on-260-mw-solar-project-in-texas.html.
- Cunha, Daniel. 2019. "Bolsonarism and 'Frontier Capitalism.'" *The Brooklyn Rail*. February 5. brooklynrail.org/2019/02/field-notes/Bolsonarism-and-Frontier-Capitalism.
- Easterling, Keller. 2014. *Extrastatecraft: The Power of Infrastructure Space*. London: Verso.
- Jameson, Fredric. 1982. "Progress Versus Utopia; Or, Can We Imagine the Future?" *Science Fiction Studies* 9, no. 2: 147–58.
- Malm, Andreas. 2018. *The Progress of this Storm: Nature and Society in a Warming World*. London: Verso.
- Mitchell, Timothy. 2014. "Economentality: How the Future Entered Government." *Critical Inquiry* 40, no. 4: 479–507.
- Rabson, Mia. 2019. "Canada's Emissions Target Gets Further Away As 2017 Report Shows Increase." *Globe and Mail*, April 16. www.theglobeandmail.com/canada/article-canadas-emissions-target-gets-further-away-as-2017-report-shows-2/.
- Statista. 2020. "Number of Cars Sold Worldwide from 1990 to 2020." *Statista.com*. statista.com/statistics/200002/international-car-sales-since-1990/ (accessed August 12, 2020).
- Starosielski, Nicole. 2019. "Harvesting Sunlight." Keynote, After Oil School 2: Solarity, Canadian Centre for Architecture, Montreal, Quebec, May 24.
- Stoekl, Allan. 2013. "'After the Sublime,' After the Apocalypse: Two Versions of Sustainability in Light of Climate Change." *Diacritics* 41, no. 3: 40–57.
- United Nations. 2018. "Sun's Energy at Centre of Revolution in Renewables, Secretary-General Tells International Solar Alliance's First General Assembly." UN SG/SM/19272-ENV/DEV/1891. October 2. un.org/press/en/2018/sgsm19272.doc.htm.