

Energy is a problem in the Anthropocene—it is perhaps *the* problem of the Anthropocene. Humans need new energy systems—and likely new energy cultures—that leave fossil fuels in the ground and that instead rely on renewable fuels, coupled with more efficient technologies and, most likely, decreased energy consumption. There is no shortage of ideas as to how this could be achieved, ranging from techno-fixes that would swap out fuels and technologies but otherwise maintain the status quo of capitalist growth, to proposals for a green economy that might involve, among other reforms, monetizing natural resources and pollution costs in order to better “count” nature as integral to a market system.<sup>1</sup>

However, market-based fixes are insufficiently appreciative of the limits of human mastery over the world. In order to live appropriately on the Earth, humans need to reevaluate our commitment to endless growth, productivity, and commodity accumulation.<sup>2</sup> With the publication of such texts as *The Limits to Growth* and *Small Is Beautiful* in the midst of the 1970s oil crisis, this sensibility gained mainstream, albeit brief, appeal in the U.S. before subsiding again in the economic heyday of the 1980s Reagan era. Critiques of productivism remain central to green political platforms, but at the same time, they have always been haunted by fears about their social consequences: that shifting to a slow-growth or no-growth economy would result in massive recession, job losses, poverty, and social unrest. Left-accelerationists Nick Srnicek and Alex Williams assert that, “without full automation, postcapitalist futures must necessarily choose between abundance at the expense of freedom (echoing the work-centricity of Soviet Russia) or freedom at the expense of abundance, represented by primitivist dystopias.”<sup>3</sup> Similarly, Clive Lord, a founding member of the British Green Party, recalls his initial reaction to the *Limits to Growth* report in the 1970s, when he asked other greens, “What is your social policy? You are proposing a deep recession. I agree it will be necessary, but every recession to date has caused widespread hardship. What

will you do when desperate people start looting?”<sup>4</sup> Since Lord bemoaned the state of oil politics in the 1970s, the problem of energy has only become more intractable, and more urgent, in the so-called Anthropocene, which purports to name a geological era in which humans become planetary agents, setting off irreversible, self-amplifying processes, largely as a result of fossil fuel consumption. The problems of the Anthropocene are distinctly troubling: the interlocking flows of climate, glaciers, species death, plastic accumulation, toxic dumping, deforestation, ocean acidification, and so on appear unprecedentedly disruptive, global, and complex.

In the Anthropocene, humans are glimpsing new Earth problems that exceed our capacity to sense, experience, and understand them. These involve planetary flows that Timothy Morton has referred to as hyperobjects, such as global warming, climate, or oil, that are “massively distributed in time and space relative to humans,” and that force us to undergo a radical ‘reprogramming’ of our ontological toolkit.<sup>5</sup> Global warming can be real and everywhere sticking to us, but “because it’s distributed across the biosphere and beyond, it’s very hard to see as a unique entity. And yet, there it is, raining on us, burning down on us, quaking the Earth, spawning gigantic hurricanes. . . . [G]lobal warming is real, but it involves a massive, counterintuitive perspective shift to see it.”<sup>6</sup>

Of course, big objects have always already been there, nudging those who would listen toward such an ontological reprogramming, but it has been possible for most people to ignore this. No longer. Morton argues that the hyperobjects of the Anthropocene have become visible to humans, largely through the very mathematics and statistics that helped to create these disasters. As we grasp, blind and mole-like, toward snapshots of those higher dimensions in which hyperobjects dwell, our sense of the world and the cosmos is seriously threatened. Indeed, one of Morton’s central arguments is that hyperobjects signal the “end of the world,” if by world we mean that human reification in which we inhabit the center, and there is a horizon outside that cozy hobbit-hole we call home.<sup>7</sup> Hyperobjects show us “there is no center and we don’t inhabit it. Yet added to this is another twist: there is no edge! We can’t jump out of the universe.”<sup>8</sup>

The ontological shift forced upon us by the Anthropocene also upends our understanding of politics. First, it presents global governance challenges that do not lend themselves to a system of nation-states, nor to global institutions that arise out of state-based collaboration. In their “Planet Politics” manifesto, international relations (IR) scholars Anthony

Burke, Simon Dalby, Stefanie Fishel, Daniel Levine, and Audra Mitchell argue that that IR “has failed because the planet does not match and cannot be clearly seen by its institutional and disciplinary frameworks. Institutionally and legally, it is organised around a managed anarchy of nation-states, not the collective human interaction with the biosphere.”<sup>9</sup>

Second, and more theoretically, our understanding of agency, power, freedom, and justice all takes on different inflections when anthropocentrism loosens its grip. This is why many ecological thinkers and activists, like Morton, conclude that the problems of the Anthropocene will demand more radical political change, and that a society that privileges accelerated growth and productivity—even if it runs on more renewable fuels—will be unable to stem planetary destruction and climate change. In a colorful metaphor, Morton writes that “the *Titanic* of modernity hits the iceberg of hyperobjects,”<sup>10</sup> and that capitalism does not seem equipped to save us: the more our engines of accumulation and economic growth churn to escape, the more they seize up in the ice.<sup>11</sup> We need experiments with socialist and democratic modes of government to make them relevant to a new Earth, an Earth that can no longer be taken for granted as hospitable to human habitation. For example, the aforementioned manifesto for planet politics contends that “in the near term, we will have to work with flawed institutions, but the gravity of this crisis means that it is right to demand more profound and systemic change, and to explore, in politics and in scholarship, what that change should be.”<sup>12</sup> This might involve new global institutions, such as an “Earth Systems Council,” that would incorporate ecological violence into international law, or treating coal as a controlled substance.<sup>13</sup>

The gap is widening between the slow pace of human change and the self-amplifying and irreversible geological and planetary feedback loops. Historic environmental victories, while encouraging, at the same time appear as mere preambles to the changes in production, consumption, and ethics now required by the global population of humans, and particularly Westerners. This is widely evident: Morton’s work, for instance, is often steeped in moods of melancholy and horror, while the planet politics manifesto begins from the assertion that IR has “failed” and that “this may finally be the death of Man, but what will come next if this face is lost in the rising tides? . . . We are speechless, or even worse, cannot find words to represent the world and those within it. We do not hope that politics will suddenly change—but it must change.”<sup>14</sup> The Western sense

of doom is but an aftershock, given that many Earthlings have been losing worlds and civilizations for centuries in the face of imperialism and industrialization. Nevertheless, there is something distinctly frightening about our current moment, in which so many of the disasters have become truly planetary and trans-species in scope.

I write this conclusion in the spirit of a new planet politics, venturing proposals that could help to incite a more far-reaching global movement, a “resonance machine” that could effectively counter what William Connolly has called the “evangelical-neoliberal resonance machine” that advances late modern capitalism and planetary destruction.<sup>15</sup> A key argument of this book has been that our commitment to growth and productivity has been reinforced by a geo-theology of energy that combines the prestige of physics with the appeal of Protestantism in order to support the interests of an industrial, imperial West. While the first geo-theology of energy was particular to a northern British crew and their efforts to improve steam engines, this logic of energy continues to haunt human relationships to fuel. The politics of energy has been captured by the ethos of work and waste, especially in the West. Historicizing energy as a modern logic of domination helps to denaturalize the energy–work connection. This does not mean that engineering equations are wrong: in many sites, energy can be successfully calculated to measure work (as matter moved). But the computing function of those units—energy and entropy—should not be allowed to stand unexamined as the basis for ethical prescriptions surrounding fuel and activity. After all, the physicists themselves remind us that energy and entropy are more epistemological than ontological. Let us affirm that the energy–work rationality is just one epistemology of energy—and not *the* epistemology of energy. Let us, following Walter Mignolo, upset the “Western code,” which has recruited support from thermodynamics, and that code’s “belief that in terms of epistemology there is only one game in town.”<sup>16</sup> Let us be free to multiply energy epistemologies, metaphors, and visions concerning how we participate in and value work, production, and dynamism.

In this conclusion, I explore just one possible path toward living energy otherwise, and toward resisting fossil fuel cultures: putting post-carbon movements into conversation with the post-work political tradition. An alliance with post-work movements would help environmentalists in countering the pleasures of the post-Fordist, consumerist life of high energy consumption with an alternative political vision of pleasure. In par-

ticular, such an alliance would respond to the conundrum raised by Clive Lord's question—the fear that a low-growth or no-growth economy would entail, at best, sacrifice and asceticism and, at worst, violence and massive poverty. This is the position taken by many so-called ecomodernists, who reject the notion of limits to growth, and chastise the dominant environmentalist narrative of reducing energy consumption as inherently unjust to those in the Global South.<sup>17</sup> Ecomodernists insist that high energy consumption is integral to escaping poverty, and to achieving modern standards of well-being, and therefore call for a massive, publicly organized expansion in modernization and technological innovation based on the premise that economic growth can be successfully “decoupled” from ecological destruction.<sup>18</sup> In contrast to the ecomodernists, post-work movements would challenge the unquestioned assertion that modernization and high-technology society can be trusted to produce widespread well-being. Instead, they offer an alternative vision of a society that decouples energy from work, and productivism from equality and well-being.

Such alternative visions are urgently needed, given that, despite growing awareness of climate change and associated environmental emergencies, energy consumption and fossil fuel burning continue apace as environmentalists struggle to disrupt dominant fossil fuel cultures and narratives. The appeal of ecomodernism (or accelerationism) is that they rest upon a pleasurable politics that promises the continuation of, or expansion of, consumerism and productivism. A radical planet politics, if it seeks to contest ecomodernist claims, needs its own politics of pleasure. However, this remains difficult in large part because environmentalists are hampered by a dominant energy logic that operates upon the assumption of the virtue of wage labor and economic growth, something that ecomodernism, too, takes for granted. According to this framework—which structures almost every contemporary debate over energy projects and technologies—environmentalists must make their case in the now-familiar terms of work and waste. They must have an answer to the simple, but dominant mantra, captured in the political cartoon advocating for the Keystone XL pipeline in figure C.1: energy means jobs.

As a result, in most energy debates, environmentalists are compelled either to prove that alternative fuels would create more jobs and/or more economic growth than existing fossil fuel systems or, if this is not possible, to prove that the waste associated with fossil fuels outweighs the benefit of fossil fuel jobs. While minor victories can be achieved within a

## The KEYSTONE XL Pipeline Plan

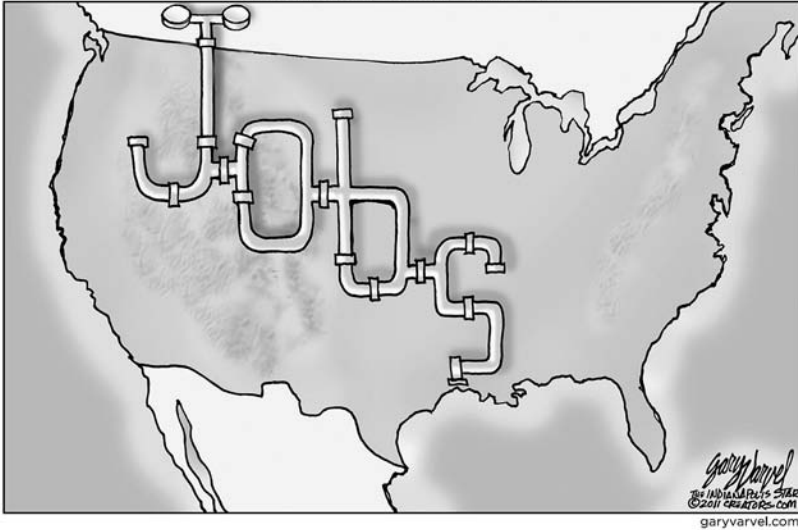


FIGURE C.1. “Pipelines Mean Jobs.” Credit: Cartoonist Gary Varvel, published December 15, 2011. Gary Varvel Editorial Cartoon used with the permission of Gary Varvel and Creators Syndicate. All rights reserved.

work–waste framework, it ultimately stymies the ability to imagine new energy cultures that depart from an endless acceleration of energy consumption and productivism.

First, a work–waste ethos stacks the deck in favor of fossil fuels. If environmentalists operate within a work-based argument, positing that alternative energy will support job growth and a healthier economy, they get mired in a back-and-forth over accounting logics that, in the spirit of neoliberalism, sidelines normative and political claims. Moreover, such an argument invites complacency, in that it encourages the belief that technology alone can save us. Changing only fuels and fuel technologies while keeping in place the globally unequal capitalist growth machine may alleviate some of the carbon accumulation in the atmosphere but will not address the multitude of other ecological problems that humans face. The hope that economic growth and ecological destruction can be reliably decoupled, and that we can achieve a “good” Anthropocene,<sup>19</sup> is ultimately too dangerous a risk to take in light of mounting evidence of Anthropocene crises. In a recent article on the Anthropocene, Donna Haraway as-

serts that “it’s more than climate change; it’s also extraordinary burdens of toxic chemistry, mining, depletion of lakes and rivers under and above ground, ecosystem simplification, vast genocides of people and other critters, etc., etc., in systemically linked patterns that threaten major system collapse after major system collapse after major system collapse. Recursion can be a drag.”<sup>20</sup>

If humans could switch overnight to run entirely on wind and solar power, leaving all else intact, it would certainly pose benefits for the Earth and its creatures, but it would not come close to resolving many of the other destructive patterns on Haraway’s list. Likewise, full automation, even if harnessed to a postcapitalist economy, will continue to imperil the planet if the underlying spirit of productivism remains.

Second, a waste-based critique of fossil fuels has important limitations. Drawing attention to waste arouses fear, sorrow, disgust, and anxiety. Its most popular genres are dystopia, nostalgia, and horror. Alarming doomsday lists have also become common; most environmental texts today begin with exhaustive catalogues of the horrors now occurring on Earth.<sup>21</sup> How many readers, like me, find their eyes skipping over these lists, which now feel redundant, even boring? Ironically, the motivation behind these genres is to shock readers, and especially the world’s most privileged humans, by rendering ecological violence visible, to depict in detail that which has all too often remained subterranean, oceanic, filtered, and displaced. Much as thinkers like Haraway strive to resist hopelessness and apathy, her own list of Earthly disasters, cited above, is emblematic of the genre, and her pithy conclusion—“Recursion is a drag”—sums up the emotional effect that such lists make upon the reader, blasted with words like “depletion,” “genocide,” and “major system collapse.”

As an affective strategy, a focus on waste is vulnerable to backfiring. The cultivation of public fear about waste and pollution can easily feed into desires for authoritarianism, militarism, and nationalism, and can reinforce anxieties about racist and gendered connotations of waste. In the United States and other parts of the West, we are already witnessing the effects of a dangerous political merging of “climate change, a threatened fossil fuel system, and an increasingly fragile Western hypermasculinity.”<sup>22</sup> In addition, in relying on the collection of waste data, environmentalists are left in the position of needing to “prove” that certain categories of waste exceed a fuel’s benefits. A waste-based argument requires that humans



*know* about the waste in the first place, and that they can develop the tools with which to measure it, both of which only occur post hoc, and often after the ecological damage is planetary and deeply entrenched.

As an alternative to the demand to amass incontrovertible evidence before making policy changes, environmentalists have long asserted a precautionary principle, where the burden of proof would be flipped, such that one would have to prove that oil is *not* harmful, that fracking does *not* contaminate the water supply, and so on. The precautionary principle is part of a long-standing effort on the part of environmentalists to mount an alternative politics outside the work-and-waste paradigm. Political ecology, pastoralism, ecofeminism, green parties, indigenous groups, simplicity movements, those who strive to live off the grid—all have appealed to more positive, hopeful narratives and emotions in countering industrial modernity. These traditions of environmental thought, drawing upon experimenters in eco-living like Henry David Thoreau or Vandana Shiva, have argued that industrial capitalism has led to the deterioration of community, and has substituted more fulfilling pleasures with a vapid cycle of debt and consumerism. Disconnecting oneself, or one's community, from consumerism and productivity is heralded as more enriching and satisfying. The struggle continues today in countering the bounty of post-Fordist life in the wealthy Global North and overcoming the inertia that keeps people stuck in the grooves of consumerism and productivity. More avenues are needed in inspiring new visions and provoking original experiments in both institutional policy and lifestyles.

My proposition here is that a historical genealogy of energy suggests some insights and tactics that could be folded into this struggle. For one, despite the seeming novelty of the Anthropocene, the Victorians were already thinking in anthropocentric terms. They may not have had a full understanding of the speed and scale of the planetary disruptions set in motion by industrialization, but they nevertheless were duly terrified of the prospect of a changeable planet, a new Earth that cared nothing for human well-being. As this book has argued, a dominant logic of energy emerged in the mid-nineteenth century that provided one guide to handling an entropic, chaotic planet: it reinforced the drive of industrial imperialists to put the world to work.

Energy science, as well as energy metaphors and logics, have morphed and evolved across the intervening decades of modern life; after all, the work ethic itself has transformed with neoliberalism, automation, and



the prominence of service-industry jobs. Nevertheless, that early logic of energy, with its engineering emphasis on thermodynamics and its drive to maximize productivism and efficiency, continues to haunt the politics of energy, and limits our ability to imagine alternative energy systems. The history of energy thus shows how energy and work became tethered to each other, and how this connection is continually reproduced in global industrial politics. The contingency and historicity of this binding are rarely acknowledged, much less contested.

However, because the energy-work paradigm must be continually reproduced, it is also vulnerable to disruption. There are other (scientific, political, spiritual) modes of knowing and experiencing energy that do not elevate productivity as a primary goal for human well-being. Rejecting productivism does not require rejecting technology or automation *tout court*. Contra Srnicek and Williams, who do not question the importance of productivism, we are not forced to choose between full automation, totalitarian planning, or primitivism. This paltry menu has already been circumscribed in advance by the dominant energy logic featured in this book.

In displacing an energy logic that demands productivism and efficiency, we open up space to judge technology and automation according to other energy and ecological imaginaries of what constitutes a good life, or a well organism. In preceding chapters, I have pointed to just a few (of many) alternative scientific approaches to energy that have flourished since the nineteenth century, and in which productive work plays a minor role in the well-being and maintenance of organisms and ecologies, or in which the meaning of energy itself is severely complicated and escapes measurement or control. These include approaches within evolution, ecology, complexity theory, cybernetics, neurobiology, relativity, symbiology, and quantum mechanics.

I have also gestured toward the many practices of resistance to the dominant logic of energy, including an insistence on work refusal and leisure. In her history of British colonial ideology in South Africa, Zine Magubane argues that “the only space of freedom for blacks was in the avoidance of work. Leisure constituted the sole exercise of power in the body.”<sup>23</sup> In other words, a genealogy of energy suggests that energy and work (meaning human, waged work in the name of productivity) can be untethered for the purposes of ecological politics. Doing so opens up new conceptual, and material, space and time, in which truly alternative energy practices can proliferate. More ecologically generous ways of life on Earth, made

unthinkable and unintelligible by neoliberalism, might become attractors for budding movements. This suggests the importance of a sustained partnership between energy politics and political ecology, in which the meaning and culture of energy are challenged alongside and through the revaluation of productive work.

The problem of energy is therefore intertwined with the politics of work and leisure. As Stephanie LeMenager notes in her study of oil and American life, “‘Energy’ becomes a way to talk about how both humans and nonhumans do work—and avoid it.”<sup>24</sup> Without challenging dominant practices of work and leisure, and the high valuation of waged, productive work in a neoliberal economy, it will remain difficult to dislodge fossil fuel cultures. Indeed, the failure to challenge the organization and ethic of industrial work contributes to the difficulty in overcoming fossil fuel systems. If energy remains tightly bound to productive work, and the work ethic goes unchallenged—a work ethic that applies not only to human labor, but also to the fuels, technologies, and nonhumans put to work for humans—then any threatened decrease in energy consumption becomes automatically tainted as dreary, ascetic, and constrained, even if it espouses vitality and hope. This is because giving up energy implies giving up work, which is widely accepted as necessary to the good life, even if, as in left-accelerationism, the *humans* are no longer working. With the work ethic intact, the field of optimism and hope is ceded to more piecemeal reforms or techno-fixes that directly uphold the virtue of work and the promise of either plentiful jobs and/or plentiful production.

Creating space between energy and work could take a number of paths, and in the remainder of this conclusion, I want to highlight just one potential partnership that I suggest is ripe for testing new alliances: feminist post-work politics. I will explore Kathi Weeks’s *The Problem with Work*, transposing its insights into the politics of work onto the politics of energy. Putting these two movements—one against fossil fuels and the other against work—into a more enduring conversation can benefit both. A post-work politics suggests one more route by which environmentalists can escape the neoliberal resonance machine, which obliges fossil fuel to be contested from within a work-and-waste paradigm. Meanwhile, by allying more explicitly with environmentalists, post-work movements can expand their relevance beyond anthropocentric critiques of capitalism, showing how not just human life, but Earthly life, is at stake in the contestation of work. And as I have been suggesting, a feminist post-work politics is distinct from the post-work politics of accelerationism,

although alliances are possible. Accelerationists like Srnicek and Williams draw heavily upon Weeks, and engage with feminist critiques of work, but their embrace of full automation and productivity leaves energy tethered to work, only gesturing to the desirability of a techno-fix that would make those automated machines ecologically sustainable.

#### **THE PROBLEM WITH WORK AND THE PROBLEM WITH ENERGY**

It is no easy thing to mount a critique of work, and Weeks argues that political theory has largely ignored work and its “daily reality.” She attributes this to the tendency to reify, privatize, and individualize work, such that “it is difficult to mount a critique of work that is not received as something wholly different: a criticism of workers. . . . [T]hinking about work as a social system—even with its arguably more tenuous private status—strangely becomes as difficult as it is for many to conceive marriage and the family in structural terms.”<sup>25</sup> Moreover, the reification of work means that “the fact that at present one must work to ‘earn a living’ is taken as part of the natural order rather than as a social convention.” Our modern system of work has become necessary to secure life, rather than a “way of life.”<sup>26</sup>

Already, this analysis of the depoliticization of work is relevant to understanding the depoliticization of energy. Weeks (like many in the anti-work tradition)<sup>27</sup> does not address environmental or energy issues in her text, and yet, because thermodynamics equates work and energy as scientific units, we can gain new insights by transposing energy into the concept of work. First, we might notice that, with work so deeply entrenched as a social convention, its supreme value taken for granted, it is no wonder that the threat of losing jobs is enough to derail the pursuit of new energy cultures. In other words, if it is difficult to mount a critique of work, then it follows that it will be all the more difficult to mount a critique of energy. Another way of saying this is that the depoliticization of work does not just hamper us from reimagining work; it also blocks our ability to imagine new energy cultures.

Energy, like work, tends to be reified, privatized, and individualized when it becomes an object of politics. In relation to work, Weeks notes that options for contesting work have been narrowed to either unionization, whose relevance has waned in the United States and which anyhow tends to embrace the work ethic, or to consumer politics. With the emphasis on consumerism, corporations justify dismal wages and

outsourcing by pointing to low prices for consumers (the classic Walmart strategy).<sup>28</sup> Parallel problems plague energy politics. Macroanalyses of energy are dominated by techno-rationality and market reform, both of which eschew normative claims. More political claims about energy, meanwhile, are often relegated to the micro level, to personal habits of energy consumption and individual consumer choices: fly less, bike to work, install solar panels, buy an electric vehicle. While these micropolitical shifts in habit are admirable and important to an “all-of-the-above” energy movement, when they make up the primary or sole avenue of energy contestation, they can leave citizens feeling fragmented and frustrated when set against the magnitude of planetary destruction. Also, parallel to the Walmart strategy, if citizenship becomes consumership, corporations can insist that environmental destruction is justified by low energy prices, with gas station signs serving as important political symbols. Corporations also exploit environmental sensibilities by hawking “green” commodities which, at best, only reinforces consumerism and, at worst, constitutes “greenwashing” in cases where certification and regulation are weak.

Second, Weeks argues that work is not necessary to life, but is instead a disciplinary apparatus through which political subjects are produced.<sup>29</sup> Something similar can be said of energy, although thanks to energy’s association with physics, such a statement feels even more counterintuitive. Energy—the energy that I followed in this project, that thermodynamic unit that has been captured by a dominant, fossil-fueled logic of work and waste—is not *necessary* to life. Of course, this does not mean that energy and work in a more multivalent sense do not play integral roles in life, nor have value. Rather, it is to contend that the dominant political rationalities of “energy” and “work” have naturalized the *particular* ways in which Westerners have sought to arrange energy-things and work-activities in the Anthropocene: mostly into fossil-fuel-soaked, waged work for the purposes of productivity and profit.

It is these particular historical edifices of energy and work that have become reified as universal, and thereby removed from political contestation. By making work, and energy, public, it becomes possible to reimagine their meaning for citizenship and sociality, and to invent new practices of energy and work. As Weeks explains, the effort to politicize work and its productivist values “is not to deny the necessity of productive activity. . . . It is, rather, to insist that there are other ways to organize and distribute that activity and to remind us that it is also possible to be creative outside the boundaries of work.”<sup>30</sup> Her goal is, first, to deconstruct work and

diagnose its problems, but, second, to “generate an alternative mode of valuation—a vision of the work society not perfected but overcome.”<sup>31</sup>

This second goal is relevant to energy politics because new ways of organizing work and productive activity, as well as creativity and leisure, will also, by default, constitute new ways of organizing energy, although Weeks does not explicitly explore this possibility. Srnicek and Williams only briefly allude to studies showing that reducing work could lead to “significant reductions in energy consumption,” but they do not explicitly consider how working less might induce a transvaluation of work—it is still crucial to their vision that machines are working productively in the name of human abundance.<sup>32</sup>

A genealogy of energy can provide additional analytical support to these post-work visions, while pushing them further in post-productivist directions. A genealogy of energy suggests its own decoupling move, in opposition to the ecomodernist faith that energy consumption can be decoupled from ecological violence. Instead, a history of energy provides the basis for decoupling energy from work. A partnership between post-carbon and post-work politics can also be advantageous to energy scholars. In many ways, the degradations of waged work are more widely felt, and more easily sensed, than planetary processes like glacial melting or ocean acidification. Just as health concerns have served as a key motivation for environmental justice movements in the past, work can also operate as a useful launching point into ecological sensibility, as it touches upon everyday practices of pleasure, pain, and desire. Forging cross-regional alliances that combine these concerns can therefore help push toward further disruption and catalyze public pressure for institutional change. Instead of calling on individuals to save, skimp, meter, and reduce energy, a post-work energy politics calls for the liberation of energy.

## ENERGY FREEDOM

The most trenchant critiques of work have emerged from those who have been excluded or exploited in the industrial waged work system, with Marxism as the most well-known example. Work intersects with other practices of domination and subjectification, including gender, race, and empire; this intersectionality was evident in the practices of British new imperialism, discussed in part II of this book. Weeks similarly observes how the class identity of the white, working man in nineteenth-century Europe and the United States was secured through the marginalization of

racialized, immigrant, and gendered groups. Not surprisingly, the most fertile sites for contesting work have emerged from among marginalized groups, in the politics of indigenous peoples, of race and slavery, of decoloniality, and of feminist and queer theory.

Weeks draws most heavily upon feminism, which has made significant contributions to unsettling and reimagining the meaning of work. Feminists have shown how the waged work system depends on the exploitation and invisibility of “women’s work,” which relegates caring labor to the private realm of the family. For women in particular, the rise of waged work, and its association with masculinity, required that “unwaged domestic work [be] reconceived as nonproductive women’s work.” It also yoked the work ethic to the family ethic, and the woman to the privatized home; Weeks traces how “this family ethic emerged in the Fordist period as an important means by which to manage the production-consumption nexus.”<sup>33</sup> Rather than treat work as a social and economic necessity, then, Weeks shows how work functions as a “disciplinary apparatus,” where “work produces not just economic goods and services but also social and political subjects. In other words, the wage relation generates not just income and capital, but disciplined individuals, governable subjects, worthy citizens, and responsible family members.”<sup>34</sup> The industrial system of waged work thus relied on the marginalization of gendered and racialized others who would work for lower, or for no, wages, serving a crucial, and yet invisible, role in production.

However, in order to locate a truly radical critique of work, Weeks must look to the margins of even these critical traditions. She observes that, historically, both feminism and Marxism have had “productivist tendencies.”<sup>35</sup> They have mostly embraced, rather than problematized, the work ethic in order to advance their claims, prioritizing inclusion into the waged work system for groups that have been systemically marginalized. This is true, for instance, of second-wave feminists’ emphasis on the importance of including women at all levels of waged work. It is also true of the wages for housework movement, which demanded wages for the reproductive and care work whose value had been excluded from the modern industrial marketplace. While such strategies have been remarkably effective, Weeks also regrets that “all of these demands for inclusion serve at the same time to expand the scope of the work ethic to new groups and new forms of labor, and to reaffirm its power.”<sup>36</sup> We can extend this observation to the left-accelerationists, who simply expand the scope of the work ethic onto machines, leaving productivism intact. In other words, by tinkering with the work ethic rather than politicizing it, these move-

ments “[fail] to contest the basic terms of the work society’s social contract,” and end up limited in what they can imagine or demand.<sup>37</sup>

By politicizing work, Weeks seeks to build upon these older feminist traditions. She does so through a politics of “utopian hope” that feels its way toward other modes of work and leisure. Weeks’s reading of utopianism, as well as her proposed “utopian demands” for building post-work societies, is useful for a radical energy politics that likewise strives to combine optimism and radicalism, while resisting nihilism, in weaving visions of the future. Weeks is aware that utopianism has been belittled in political thought, but she seeks to rehabilitate it through her readings of Bloch, as well as Nietzsche. Bloch’s utopian hope requires a specific approach to the future, one that treats it not as a linear evolution from the past, but as ripe “with possibilities for significant ruptures and unexpected developments.”<sup>38</sup> Even as it seeks opportunities for rupture, utopian hope also requires an affirmational approach to the present. Weeks draws on Bloch and Nietzsche to “claim the present as the site of utopian becoming,” as the site containing “not only the artifacts of the past but the seeds of the possible future.” This is in many ways an internally contradictory project, one that attempts “both (self-)affirmation and (self-)overcoming; to affirm what we have become as the ground from which we can become otherwise.”<sup>39</sup>

Emotionally, such a project triggers both fear and hope. Fear: clinging to the present, to our self-affirmation, to the self we know, and anxious about the future world and the self-to-come, which is unknowable. Hope: acknowledging our self as unfixed, as an artifact of our past experiences, and therefore capable of becoming other, better, through the possibilities of our present experiences. As Weeks observes, “cultivating utopian hope as a political project of remaking the world is a struggle to become not just able to think a different future but to become willing to become otherwise,” which entails no small feat of courage.<sup>40</sup> This is why Weeks ultimately warns against the politics of fear, which “disables” subjects from seeking more radical political goals: “whereas the fearful subject contracts around its will to self-preservation, the hopeful subject . . . represents a more open and expansive model of subjectivity.”<sup>41</sup> Likewise, the cultivation of fearful subjects in the Anthropocene, attuned to the horrors of extinction and planetary catastrophe, risks pushing publics toward the desire for self-preservation, for contraction around conservative, security-oriented values, rather than toward expansive, more generous ethics and distributions of power.



In order to advance a project of utopian hope geared toward the revaluation of work, Weeks makes two utopian demands. She describes the utopian demand as a utopian form for politics; it is a partial, fragmented kin to the genre of the manifesto. The utopian demand combines a “conflict between the speculative ideals of utopias and the pragmatism of demands.”<sup>42</sup> It therefore resonates with the “paradoxical” relationship of present and future described above, seeking out both the seeds of possibility in the present (pragmatism), and yet also treating the future as capable of rupture and surprise (utopianism). In this way, the utopian demand must combine both some measure of practicality—it should be achievable (even if difficult) in the present—while also opening humans up to radically different visions of life.<sup>43</sup> Importantly, the purpose of the utopian demand is not to map out the precise contours of a future society or set of policies. Rather, it is in the very act of making utopian demands that humans engage in a process of becoming different, of becoming new kinds of political subjects, “thus opening new theoretical vistas and terrains of struggle. The point is that these utopian demands can serve to generate political effects that exceed the specific reforms.”<sup>44</sup>

Weeks points to the feminist movement for wages for housework as a prime example of the utopian demand. It is a practical demand, on the one hand, and yet implementing wages for housework would dramatically alter the conditions of capitalism, possibly setting off a domino effect whose outcome would be impossible to predict. Moreover, the influence of wages for housework movements has been less about their ability to offer precise policy prescriptions, and more about how, in the act of making the demand, people began to relate to the system of work and family, and its subordination of women, differently, opening up new choices and agencies for women.<sup>45</sup> While Weeks is inspired by wages for housework, she notes that it was too narrowly fixated on domestic tasks within the family, with the resulting solutions offered (e.g., work-life balance and privatized household services) doing “more to sustain the existing system than to point us in the direction of something new.” So while the wages for housework movement was important in revealing how household labor was necessary to reproduce waged work, Weeks now wants to go further, with utopian demands that “broaden the concept of social reproduction” beyond the heavily gendered sites of home and family.<sup>46</sup>

Her utopian demands are meant as “successors” to wages for housework: first, a universal basic income (UBI), and second, shorter working hours.<sup>47</sup> Both are intended to contest productivism, and to develop a “political

project of life against work,” to free time and energy from the strictures of the work ethic.<sup>48</sup> A UBI uncouples the reproduction of life from waged work, separating the right to food, shelter, and citizenship from one’s contribution to economic productivity. Its purpose is also to “create the possibility of a life no longer so thoroughly and relentlessly dependent upon work for its qualities,” which “might allow us to consider and experiment with different kinds of lives, with wanting, doing, and being otherwise.”<sup>49</sup> Perhaps most provocatively, the demand for a basic income is “anti-ascetic”; it dramatically protests “the ethics of thrift and savings” that Weeks notes forms the basis of most political claims-making, and instead insists on the *expansion* of desires and needs.<sup>50</sup>

While a UBI is meant to be radical, it is gaining increased traction worldwide, among both scholars and social movements, including the “No Jobs” bloc in the UK. Switzerland failed to pass a 2016 referendum on a basic income, but the referendum helped to mark the UBI as worthy of serious public debate. The appeal of a UBI to green politics has deeper roots: the Green Party in the United Kingdom has long championed a UBI, for instance. Lord, the British Green Party cofounder cited above, came to the conclusion that a UBI, whose proponents usually focus solely on social justice, can also “enable a low growth economy to protect the ecosphere.” Moreover, for Lord, a UBI that is given to everyone regardless of their work status, staves off the social fears that attach to limits to growth arguments.<sup>51</sup>

Along with the demand for a basic income, Weeks argues that we must also demand more time away from work, starting with shorter working hours. This is a feminist demand in that, in seeking to liberate time from work, it also insists on expanding what we mean by work, to include reproductive and care work, and to demand more time away from those responsibilities as well. It is therefore important to Weeks that the demand for shorter hours does not collapse into a demand for more “family time,” a project that tends to reinforce the neoliberal family and has historically only added more work and anxiety, especially for women.<sup>52</sup> Shorter working hours steals back more time for family and community, yes, but should also mean devoting more time to “what we will,” to pleasure, to “broaden [our] perspective on the possibilities of nonwork time.”<sup>53</sup>

It is the anti-asceticism of these utopian demands that offers the most opportunities for energy politics. Environmental movements have struggled to counter the pleasures of energy consumption without embracing constraint, thrift, or simplicity as an antidote. While such values may be necessary in a post-carbon society, environmentalists would also do well

to continue to multiply other pleasurable, desire-based visions for the future. A feminist post-work politics suggests one such mode of hopeful politics, one that shifts from the impetus to save energy, to give up energy, to use it more thriftily and efficiently, toward a practice of liberating energy from work. At the same time, the focus moves from individual energy consumption to the larger problem, the connection between energy and production, a problem that is not satisfactorily resolved by left-accelerationism and full automation. Rather than energy efficiency, which reinforces the bond between energy and the work ethic, what if we posit energy freedom? Energy freedom—by which I mean an attempt to free more energy from the strictures of waged, productive work—would short-circuit the dominant logic of energy and its assumption that freedom is equivalent to a nation's industrial capacity for maximum fuel independence.

Let us pause here for a moment to pursue a thought experiment: How might the realization of post-work demands neutralize the most pressing arguments in favor of fossil fuel burning? Consider, as just one key example, the rampant fossil fuel boosterism in the wake of the 2016 U.S. presidential election of Donald Trump and the conservative capture of Congress. In a short time, the Trump administration and the Republican Party have shored up fossil fuel systems by denying climate change and dismantling a host of environmental policies including: withdrawing from the Paris Climate Agreement, installing a climate denier (Scott Pruitt) to lead the Environmental Protection Agency, taking steps to kill the Clean Power Plan, weakening the Clean Air Act and the Clean Water Act, lifting a moratorium on new coal leases on federal land, ending a study on the health effects of mountaintop coal removal, and moving to open nearly all U.S. coastal waters to offshore drilling for oil.<sup>54</sup>

In analyzing the press releases, blog posts, and interviews of Republicans and allied fossil fuel proponents, it is abundantly evident that most arguments mobilized in favor of fossil fuels begin and end with jobs. As Representative Richard Hudson (R-NC) explains, “As I’ve said before, my top three priorities are jobs, jobs, and jobs. Our robust energy plan will not only create jobs, but help equip workers with the skills necessary to find employment. It’s time for us to seize the tremendous energy opportunity ahead to lower energy costs, empower folks with more good-paying jobs, and get one step closer to energy independence.”<sup>55</sup>

Another opinion essay filed in October 2015 as part of the House Energy and Commerce Committee’s “Idea Lab” derides the new Environ-

mental Protection Agency regulations on air quality as “equal to putting every worker in Ohio out of work.”<sup>56</sup> Meanwhile, Trump’s professed love for coal is most often expressed through the discourse of putting miners to work, a promise that resonates strongly with a community primed to associate mining jobs with masculine identity. In other words, Trump and his supporters “dig coal” (a popular campaign slogan) because it is an icon of masculinist empowerment.<sup>57</sup> Again and again, jobs appear in the discourse—“jobs, jobs, jobs.”

The job argument has proven to be compelling, and is an incredibly difficult argument to counter, given the unquestioned importance of work to the American notion of hegemonic masculinity and citizenship. Imagine, though, if the United States had instituted the feminist, utopian demands of a basic income and shorter hours, such that full-time, traditional waged work was no longer an economic necessity. It is impossible to foresee the exact outcome of such demands-making, but let us assume that, in making such demands and gaining some autonomy from the late industrial system of organizing work and activity, people were engaged in undermining the supremacy of waged work as a sign of self-worth and morality. In such a situation, the argument of “jobs, jobs, jobs” would be toothless. The threat of lost jobs only works if, in losing one’s job, one loses access to the necessities of life, to the respect of society, and to the rights of citizenship. Instead, a post-work politics pries open new possibilities in countering “jobs, jobs, jobs,” possibilities in which alternative arrangements of energy and work appear more intelligible and palatable. Without the threat of lost jobs, the fossil fuel argument, at least as outlined by the House committee, would have almost nothing else to say in support of fossil fuels.

Of course, alternative ways of organizing energy and work would not necessarily be more ecologically sustainable, nor more globally just. A post-work politics that stays wedded to productivism, and sited in the Global North, risks inventing yet another idle Victorian woman fantasy, one in which labor is not transformed but simply made invisible. Utopian demands need to be considered on a transnational scale, taking advantage of regional alliances. Challenging work entails not only challenging the work ethic that dominates human life, but also the work ethic that captures nonhuman and machinic activity into its profit, while violently expelling the unemployed, the underemployed, and anything coded as waste.<sup>58</sup> Privileged practices of leisure will also need to be revitalized and reimaged; humans, especially in the Global North, have been conditioned

to fill non-work time with unbridled consumption. However, reorganizing leisure will likely be impossible without first reorganizing work and opening up more time, space, and, yes, *energy*, with which to do so, both in the sense of moral and political energy and in the sense of fuel.

My wager is that many alternatives to work and leisure are imaginable that could pose significant advantages to the planet and its creatures. Humans would be hard-pressed to devise new work systems that matched the ferocity with which industrial capitalism has mined and burned fossil fuels. Moreover, the urgency with which we burn fuel is tied to the urgency with which we pursue productivity and hard work. After all, as pleasurable as consumption has been, especially for the Global North, its partner has been an alienating system of modern work that is breaking down.

Work supposedly earns humans the right to consume what they will. Post-work political movements ease us away from the fever dream of work, highlighting its oppressive and exploitative nature, while potentially inaugurating what Lord calls “a totally new culture” that “will also allow people generally to heed eco-constraints, notably climate change, where competitive capitalism does not.”<sup>59</sup> By building upon accelerating frustrations with the work system, such a pleasure-based politics stands the best chance of appealing to a broad and diverse public and motivating the kind of radical change called for in the Anthropocene.