

## Beyond Carbon Democracy: Energy, Infrastructure, and Sabotage

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In the opening line of his essay, “Virtuosity and Revolution: The Political Theory of Exodus,” Paolo Virno writes, “Nothing appears so enigmatic today as the question of what it means to act.”<sup>1</sup> Virno was thinking of advanced capitalism in general; his observation arguably applies doubly to petrocultures and their impasses, in which most conventional forms of political action seem blocked, gestural, empty, complicit, or weak in the face of the unretractable character of petrocapitalism (even beautiful Norway tripled production in the face of the truth of climate change). Climate change—petrocapitalism’s evil twin—bears similarly on the prospects of action. If global warming is what Timothy Morton has described as a “hyperobject,” a phenomenon so “massively distributed in time and space relative to humans” as to appear unscalable, then what is left for the action of human subjects besides the hypocrisy and humiliation to which Morton refers?<sup>2</sup> “In order to break the spell,” Virno goes on to say, “we need to elaborate a model of action that will enable action to draw nourishment precisely from what is today creating its blockage.”<sup>3</sup> In this chapter, I will explore whether sabotage points toward such a model in the context of our contemporary energy culture.

I am indebted to Timothy Mitchell and his book *Carbon Democracy* for drawing my attention to sabotage as a way to think about politics in the context of fossil fuel economies and politics. The basic claim is straightforward, expressed succinctly by Mitchell:

Political possibilities were opened up or narrowed down by different ways of organizing the flow and concentration of energy, and these possibilities were enhanced or limited by arrangements of people, finance,

expertise and violence that were assembled in relationship to the distribution and control of energy . . . [It] was the movement of concentrated stores of carbon energy that provided the means for assembling effective democratic claims.<sup>4</sup>

Mitchell's story concerns coal, the era of progressive democratic and welfarist reform in the West, and the transition to an oil-based energy and economic system. In it, the material properties of coal and its infrastructures left the movement of coal (that is to say, its value as a *commodity*) vulnerable to sabotage by organized workers, who succeeded in leveraging this disruptive power to secure progressive democratic concessions from capital and capitalist states. In the late nineteenth and early twentieth centuries, organized workers involved at various points in the transportation of coal in Europe and North America used sabotage to extract a broad range of progressive, structural concessions from industrial capital and their governments. These actions were typically led by militant miners' unions, but often spread to, or were coordinated with, railway workers, dock workers, and marine workers positioned to disrupt the flow of coal through foot-dragging, slowdowns, tampering, and strikes. According to Mitchell, their power "derived not just from the organizations they formed, the ideas they began to share or the political alliances they built, but from the extraordinary quantities of carbon energy that could be used to assemble political agency, by employing the ability to slow, disrupt, or cut off its supply."<sup>5</sup>

Among the benefits that workers in North America and Europe secured by leveraging their ability to sabotage the movement of coal, Mitchell lists the extension of suffrage; rights to form labor unions, to strike, and to create workers' political organizations; and labor reforms including the eight-hour day, social and unemployment insurance programs, protection against job loss due to accident or sickness, and the first public pension schemes. As Mitchell puts it, "working people in the industrialized West acquired a power that would have seemed impossible before the late nineteenth century."<sup>6</sup> In response, capital turned to oil, a commodity whose material properties lent themselves to movement via infrastructures (pipelines and tankers) that required less human labor and were more flexible, thereby reducing the impact of disruption and undermining or sabotaging the growing political power of organized workers.

Mitchell's account figures the scene of carbon politics as a scene of sabotage. At the close of his book, he makes specific reference to the current state

of extreme or unconventional petroleum extraction. He writes: “To transform kerosene-impregnated rock formations and bitumen-filled sands into oilfields is to acknowledge that what we call nature is a machinated, artificial territory in which all kinds of novel claims and political agencies can form.”<sup>7</sup> The question this prompts us to ask is whether it is productive to think of these “novel claims and political agencies” in terms of sabotage.

Typically, when we think of sabotage, we think of someone breaking or physically destroying something, which is what allows for the reduction of sabotage to violence, criminality, and even terrorism. However, sabotage is only contingently related to the specific tactics by which it is carried out in any given circumstance. Sabotage has a very long and diverse history, in which the tactics and techniques deployed by saboteurial actors range widely.<sup>8</sup> Sometimes this has involved breaking things, but often it has not. As Arturo Giovannitti wrote in his jail-cell introduction to Émile Pouget’s classic 1912 text *Sabotage*, “It is not destructive. It has nothing to do with violence, neither to life nor to property. It is nothing more or less than the *chloroforming of the organism of production*.”<sup>9</sup> Elizabeth Gurley Flynn of the Industrial Workers of the World (IWW), in her crucial 1916 text on sabotage, defines it as “the conscious withdrawal of the workers’ industrial efficiency.”<sup>10</sup> Even the capitalist state has recognized that sabotage cannot be defined solely in terms of violence. In a landmark 1927 ruling, the US Supreme Court upheld the conviction of an IWW organizer found guilty of sabotage merely for possessing pamphlets that advocated “going slow” (a classic tactic of nonviolent workers’ sabotage) on the grounds that “any deliberate attempt to reduce profits in the manner [of slowing down on the job] would constitute sabotage.”<sup>11</sup> In the case of going slow, sabotage disrupts value that is still potential and not yet actual by reducing the amount of value transferred by labor power to the commodity in the process of production. Even these erstwhile antagonists would seem to agree on what defines sabotage: it is a form of action that intervenes in established structures and systems of distributing and accumulating value, especially processes of extraction, production, reproduction, and circulation. Sabotage is a form of action that withdraws, disrupts, or subtracts from the efficiency of work and the efficiency of flows. Thus, it can take many forms, including many that have nothing to do with violence or the destruction of property.

In what follows, I will highlight three things that Mitchell’s account helps us to specify about sabotage in relation to a possible politics of or through energy in the context of petroculture and climate change. I will then consider a few attributes of sabotage that exceed the account given by Mitchell.

## Sabotage Is Normal

It is a long-standing conviction in the intellectual and political history of sabotage that capitalists are its primary and most committed practitioners. In making her case for workers' sabotage, Flynn refers to the case of Frederic Sumner Boyd, who was arrested during the Paterson Silk Strike of 1913 for suggesting that textile workers should enter the dye houses and adulterate the silk with chemicals to render it unweavable. Flynn points out that Boyd was merely advocating "something that is being practiced in every dye house in the city of Paterson already, but is being practiced for the employer and not for the worker."<sup>12</sup> As William Trautmann put it in another IWW pamphlet from 1912, "sabotage is in daily use for the enlargement of capitalist profit interests."<sup>13</sup> Similarly, in his 1921 treatise, *The Engineers and the Price System*, Thorstein Veblen (upon whose discussion of sabotage Mitchell relies heavily) demonstrates that sabotage by businessmen is part of the "ordinary conduct of business" in "any community that is organized on the price system." Profitable business under market conditions thus demands and comprises a "voluminous running administration of sabotage."<sup>14</sup>

Mitchell invokes this theme in order to bolster his argument that, whether via the manipulation of price through the throttling of supply or the development of pipelines to undermine workers' power to disrupt flows, petroc capitalists are themselves agents of sabotage. This observation extends easily into the present era and beyond the energy sector to include the planned obsolescence that is a structural condition of the digital economy and the evasion of environmental standards that keeps the wheels of automobility turning.<sup>15</sup> If sabotage is a structural feature of the organization of power in a capitalist economy and society—whereby the flow of value is manipulated in order to maintain or elevate price or to secure the strategic advantage of firms—then it is fair to say that this form of sabotage is a normalized attribute of capitalist economies, though it is typically styled as innovation or competitiveness. As suggested above, the association of sabotage with criminality (as opposed to enterprise or political action) is strictly social, not definitive or necessary.

## The Mode of Sabotage Is Immobility (Not Publicity)

Sabotage figures the political sphere as a scene of movement or mobility, not a sphere of appearance and discursive interaction. Sabotage thus strikes at the heart of the commodity (which must move to generate value) and is a primarily nondiscursive mode of action particularly suited to a context in which

the norms and practices of publicity have been largely drained of integrity.<sup>16</sup> From this perspective, if the public sphere is a sphere of communication, it is a sphere of communication-as-transportation. Under these conditions, the site of political intervention shifts from the transmission of meaning to the circulation of bodies and things.<sup>17</sup> It is telling, in this regard, that the history of sabotage by organized workers in the West begins not in a factory but, as Flynn points out, on the docks. As Evan Calder Williams emphasizes, the site of sabotage's earliest political potential was not manufacturing but, instead, "the dockyards, the train lines, all the juncture sites of circulation."<sup>18</sup>

This, too, is clear in Mitchell's account of sabotage and the movement of coal: sabotage is a mode of action strategically addressed to mobility—in this case the mobility of commodities—rather than to publicity, even in cases where it instrumentally resorts to publicist tactics from time to time. This suggests, for example, that the strategic point of Canadian antipipeline demonstrations or legal actions is not to persuade people with arguments, but to make it impossible to move oil sands bitumen.<sup>19</sup> In Mitchell's account, states were coerced by forced immobility into conceding to workers' demands; they were not *persuaded* by the force of better arguments. In this respect, we might say that the political mode of sabotage is not dialogical but, instead, logistical.<sup>20</sup>

## The Medium of Sabotage Is Infrastructure

Sabotage is a form of action that finds its medium in infrastructures of circulation, transportation, and mobility. As Mitchell shows, coal cars, petroleum pipelines, and oil tankers can be more or less vulnerable to sabotage, depending on their particular material configuration and attributes. This implies a conception of media, infrastructure, and even communication that exceeds what prevails when politics is reduced to communicative action in the form of intersubjective dialogue, and when the critical questions concern how media "distort" democratic communication and whether new infrastructures or media might support more authentically democratic modes of communication.<sup>21</sup> From the perspective of sabotage, the significance of infrastructure as the medium of political action is not the quality of symbolic exchange or dialogue it supports but, rather, the opportunities it presents or denies for the disruption of material flows.

In these three respects—that sabotage is a normal mode of capitalist value accumulation, particularly in the energy sector; that sabotage is a politics strategically oriented to mobility, especially the mobility of commodities; and

that infrastructures for this movement provide sabotage with its distinctive media—Mitchell’s account helps us to think about the character of many of the “agencies and claims” at play in contemporary struggles over energy development and transition. However, I am less sure that with Mitchell we arrive at the more radical heart of what sabotage might signal in terms of political action and subjectivity in a carbon economy and polity. Up to this point, the politics characterized as saboteurial actually sound quite conventional: identify a vulnerable choke-point in a commodity-chain; organize and appear in force to block it; make a demand; keep choking until that demand is met with either concession or violence. Do it again. This is the story of carbon democracy that Mitchell tells so well.

If that is all there is to sabotage, it names many of the forms of action we see in efforts to disrupt expansion of the petro-economy, including physical blockades and occupations of testing sites and pipeline routes, disruptive intervention in public hearings and regulatory proceedings, assertions of territorial sovereignty and custodianship, litigation to contest approvals and licenses, and publicist tactics aimed at depriving extractive enterprises of social license (or at least driving up its cost). These are all effective forms of political action, and they are saboteurial in many ways. And, as with the transitions to coal and petroleum, they might even succeed in prompting capital to accelerate its transition to new energy sources and infrastructures that will sabotage the growing power of the “petrotariat.”<sup>22</sup> For all that, it is still not clear that these are especially novel forms of action or that they embody what is really unusual and radical about sabotage as a particular form of action and subjectivity. Mitchell’s account tells us something about sabotage, but not everything. Sabotage might be a much stranger and more complex form than what has been discussed so far in this chapter, portending a much more radical form of political action and subjectivity, one less easily identified and located in the present scene of petropolitics.

With this in mind, I will highlight three other attributes of sabotage, informed by an account that has been emerging in the work of Evan Calder Williams, arguably the most interesting and thoughtful contemporary scholar of sabotage.

## Sabotage Is Internal to Capitalism

It is not just that sabotage is practiced by capitalists against the interests of competitors, workers, and consumers, and is therefore a normal structural



attribute of capitalism. It is that when sabotage happens, it comes from inside the system it attacks, not from without. The potential of sabotage is already present in any interdependent system. Because sabotage is already internal to the system of capitalist power, it is readily available for deployment against that system provided one is ready to bear the considerable risks of enacting it. As Williams writes, sabotage is “the deployment of a technique or activation of a capacity, at odds with the apparatus, system or order within which it is situated and for which it was developed.”<sup>23</sup> Sabotage is potentially effective as a mode of contention because it is already there inside the system being contested.

Quoting Flynn, Williams observes that all that is required to activate sabotage against, rather than in favor of, the existing order of things is

the “fine thread of deviation”: the impossibly small difference between exceptional failure and business as usual, connected by the fact that the very same properties and tendencies enable either outcome. If we are to think of sabotage as a process that negates productivity, it’s a negation that can’t be disentangled from the structures of productivity itself.<sup>24</sup>

In this sense, sabotage is “politics as judo” in that its organizing principle is the use of subtle shifts in position to divert an opponent’s force against them. It works from the inside out. This is why, as Williams observes (cleverly quoting a 1987 master’s thesis by US Air Force captain Howard Douthit): “History does not point to an effective countermeasure to sabotage.”<sup>25</sup> The suggestion here is not that counter-hegemonic sabotage is easy or risk free for those who might summon the courage to undertake it. **If there is a difference between capitalist sabotage and anticapitalist sabotage, it is that the former is rewarded by markets and mostly protected by law, while the latter is subject to prohibition and punishment.** Instead, the point is that in deeply embedded and highly interdependent systems such as petrocapitalism, the resources—the technologies, agencies, and relationships—for potential disruption, resistance, and deviation are already present, even if only latently. In this sense, sabotage stands counter to the cynical position that, under conditions of petrocapitalist totality, meaningful action is impossible prior to a fundamental transformation that is beyond our capacity to effect. **By contrast, a sabotage disposition assumes that systems based on inequality and contradiction already contain energies that harbor the potential to undo them. Releasing these energies by pulling fine threads of deviation is what it means to act.**

## Sabotage Is Mediation

If infrastructure is the medium of sabotage, then sabotage itself is a practice of mediation. Throughout the history of its thought and practice, it has been well understood that the potential of sabotage relies on an unspoken confederacy between the saboteurial actor and the systems and materials he or she leverages in the course of committing disruptive action. While sabotage takes the form of a withdrawal, it is not simply a strike or a collective withdrawal of the single element of workers' labor from a productive system (indeed, historically, sabotage arose as a tactic under conditions where the simple withdrawal of labor proved ineffective against companies that could simply replace that labor). Saboteurs do more (or less) than remove their labor: they disrupt the generation, circulation, and accumulation of value in a system by acting in it, with it, through it, in concert with any number of its many and complex animate and inanimate elements.

This is the sense in which sabotage is materialist: it rests upon an assemblage of human and nonhuman agencies, a confederacy of workers, sites, architectures, machines, processes, and materials. Williams is particularly insightful on this point:

Sabotage . . . invokes a very slippery, inhuman solidarity and communication with the very things you fight against . . . In order to sabotage, one must know the landscape, one must know the factory, one must know the home, one must know the hospital, *intimately*. It is not a knowledge that can simply come from afar—a Molotov doesn't count. It's knowing precise points of failure, and so what it means is this odd complicity with anonymous and yet non-neutral materials.<sup>26</sup>

What distinguishes sabotage is an intimate relationship with the complex materiality of the situation—a materiality composed of a multiplicity of human and nonhuman constituents whose assembly is what generates the saboteurial possibility.<sup>27</sup> In Williams's account, sabotage extends from simply going slow to include any act that “use[s] elements of a machine, system, organism, code, network, or city against its designed function” in order to disrupt or defect from capitalism's hold on the organization of production, time, space, and life.<sup>28</sup> Sabotage thus materializes a form of “invisible organization” that inheres in everyday experience and skill, and embodies a relationship of intimacy between human actors and the nonhuman things (materials, processes,

So basically, data collection, studies, cost-benefit analyses— these are all forms of sabotage



technologies) that are complicit in their action. Sabotage, we might say, is essentially relational, and, therefore, it is definitively a practice of mediation.

In this sense, sabotage represents a specifically political form of what Richard Grusin has called “radical mediation.” For Grusin, “mediation operates not by neutrally reproducing meaning or information but by actively transforming human and non-human actants, as well as their conceptual and affective states.”<sup>29</sup> Radical mediation, he says, “should be understood not as standing between preformed subjects, objects, actants, or entities, but as the process, action, or event that generates or provides the conditions for the emergence of subjects and objects, for the individuation of entities within the world.”<sup>30</sup> Sabotage is mediation in the sense of what Williams refers to as a relationship of “odd complicity,” even if not all mediation is necessarily sabotageurial. Sabotage is mediation doubly radicalized, mediation in its most explicitly political form. From the perspective of radical mediation, the two-part question facing the saboteur is as follows: What are the specific constituents, relations, and orientations that might deviate from, destabilize, and destructure the hegemony of petrocapi-talism, and through what practices and processes of mediation might they be assembled and materialized?

## Sabotage Is Postsubjective

In this light, we might well ask: who, in this wild scene of material complicity, is the responsible actor, and what is she/he/it doing? He/she/it is implicated in an assemblage, but definitely not standing up *in an assembly* and making a speech, writing a blog post, or casting a vote. Like the capitalist saboteur acting anonymously as “the economy” or “the market” by orchestrating a conspiracy of human and nonhuman elements, and unleashing their effects across unbounded temporal and spatial distances, he/she/it might never appear in public in his/her/its *own right* at all. Sabotage is a way of being political that reverses the republican logic of politics as the event of appearance and the act of speaking.

“Sabotage,” according to Williams, “is a constant activity, it is not something that will happen . . . but a way to wage war without ever coming into the open.” Sabotage is not eventual but everyday—“not an act with a definite social content,” Williams writes, “but rather an exacerbated relation” that places the saboteur in a constant state of withdrawal, or being-in-refusal, even as they might appear to be or to say otherwise.<sup>31</sup> This is what distinguishes Williams’s account of sabotage from Mitchell’s, in which sabotage, though enacted on

flows and mediated by infrastructure, is still more or less indistinguishable in its basic logic from the strike. In a strike, disruptive action is collectivized, but its authors are declared, as are the demands whose satisfaction will end the disruption and restore operations to normal. Strikes can be sabotage, but they are not necessarily or always so.<sup>32</sup> Sabotage is more akin to what Stefano Harney and Fred Moten, referring to the struggle over the means of social reproduction in and by the black undercommons, call “planning”: “the plan is to invent the means in a common experiment launched from any kitchen, any back porch, any basement, any hall, any park bench, any improvised party, every night . . . planning in the undercommons is not an activity, not fishing or dancing or teaching or loving, but the ceaseless experiment with the futural presence of the forms of life that make such activities possible.”<sup>33</sup> Here, planning is not the discrete action of a particular individual or collective but the mediated emergence of the conditions of possibility for action at all. Planning does not happen; it is under way. This points to what is most radical about sabotage: its confounding of the regime of the modern, liberal, humanist subject who is seen and said to act only when the boundaries of his or her action can be established and he or she can be named, represented, and held accountable for it.

In reducing political action to public speech, Hannah Arendt famously writes that, “without the disclosure of the agent in the act, action loses specific character . . . action without a name, a ‘who’ attached to it, is meaningless.”<sup>34</sup> Indeed, sabotage is not a form of action fit for the Athenian polis or the attenuated liberal democracies that aspire to its dialogical ideal. Sabotage, according to Williams, is “a form of social war opposed not just to a global order of reproduction, circulation, and management but also to the most basic structures of representational politics that order strongly encourages us to adopt.”<sup>35</sup> Sabotage explicitly eschews the diluted forms of political action provided by liberal democratic publicity. “Sabotage,” Williams says, “is anathema to any notion of representation, of voting, of being a citizen and above all the notion of the human that underwrites the entire project and therefore structures what people understand the political to mean.”<sup>36</sup> This is not simply because the saboteur would sooner write a disabling bug into a game console’s code than sit through a steering council meeting or organize an encampment. It is because the structure of sabotage—its “invisible” organization, the temporal and spatial gaps between the act and its effects, the manner in which the act combines multiple human and nonhuman agencies with which the saboteur collaborates but which he or she cannot control—destabilizes

the very idea of action as a discrete event that can be attributed directly and openly to an individual actor who is its exclusive author. In Williams's account, sabotage is inherently (and not just tactically) clandestine, a category of action that is defined in opposition to the modern liberal conceit that an act is a bounded occurrence for which an individual can and must "appear" to take responsibility or credit. "Sabotage," he says, "necessarily insists on acts that must not be traced back to their source. They therefore become properties of the world."<sup>37</sup> The difference between action as a property of individuals and action as a property of the world is the difference between the liberal and the sabotage subject.

Capitalists and other producers of inequality and exploitation have always been sabotage subjects in exactly this sense: their acts become properties of the world that are not traced back to their source. When a capitalist in a Manhattan office is prompted by an algorithm to close a plant in a small Ontario town because some combination of subsidy, tax relief, and the price of labor is more advantageous elsewhere, he or she acts politically by leveraging systemic interdependencies to withdraw or withhold the firm's contribution to the circulation of value.<sup>38</sup> The capitalist commits a great and disruptive sabotage, but its effects are felt far from where and when he or she "acts," and it is not clear that the person is acting alone or that his or her "decision" can even be understood as a discrete action attributable uniquely to him or her. It implicates a complex assemblage of other human and nonhuman elements, and it is less of an event for him or her than it is a "constant activity," a "property of the world," and so the capitalist never "comes into the open" and the act is never "traced back to its source." **He or she is never named, is not responsible, is not held accountable. He or she is a saboteur.** The designation of action as a property of individuals mediated by speech is central to liberalism, but it has only ever been applied selectively and has never adequately described how power operates or how effective political action actually happens. This is revealed most dramatically under the conditions of contemporary neoliberalism, wherein some individuals (the poor) are required to stand up and take responsibility for that over which they have no control or influence, while those who have the most power and influence over events (the rich) are relieved of any responsibility for the consequences of their actions. The political subject of sabotage simply takes this attribute of the system as given and turns it against the system itself, thereby becoming a constituent (not the author) of an exacerbated relation. This is what it means to act today.

Why linger over a discredited category such as sabotage? It is not to suggest that sabotage is what people ought to do, or that they ought to use that word to name what they are already doing. The conventional association of sabotage with destructiveness and criminality runs too deep to recommend such provocations, and, in any case, the account presented above would imply there is no need to promote sabotage because sabotage is already under way. This is precisely the value of highlighting it as a category. The veritable evacuation of liberal democratic institutions and procedures as venues for effective political action, the hyperobjective qualities of climate change, and the apparently intractable character of the petrocultures that subtend both have generated a social condition that is experienced by many as postpolitical, in which the meaning of action is difficult to discern. However, politics is a property of the world that cannot be eradicated so easily. The task of a critical theory of petroculture is to identify the forms that politics does and might take under conditions that would otherwise seem to erase it, forms that are consistent with the material realities of that culture. The intuition sketched briefly here is that sabotage might be one of those forms, particularly in light of the qualities attributed to it in the latter parts of this chapter—its *internality* to systems, its *mediational* and *postsubjective* character—which exceed the potential attributed to it in Mitchell's account of carbon democracy. It bears remembering that Mitchell's saboteurs did not disrupt the movement of coal because they wanted to end the extraction and consumption of coal. They did it to accomplish a redistribution of the value generated by the carbon economy, a demand whose satisfaction was predicated on the continuity of that economy. The same goes for the sabotage carried out by striking refinery workers in France today.<sup>39</sup> There is nothing wrong with this sort of action, and it can result in many good things, but it is not a type of sabotage oriented to enacting a future social order "after oil."<sup>40</sup> Who and where, we might ask, are the actors internal to petrocapitalism who will pull the "fine thread of deviation" and unleash a saboteurial unraveling for which there is no effective countermeasure? Which confederacies will be established and mobilized between human and inhuman agencies, and what will be the intimate knowledges by which their mediation is accomplished? And who, or what, will be the saboteurial political actor that, in its constant activity, does not appear and never makes a speech or a demand, and whose action cannot be traced to its source? What and where is the invisible organization, and what forms of mediation will it materialize? These are questions that might orient us to the enigma of what it means to act into the apparent impasse of today's energy culture.

## Notes

1. Paolo Virno, "Virtuosity and Revolution: The Political Theory of Exodus," in *Radical Thought in Italy: A Potential Politics*, edited by Paolo Virno and Michael Hardt (Minneapolis: University of Minnesota Press, 1996), 189.
2. Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis: University of Minnesota Press, 2013), 1.
3. Virno, "Virtuosity and Revolution," 189.
4. Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil* (New York: Verso, 2011), 8.
5. Mitchell, *Carbon Democracy*, 19.
6. Mitchell, *Carbon Democracy*, 27.
7. Mitchell, *Carbon Democracy*, 252.
8. See Pierre Dubois, *Sabotage in Industry*, translated by Rosemary Sheed (New York: Penguin, 1979).
9. Arturo Giovannitti, "Introduction to Pouget's Sabotage," in Émile Pouget, *Sabotage*, translated by Arturo M. Giovannitti (Chicago: Charles H. Kerr & Co., 1913 [1912]).
10. Elizabeth Gurley Flynn, "Sabotage: The Conscious Withdrawal of the Workers' Industrial Efficiency," in *Direct Action and Sabotage: Three Classic Texts from the 1910s*, edited by Salvatore Salerno (Oakland, CA: PM Press, 2013), 91.
11. See US Supreme Court, *Burns v. United States*, 274 U.S. 328 (1927), argued 24 November 1926, decided 16 May 1927, <https://supreme.justia.com/cases/federal/us/274/328/case.html>.
12. Flynn, "Sabotage," 98. As Salerno recounts, Boyd would later renounce sabotage in exchange for a pardon, leading Flynn to append a note to her pamphlet decrying his "cowardice" and to speculate that he might have been a provocateur. In 1917, Flynn herself would renounce sabotage in an effort to secure Woodrow Wilson's intervention in charges brought against her under the Espionage Act. See Salvatore Salerno, "Introduction," in *Direct Action and Sabotage: Three Classic Texts from the 1910s*, 17–18.
13. William E. Trautmann, "Direct Action and Sabotage," in *Direct Action and Sabotage: Three Classic Texts from the 1910s*, 42. See also Pouget, *Sabotage*, 55.
14. Thorstein Veblen, *The Engineers and the Price System* (Kitchener, ON: Batoche Books, 2001), 7.
15. On planned obsolescence, see Giles Slade, *Made to Break: Technology and Obsolescence in America* (Cambridge, MA: Harvard University Press, 2007). In 2015, the US Environmental Protection Agency sanctioned Volkswagen for installing "defeat devices" in its diesel vehicles in order to circumvent emissions standards, a practice later revealed to be relatively common in the industry. See Megan Geuss, "Volkswagen's Emissions Cheating Scandal Had a Long, Complicated History," *arsTECHNICA*, 24 September 2017, [www.arstechnica.com](http://www.arstechnica.com).
16. On publicity, see Darin Barney, "Publics without Politics: Surplus Publicity as Depoliticization," in *Publicity and the Canadian State: Critical Communications Approaches*, edited by Kirsten Kozolanka (Toronto: University of Toronto Press, 2014), 72–88.



17. See Darin Barney, "We Shall Not Be Moved: On the Politics of Immobility," in *Theories of the Mobile Internet: Materialities and Imaginaries*, edited by Jan Hadlaw, Thom Swiss, and Andrew Herman (New York: Routledge, 2014), 15–24.
18. Evan Calder Williams, "Manual Override," *New Inquiry* 50 (21 March 2016), <https://thenewinquiry.com/manual-override/>.
19. Laura Kane, "Indigenous Protesters Build Homes in Trans Mountain Pipeline's Path," *Globe and Mail*, 7 September 2017, <https://www.theglobeandmail.com/news/british-columbia/indigenous-protesters-build-homes-in-trans-mountain-pipelines-path/article36207510/>.
20. On logistics and politics, see Deborah Cowen, *The Deadly Life of Logistics: Mapping Violence in Global Trade* (Minneapolis: University of Minnesota Press, 2014); and Ned Rossiter, *Software, Infrastructure, Labor: A Media Theory of Logistical Nightmares* (New York: Routledge, 2016).
21. See John Durham Peters, *The Marvelous Clouds: Towards a Philosophy of Elemental Media* (Chicago: University of Chicago Press, 2015).
22. On the role of labor in the transition from hydraulics to coal power, see Andreas Malm, *Fossil Capital: The Rise of Steam Power and the Roots of Global Warming* (London: Verso, 2016).
23. Williams, "Manual Override."
24. Williams, "Manual Override."
25. Williams, "Manual Override."
26. Williams, "Manual Override, Lecture 2: The Sabotage of Time," lecture, Center for Transformative Media, Parsons The New School for Design, New York, 10 March 2014.
27. On the multiple material agencies at work in pipeline developments, see Andrew Barry, *Material Politics: Disputes along the Pipeline* (London: Wiley-Blackwell, 2013).
28. Williams, *Manual Override: The Sabotage of Capital*. 2013–14 Fellows Lectures. Centre for Transformative Media, Parsons: The New School for Social Design. This quotation is taken from the abstract posted at <http://ctm.parsons.edu/events/lecture-series/2013-14-fellows-lectures/>.
29. Richard Grusin, "Radical Mediation," *Critical Inquiry* 42 (Autumn 2015): 130.
30. Grusin, "Radical Mediation," 129.
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