



PROJECT MUSE®

Necrocracy in America: American Studies Begins to Address Fossil Fuels and Climate Change

Matthew Schneider-Mayerson

American Quarterly, Volume 67, Number 2, June 2015, pp. 529-540 (Review)

Published by Johns Hopkins University Press

DOI: 10.1353/aq.2015.0016



➔ For additional information about this article

<http://muse.jhu.edu/journals/aq/summary/v067/67.2.schneider-mayerson.html>

Necrocracy in America: American Studies Begins to Address Fossil Fuels and Climate Change

Matthew Schneider-Mayerson

Oil Culture. Edited by Ross Barrett and Daniel Worden. Minneapolis: University of Minnesota Press, 2014. 456 pages. \$90.00 (cloth). \$30.00 (paper).

Living Oil: Petroleum Culture in the American Century. By Stephanie LeMenager. New York: Oxford University Press, 2014. 263 pages. \$49.95 (cloth).

Routes of Power: Energy and Modern America. By Christopher F. Jones. Cambridge, MA: Harvard University Press, 2014. 320 pages. \$39.95 (cloth).

American studies' short lifetime is concurrent with the gradual expansion of de jure democratic rights to the entire populace regardless of race, gender, class, and sexuality, a project it has often seen as fundamental to its academic (and political) mission. It is also concurrent with the maturation of oil capitalism in the United States and around the world. So profoundly has petroleum affected the contemporary politics, identities, and subjectivities of American life that some scholars have asked whether the United States is a democracy or a *necrocracy*.¹ This term refers to the rule of deceased former rulers but also denotes the ancient flora and fauna that became, millions of years postmortem, fossil fuels: oil, natural gas, and coal. If observers once imagined that the legacy of the United States would be its experiment with democracy, there is now little question that one of its enduring legacies will be the development and dissemination of a way of life premised on consuming fossil fuels at a staggering rate. Future historians may remember the United States in the twentieth and early twenty-first centuries principally as the progenitor of the rising seas, extreme weather events, volatile climate, and acidified, littered oceans that plague their times. The human experience of this "slow violence"

is already tangible—scientists estimate that three hundred thousand people already perish every year as a result of anthropogenic climate change, while three hundred million are negatively affected.² Moreover, it disproportionately affects the people that most American studies scholars study and support: groups marginalized and powerless because of their race, class, gender, sexuality, ability, and/or nationality. The World Bank reports that 75–80 percent of the damages and costs of climate change will be suffered by countries in the global South,³ and scholars predict there may be two hundred million climate refugees by 2050, primarily from the poorest and most vulnerable countries.⁴ We can infer that climate change will ultimately stand alongside the European colonization of the Americas and the Atlantic slave trade as among the most egregious collective acts of injustice in history.

One might not know that we are in the midst of an unprecedented global crisis (in which we are, individually and collectively, deeply complicit) from reading *American Quarterly* or attending the American Studies Association's annual conference, however. American studies, the academic discipline arguably most dedicated to progressive political engagement, social justice, and activism, has for the most part ignored climate change and the still-accelerating consumption of fossil fuels despite our awareness of the catastrophic environmental and human consequences. This lacuna is particularly surprising given the United States' central role in extracting and consuming fossil fuels, developing and normalizing oil capitalism, and denying climate science. If climate change was once seen primarily as a scientific, technological, economic, or policy issue, and thus beyond the purview of the humanities, it is increasingly recognized as a problem deeply rooted in social, cultural, and political systems.

As climate change and the consequent social, economic, and political destabilization becomes a regular feature of our news cycle and daily lives, scholars and students are responding; while humanities and social science budgets are being slashed nationwide, the emerging interdisciplinary field of environmental humanities is gaining recognition and environmental studies departments are rapidly expanding. Whereas anthropology, sociology, geography, history, philosophy, religious studies, and literature increasingly turn their focus toward climate change and its effects, American studies—another interdisciplinary that arose to fill a set of intellectual and cultural voids—has remained aloof, beyond a dedicated but relatively small group of scholars who make up the Environment and Culture Caucus. In the last fifteen years, for example, *American Quarterly* has published only five articles or reviews that even mention climate change or petroleum, and the 352 panels at the 2014 ASA conference included just 2 on energy or climate change and 12 on envi-

ronmental issues very broadly construed.⁵ These subjects are often similarly absent or marginalized in most American studies curricula. With the publication of three excellent new books, Ross Barrett and Daniel Worden's edited collection *Oil Culture*, Stephanie LeMenager's *Living Oil: Petroleum Culture in the American Century*, and Christopher F. Jones's *Routes of Power: Energy and Modern America*, American studies may finally be getting up to speed.

All three share the crucial and timely endeavor of extricating the deep entanglement of petroleum in recent and contemporary culture and politics. They go about this work differently: *Oil Culture* is an edited collection of short, punchy pieces; *Living Oil*, a kaleidoscopic meditation on petroleum media, cultures, and affects; and *Routes of Power*, a regional historical study of the energy transition that brought us fossil fuels, electricity, and modernity. They present generative models of the "energy humanities" and provide points of entry for climate-curious interdisciplinary scholars to begin to address energy and climate change in their research and teaching.⁶

Oil Culture originated as a panel at the ASA conference, became a special issue of the *Journal of American Studies* (May 2012), and is intended, Barrett and Worden write, to "consolidate the field of 'oil studies' as a major component of not just environmental and energy studies but also cultural studies more generally" (xxx). While some of these essays may bite too much around the edges of the energy-culture-politics nexus for that to be the case, the editors have accomplished admirable work in curating twenty strong interdisciplinary pieces from scholars in history, geography, gender studies, museum studies, film studies, photography criticism, art history, literature, and science fiction studies. In their introduction, Barrett and Worden outline the recent emergence of energy humanities and define their object of study: "oil culture," by which they mean both "the particular modes of everyday life that have developed around oil use in North America and Europe since the nineteenth century (and that have since become global)" and the "dynamic field of representations and symbolic practices that have infused, affirmed, and sustained the material armatures of the oil economy" (xxiv). Like the other works reviewed here, *Oil Culture* was arranged with present concerns in mind and the aspiration that "by attending to those moments in which oil's ceaseless colonizing expansion has engendered uncertainty, ambivalence, or resistance, the cultural analysis of oil" might "uncover symbolic materials that may be useful to the construction of alternative perspectives on fossil fuels and the energy economy" (xvi).

Organized in five parts, the book opens with "oil's origins of modernization" in the nineteenth and early twentieth century. Heidi Scotts explores the calcu-

lated romanticism of whale oil products and advertisements, which prefigured the “greenwashing” campaigns of oil and gas companies, and Barrett contributes an engaging art-historical analysis of “petro-primitivism”—recasting oil extraction as an ancient and masculine endeavor—in Standard Oil’s 1901 memorial to one of oil exploration’s founding fathers in Titusville, Pennsylvania. The second section focuses on “oil’s golden age.” In the late 1940s and 1950s, as Frederick Buell observes in his entry, new applications of petroleum reshaped much more than American transportation:

As wartime petrochemistry was reworked into the chemical equivalent of plowshares, oil, chemically metamorphosed, became central to many new productions, from plastics to pharmaceuticals, print inks to pesticides. It changed into what people dressed in, evacuated into, viewed, and even ate, not just what they put into their power machinery. Oil thus now reappeared as an agent of chemical *and* social metamorphosis. Bodies became literally oily, in what they ate, and in the cosmetics and clothes they put on; pharmaceuticals began doing the same thing for minds. (81)

For these reasons, many of *Oil Culture*’s authors describe contemporary life as “petro-modernity.”

“Should brave men die so you can drive?” This was the query of a World War II propaganda poster that challenged Americans to sacrifice by altering their driving and consumption habits, but Sarah Frohardt-Lane argues that this gendered campaign actually entrenched automobility by interpellating drivers as potential patriots. Hanna Musiol explores the “oil curse” among the Osage tribe, who found wealth after discovering oil on their Oklahoma land in the 1920s and 1930s, through her examination of John Joseph Mathews’s indigenous bildungsroman, *Sundown* (1934). In Oklahoma, as elsewhere, “oil extraction and its violence simultaneously produce[d] stability in American industrial centers” but led to “cultural fragmentation” (130) at the sites of extraction. This dynamic is the subject of the two most disturbing pieces in the third section, “The Local and Global Territories of Oil,” which adds a welcome international perspective on this most transnational of commodities. The geographer Michael Watts compares the Niger Delta (where oil spillage approximating the *Exxon Valdez* spill has occurred every year for the last half century) and Louisiana (where 228,000 oil and gas wells have been drilled in the last century) as typical “oil frontiers,” geographically dispersed sites of accumulation, exploitation, violence, extreme inequality, and environmental destruction. Jennifer Wenzel scrutinizes “petro-magic-realism” in Nigerian literature: whereas petroleum (petro-magic) “offers the illusion of wealth

without work,” petro-magic-realism illuminates the true cost, “a recognizably devastated, if also recognizably fantastic landscape” (219).

The volume then turns back to North America, as Matthew Huber fruitfully connects the energetic surplus of the last half century to the rise of neoliberal politics and political subjectivities. Huber observes that it is only “with all the ‘work’ (or energy) accomplished through taken-for-granted hydrocarbons” that “individuals could imagine themselves as masters of their own lives” (239). Sheena Wilson’s chapter studies the naturalization of women’s consumerist relationship to petroleum. She takes up the mainstream media’s treatment of Canada’s environmental justice Idle No More movement, a Canadian “ethical oil” billboard campaign to rationalize the Alberta tar sands, and *Vogue Italia*’s notorious 2010 “Water & Oil” photo spread. In a related vein, the naturalization of petro-infrastructure is the topic of the first essay of the next section, “Exhibiting Oil.” Dolly Jørgensen finds that American aquariums, partially sponsored by oil and gas corporations, typically represent the Gulf of Mexico’s marine ecosystems by integrating offshore oil rigs into their displays, framing the oceans as a “harmonious meeting place of oil and water” (285). Catherine Zuromskis inspects the “industrial sublime” (300) of the photographer Edward Burtynsky’s momentous *Oil* series, and finds “an unsettling sense of permanence in the postmillennial moment, a permanence that speaks not to bottomless resources but to a failure to reimagine Western culture and prosperity another way” (304).

The essays in the final section, “The Future of and without Oil,” come to a similar conclusion. “Peak oil” refers to point at which global oil production reaches its maximum rate and begins an expected decline. From 2005 to 2010 widespread fears of an imminent peak gave rise to a great deal of cultural production as well as a social movement premised on the imminent collapse of industrial civilization.⁷ Surveying the representation of oil and other resources in American science fiction, Gerry Canavan notes that “as the world-historical scarcity of oil has grown more and more obvious” over the last few decades, “the glittering techno-utopias of Golden Age science fiction become increasingly replaced by their psychic opposites: apocalyptic, post-peak oil horrors of deprivation and ruin” (332). In his chapter, the influential petro-thinker Imre Szeman interrogates the political solutions offered by three recent oil documentaries. He asserts that while they may succeed in educating viewers on “the structuring role of oil in civilizational processes” (360), their inability to define the kind of political action they hope to inspire speaks to the paralyzing dependence on petroleum in contemporary life. If anticapitalist and

environmental movements are to succeed, Szeman contends, they must begin by developing political imaginaries and agendas that go beyond fossil fuels.

While LeMenager's *Living Oil* hits some of the same notes as *Oil Culture*, it moves at a more beguiling rhythm. With unexpected detours and digressions and a personal, self-aware tone that mirrors the author's (and the reader's) intimate immersion in petroleum culture, *Living Oil* can be slow reading; but one senses that this is a deliberate strategy. The book is a leisurely road trip through twentieth-century US media and culture, and LeMenager's goal—"to consider how the story of petroleum has come to play a foundational role in the American imagination and therefore in the future of life on earth" (10)—is accomplished not only through linear argumentation but purposeful meditation. The seepage of fossil fuels into every aspect of our lives suffuses the pages and washes over the reader.

LeMenager describes *Living Oil* as "a work of environmental cultural studies, driven by a fascination with petroleum aesthetics," which is to say all modern aesthetics, since oil is "a medium that fundamentally supports all modern media forms concerned with what counts as culture—from film to recorded music, novels, magazines, photographs, sports, and the wikis, blogs, and videography of the Internet" (6). It begins probing the dynamic between oil and environmentalism with the year-long Santa Barbara oil spill that began in 1969, one of the catalyzing events of modern environmentalism in the United States. Through media and photography theory, LeMenager explores the nation's introduction to now-familiar images of wildlife choking on "black gold" via a *Life* magazine spread and the archives of local photographers. Devastating a middle-class paradise, the Santa Barbara spill demonstrated that not even the privileged were immune from modern ecological tragedies. Partly in response to this event, California became known as a "green" state, yet the Santa Barbara spill has been largely forgotten, and nearby areas are now being fracked for natural gas.

The second chapter is structured around a Wikipedia entry's delightfully simple query, "Why is oil so bad?" To answer it, LeMenager turns to oil media that feature petroleum and automobility, including the novels *Oil!* (1927), *Lolita* (1955), *On the Road* (1957), and the film *There Will Be Blood* (2007). First, she asserts that "liveness, as in seeming to be alive, now relies heavily upon oil" (6), since movement and speed are commonly associated with desire, excitement, and happiness. Second, echoing Szeman, she argues that because petroleum "has supported overlapping media environments," there is "no apparent 'outside' that might be materialized through imagination and affect as

palpable hope” (70). I find this to be a slight overstatement; indeed, *Living Oil* itself locates kernels of hope and resistance at many junctures.

Living Oil was composed recently enough for LeMenager to take full stock of the developments in energy supply that have occurred over the last ten years: while petroleum remains as central to the “American way of life” as it was in the 1940s, the methods and costs of its extraction are quite different. The days of black geysers pictured in Hollywood films are long past, and a great deal of energy and capital are now required to supply prodigious quantities of oil and natural gas, which are extracted and processed via risky and technologically sophisticated methods. Much of the planet’s petroleum deposits are far offshore and underwater (sometimes five thousand feet deep); distributed as bitumen in viscous clay, sand, and water (as in Alberta’s tar sands, which require forty-five hundred pounds of earth to produce a single barrel of oil); or unleashed and collected only through hydrofracking (at least twenty-two thousand new wells were drilled and fracked in the United States in 2012 alone). The methods for extracting this oil reflect a marked decline in energy return on energy invested (EROI) since the 1930s. EROI for American oil at that time was approximately 100:1—for every unit of energy that went into discovery and extraction, the well would yield one hundred times that amount. EROI fell to 30:1 by the 1970s and to approximately half that by 2009. The estimated EROI for “unconventional” hydrocarbons, such as tar sands and oil shale, is much less (6:1 and 2:1, respectively). As LeMenager puts it, “Tough Oil,” the industry term for oil and natural gas extracted through more laborious methods, “isn’t the same resource as so-called easy oil, in terms of its economic, social, and biological costs” (15). While the environmental risks of these practices have been obfuscated by public relations campaigns, industry-funded scientists, and legislative bodies captured by campaign donors, they are (by almost all independent reports) quite serious and testify to a shocking investment in a fossil-fueled future even as most scientists insist that “business as usual” is no longer an option.⁸

LeMenager’s cultural and literary exegeses are compelling, but it is *Living Oils* sensitivity to the affective registers of the intricate relationship between energy, ecology, and modern life that distinguishes this work. The third chapter shifts from California to Louisiana to explore the affects and structures of feeling of our “bad love” for “a profoundly unsustainable and charismatic energy system” (11), including “petromelancholia,” the grieving for evanescent modernity as conventional resources dwindle. Louisiana presents three additional ecological dimensions to consider: Hurricane Katrina; the BP spill of 2010;

and subsidence, a phenomenon in which twenty-five to forty square miles of the state's wetlands sink underwater each year, primarily because of oil and gas drilling. Drawing on a swarm of sources that include an environmental journalist's chronicle of subsidence, documentaries, a post-Katrina blog, a memoir of trauma and recovery, an oral history of Louisiana oil and gas workers, and graphic novels, LeMenager describes the Gulf Coast as a sacrifice zone as well as a sign of things to come in this era of extreme extraction and climate chaos. In this light, understanding the affective, political, and artistic responses to ecological damage and environmental racism "may be crucial both to national and species survival" (123). The last chapter covers North American petroleum archives, and an appendix presents a "Life Cycle Assessment of a Conventional Academic Print Book," which concludes that the energy required to produce one book is comparable to a cheeseburger.

How did we get into this mess? Jones's *Routes of Power* provides some vital historical context. Jones examines the role of canals, pipelines, and wires in facilitating six energy transitions that occurred in the mid-Atlantic region (Pennsylvania, New Jersey, New York, and parts of Delaware and Maryland) from 1820 to 1930. These years saw the sweeping shift away from the age-old "organic" energy regime to fossil fuels, electricity, trains, and automobiles. In the 1820s the vast majority of people in the region (and the world) lived in rural areas and worked on farms, harnessing only the power of animals, rivers, biomass (such as wood), and their own muscles; by 1930 many of their great-grandchildren lived in large cities, worked in factories, enjoyed "luxuries once restricted to ruling elites" (229), and had little choice but to embrace the increasing use of fossil fuels. What happened, and what can it tell us about our future?

As Jones's title suggests, his major contribution to the growing literature on historical energy transitions is his attention to the role of energy transport systems. The six case studies are the construction of canals able to move the region's anthracite coal from 1820 to 1840; the growth of anthracite coal consumption from 1820 to 1860; Pennsylvania's oil boom from 1859 to 1880; the completion of the first long-distance oil pipeline in 1880; the erection of a colossal hydroelectric dam on the Susquehanna River in 1910; and the installation of long-distance electricity wires between 1926 and 1931. As a result of these cumulative developments, life in the region (and, soon after, throughout the United States) changed greatly. Jones is at his best in describing the role that "boosters" played in encouraging new behaviors and the emergence of positive feedback loops that encouraged "landscapes of intensification" of

energy consumption. Because these networks required huge initial outlays of capital, they “created a set of actors with a vested financial interest in ensuring that as much energy was shipped” (231) and consumed as possible. Whereas the transition to our world of fossil fuels is sometimes portrayed as the product of heroic inventors or a natural step toward a self-evidently better life, Jones’s research reveals something far more complex: “For every John D. Rockefeller or Thomas Edison, there were thousands of people whose labors were necessary to create our current world of fossil fuel abundance” (9). One of *Routes of Power*’s virtues is its relatively narrow spatial and temporal perspective, which allows it to recognize the contributions of otherwise forgotten actors. By offering cheap and convenient energy—“akin to opening a time warp that unlocks the slowly accumulated energy surplus of eons in instantaneous moments of combustion” (17)—and modeling the wonders of coal, oil, and electricity for both personal and industrial use, these boosters were able to sell Americans on fossil fuels. In so doing, they “created an energy surplus that stimulated the dramatic growth of manufacturing enterprises, urban populations, and leisure patterns based on consuming energy rather than preserving it” (3).

Routes of Power is productively attuned to the cultural and political dimensions of energy transitions, eschewing the lens of technological or environmental determinism through which scholars have often viewed them. In the mid-Atlantic, regional legislators passed measures that gave extensive rights to production and transport measures, and Euro-American cultural norms privileged the “improvement” and exploitation of nature. Jones provocatively hints at the effect that this transition might have had on politics (from the republicanism of the early nineteenth century to the federalism of the New Deal), but does not reach the level of insight on the relationship between energy and politics as another recent book, Timothy Mitchell’s *Carbon Democracy*.⁹ While Jones (to his credit) repeatedly reminds the reader that the benefits and monetary rewards of coal, oil, and electricity were unequally distributed across the population, he spends little time discussing the losers, outside of the chapter on Pennsylvania’s oil boom (which is reminiscent of contemporary shale oil-crazed North Dakota). Similarly, although *Routes of Power* astutely analyzes how canals, pipelines, and wires distanced consumers from the sources of their energy production and thereby enabled increased pollution and environmental despoliation, it might have offered more detail on the nature of that damage and how people experienced and ameliorated it. For these reasons, *Routes of Power* may prove more useful to science and technology scholars and historians of energy and the mid-Atlantic than a broader humanities readership—it is

not, for example, as comprehensive as David E. Nye's *Consuming Power* or as suited for petro-newbies as Vaclav Smil's *Energy Transitions*.¹⁰

Nonetheless, *Routes of Power* is an excellent example of the potential contribution of humanities scholars to addressing climate change and the energy transition that looms on our horizon. Jones's focus on energy delivery infrastructure could not be more relevant today, as environmentalists and indigenous people square off with corporate interests and the Republican Party over the completion and approval of the Keystone XL pipeline. Jones concludes his study with the following lessons: energy transitions are slow and overlapping; require facilitating transport networks; are shaped by both public and private actors; and reconfigure social and political as well as mechanical power. This final lesson is especially valuable. The politically transformative potential of a dawning energy transition should go a long way toward convincing American studies scholars of the productive congruence between this and more established subjects of study.

As far-ranging as these three works are, they leave many critical areas unexplored. While sociologists and historians are increasingly attuned to environmental racism and authors such as Naomi Klein have highlighted the intersectional and revolutionary potential of the climate justice movement, energy and environmental humanities would benefit from cross-pollination with ethnic, African American, migration, gender, and queer studies (and the reverse is also true).¹¹ By exposing and highlighting the connections between issues that seem to have little to do with fossil fuels and "the environment" narrowly conceived—poverty, say, or racism, migration, and conflict—American studies scholars could help shape a democratic and egalitarian politics to guide the movement for a just energy transition. Such a politics might, in turn, ensure that that transition to renewable resources (such as wind or solar power) also ushers out the power structures and inequalities of the fossil fuel era. As Joni Adamson and Kimberly Ruffin have shown, American studies has a long history of environmental critique and activism, including the work of Henry Nash Smith, F. O. Matthiessen, Annette Kolodny, Patricia Limerick, and Gloria Anzaldúa, from which we can draw inspiration.¹²

The philosopher Dale Jamieson observes that "climate change risks putting an end to a great deal that we value."¹³ This conceivably includes the very practice of modern fossil-fueled scholarship. A radically different climate is not simply another issue deserving of concern but a likely catalyst for the kind of massive social and political destabilizations that would negate the important cultural, social, and political work American studies has accomplished since

its inception. In this moment of dawning awareness (at least in the academy) of the calamitous and deeply unjust futures that might emerge should we continue our current path of nearly unrestrained fossil fuel consumption, failing to bring our most rigorous and inspired analytical practices to bear on the relationship between culture, energy, and the environment would constitute not only a missed opportunity but an abdication of responsibility. As Priscilla Wald noted in her 2011 presidential address, American studies scholars in the twenty-first century are united most of all by our “passionate conviction that we can change the unjust stories of our world.”¹⁴ Anthropogenic climate change, as one of the most epic and unjust stories to involve our species, requires our action as both citizens and scholars.

Notes

- I would like to acknowledge Joni Adamson, Rebecca Evans, and the ASA's Environment and Culture Caucus for their assistance and support.
1. See, e.g., Joseph Campana, “Intimations of Immortality in a Petrochemical Harp,” in Marina Zurkow, *The Petroleum Manga* (Brooklyn, NY: Peanut Books, 2014), 72–73.
2. Global Humanitarian Forum, *Human Impact Report: The Anatomy of a Silent Crisis* (Geneva: Global Humanitarian Forum, 2009), 1. The Global Humanitarian Forum predicts that by 2030, 500,000 people will die every year as a result of climate change, with 660 million negatively affected.
3. World Bank, “World Development Report 2010: Development and Climate Change,” 2010, <http://siteresources.worldbank.org/INTWDR2010/Resources/5287678-1226014527953/WDR10-Full-Text.pdf>.
4. Mostafa Mahmud Naser, “Migration, Climate Change, and Environmental Degradation: A Complex Nexus,” *William and Mary Environmental Law and Policy Review* 36.3 (2012): 750. According to some estimates, the number of climate migrants could be as high as one billion by 2100.
5. Among self-described American studies journals, the *Journal of American Studies* and the *Journal of Transnational American Studies* have paid the most attention to energy and climate change to date.
6. See Dominic Boyer and Imre Szeman, “Breaking the Impasse: The Rise of Energy Humanities,” University Affairs, *The Association of Universities and Colleges of Canada*, 2014, www.universityaffairs-digital.com/universityaffairs/201403/?pg=42&cpm=1&cu1=friend#pg42.
7. See Matthew Schneider-Mayerson, *Peak Oil: Apocalyptic Environmentalism and Libertarian Political Culture* (Chicago: University of Chicago Press, 2015).
8. For a summary of the implications of most climate scientists' reports, see Naomi Klein, “How Science Is Telling Us All to Revolt,” *New Statesman*, October 29, 2013, www.newstatesman.com/2013/10/science-says-revolt.
9. Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil* (New York: Verso, 2011).
10. David E. Nye, *Consuming Power: A Social History of American Energies* (Cambridge, MA: MIT Press, 1998); Vaclav Smil, *Energy Transitions: History, Requirements, Prospects* (Santa Barbara, CA: Praeger, 2010).
11. Naomi Klein, *This Changes Everything: Capitalism vs. the Climate* (New York: Simon and Schuster, 2014).
12. Joni Adamson and Kimberly N. Ruffin, introduction to *American Studies, Ecocriticism, and Citizenship: Thinking and Acting in the Local and Global Commons*, ed. Joni Adamson and Kimberly N. Ruffin (New York: Routledge, 2013), 1–17. See also the essays in *American Studies, Ecocriticism, and Citizenship* itself for more recent environmental criticism in an American studies vein.

13. Dale Jamieson, *Reason in a Dark Time: Why the Struggle against Climate Change Failed, and What It Means for Our Future* (New York: Oxford University Press, 2014).
14. Priscilla Wald, "American Studies and the Politics of Life," *American Quarterly* 64.2 (2012): 203.