

Article

Petromyopia: Oil and the Energy Humanities

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Abstract: Oil is currently over-represented in the energy humanities, a state of affairs I describe as petromyopia. While oil constitutes a vital source of energy in the modern world, focusing too heavily on petroleum can distract scholars from giving proper attention to other aspects of the social and cultural dimensions of energy. The goal of this article is to encourage those in the energy humanities to cast a broader net in their analyses and recognize the full diversity of energy systems in their scholarship.

Keywords: energy humanities; oil; petroleum; coal; natural gas; solar; wind; renewable; energy

1. Introduction

Energy humanities, as a field, currently pays too much attention to oil and too little attention to other energy topics. This state of affairs can be understood as petromyopia: the over-privileging of petroleum accompanied by the relative understudy of other energy topics. Humanities scholars should be concerned about petromyopia because too much focus on oil can distort our understanding of energy systems and distract scholars from giving proper weight to other energy sources such as coal, natural gas, food, the critical role of electricity in modern society, most discussions of renewable energy, and alternative framings of energy topics. This article, therefore, is intended to initiate a conversation with practitioners of the energy humanities about the limitations of petromyopia and encourage those in the field to devote greater attention to non-oil topics.

More than a critique of oil studies, this article is meant to be a celebration of the wonderful array of topics that belong in the tent of the energy humanities. Oil is fascinating, but so too are the remarkably varied set of practices human societies have developed over time to heat homes, cook meals, transport goods, grow food, and manufacture products. Many of these, it can be argued, have been as important as oil, if not more so in many times and places. Compared to oil, for example, coal has been a more transformative fossil fuel, food has been the single most essential energy source for human history, and electricity constitutes the most commonly used form of energy for those living in developed nations. With the exception of electric vehicles or biofuels, oil tells us relatively little about the renewable energy transitions most consider necessary for a more sustainable future. Here the point is not to engage in a petty ranking of energy subjects; rather, it is to recognize the wide range of exciting topics beyond oil that are available to energy humanists.

Before proceeding, let me offer some caveats. Oil is, without doubt, an important topic for critical analysis using the tools of the humanities. We should be studying it closely. However, other topics in the energy humanities are also important, and the question at stake is what may be lost. In addition, I do not believe petromyopia represents any form of conspiracy or conscious distorting of trends. Instead, I expect it has emerged organically in the same way that waves of fashion are present in most academic fields most of the time. Oil has “sex appeal” in our contemporary world, and there is little surprise that academic inquiry reflects this orientation. Yet with all things fashionable, there is often considerable merit in cutting across the grain. Finally, this article is meant to stimulate a constructive

conversation within the energy humanities about positive future directions for this exciting field of inquiry. I consider myself an insider to the energy humanities and have written this article for others in the field or considering entering it because I want to see the best possible scholarship. My hope is that this article is read as a useful prod toward a more balanced field, not as a critique of those devoting their scholarly attentions to oil.

I develop my argument in two sections. The first examines the evidence for petromyopia and the second develops arguments for why energy humanists should be concerned about this trend.

2. Evidence of Petromyopia

What does it mean to say that current research in the energy humanities pays too much attention to oil? This is, of course, a question of balance that is subject to debate. Based on ten years of engagement in the field, conversations with many colleagues, and participation in numerous workshops, I believe it fair to argue that the field presently exhibits petromyopia. However, to balance my admittedly partial perspective, in this Section 1 present a combination of quantitative and qualitative evidence to defend the claim that the present state of energy humanities is biased toward petroleum.

Before diving into the literature, a couple basics about oil may usefully frame this analysis. The first point relates to production: oil does not represent the majority of primary energy production globally. Oil constituted 31.4% of primary global energy in 2012; the number is slightly higher in the United States at approximately 36% ([1], pp. 6, 33; [2], p. 5). An initial look at the numbers, therefore, suggests that oil's share in energy markets is about a third on average, and has been declining for several decades (oil constituted 46.1% of primary global energy in 1972) [1]. This does not, of course, mean that we should expect scholarly attention to slavishly follow production and consumption numbers. Such an approach would leave a number of deserving topics—food and most renewable energies, for example—in the background. However, it does provide a useful reminder that oil represents only one component of energy more generally.

A second point concerns consumption. Humans use energy for countless tasks, but only a small subset of these activities are powered by oil. The transportation sector absorbs the healthy majority of oil (63.7% globally in 2012), with modest amounts devoted to industrial use, home heating, and as a feedstock for the petrochemicals industry ([1], p. 33). In transportation and petrochemicals, oil has few easy replacements and is therefore vitally important. However, at the same time, this leaves many sectors where oil's significance is relatively peripheral. Most notably, oil is not consumed to generate electricity in the vast majority of places, and electricity (as will be explored later) is currently the most frequent and pervasive form of energy consumption for those living in developed nations. A result of these two factors—oil representing a substantial but not overwhelming share of total global energy supply and its specialized applications—is that scholars cannot come up with a comprehensive and representative encapsulation of the social and cultural dimensions of energy systems without looking beyond oil.

Both quantitative and qualitative analysis suggests oil gets the lion's share of attention from scholars of the energy humanities. This trend is quite clear when examining articles in leading journals in the field. I searched for energy articles in fifteen leading humanities journals between 2005 and 2015 and classified them according to the dominant source of energy that was their focus. In certain cases, where an article discussed a transition, such as from wood to coal, I counted the article as half on wood and half on coal. Of the almost 100 articles focused on energy (97.5 in total), 54 of them emphasized oil. Notably, oil received more than five times the attention of any other energy source—10 articles covered topics related to bio-energy (mostly firewood), 9 articles analyzed nuclear energy (several in response to the Fukushima nuclear meltdown), and 6 covered electricity. Only 4.5 articles examined coal, 4 hydropower, 2 natural gas, 1 solar, 1 wind, and 1 fracking. On average, therefore, scholars devoted ten times more attention to oil than any other energy source (Appendix A).

I also examined conference papers delivered from 2009 to 2015 at several major conferences where energy humanities topics would be addressed—the American Society for Environmental

History (ASEH); the American Society for Literature and the Environment (ASLE); the Association for Environmental Studies and Sciences (AESS); Rice's Cultures of Energy conference; and the Society for the Social Studies of Science (4S). In this context, the data is a bit less clear, mostly because conference programs typically only list the titles of papers with no abstracts or full text to classify which type of energy is being emphasized. For example, of the 123 papers on energy topics delivered at the AESS meetings during this time period, I was unable to assign 70 to a more specific category than "energy". Of the remaining 63 papers, there was actually a very wide spread of topics, with 5 being devoted to oil, 4 to coal, 9 to natural gas and fracking, 3 to solar, 8 to wind, 1 to hydro, 4 to biofuels, 8 to renewable energy as a general category, 7 to nuclear, and 4 to electricity (Appendix A).

ASLE and Rice's "Cultures of Energy" workshop, the two conferences with the strongest humanities influence (and less influence from the social sciences compared to the other conferences) devoted the greatest attention to petroleum. Data from the biannual 2009, 2011, 2013, and 2015 ASLE meetings revealed oil to be by far the most popular topic with 36 papers compared to 11 in the general category of energy, 11 on coal, 9 on fracking, 1 on solar, 4 on wind, 1 on hydro, 2 on renewable energy as a general category, 7 on nuclear, and 2 on electricity. Since 2012, Rice has held an annual "Cultures of Energy" workshop where oil has received more than twice the focus of any other energy source, with 8.5 papers on oil compared to 4 on energy as a general category, 4.5 on nuclear, 2 on coal, 2 on solar, 1 on wind, 1 on biofuels, and 2 on electricity (Appendix A). I did not analyze data for one of the other major sites of activity in the energy humanities—the Petrocultures workshop organized by Imre Szeman at the University of Alberta [3]. Because petroleum is explicitly stated as the organizing topic of the workshops, it is little surprise that oil is the dominant object of study. Notably, oil appears to be the only energy source to acquire its own regular workshop in the energy humanities.

Two conferences that bridge the humanities with the social sciences—ASEH and 4S—did not demonstrate the same degree of petromyopia. At the ASEH conferences from 2011 to 2015, oil represented the most common energy topic, but not by a wide margin: 22 papers on oil compared to 19 on hydropower, 17.5 on nuclear, 17 on energy as a general category, 12 on coal, 10.5 on biofuels, 6 on electricity, and 2 each on natural gas, fracking, and solar. At 4S, oil actually appeared less often than several other topics. While from 2011 to 2015, there were 15 papers on oil, this was far eclipsed by a whopping 81.5 papers on nuclear energy, 47 on electricity, and 20 on renewables as a general category. In addition, there were 15 papers on biofuels, 11 on solar, 11 on wind, 7 on natural gas, 3.5 on hydropower, 3 on fracking, and 2 on coal (Appendix A).

Qualitative evidence correlates these quantitative findings. It is not simply the number of articles and presentations that privileges oil within the energy humanities, it is also—and perhaps more consequentially—their relative prominence. When high-profile outlets such the *Journal of American History* and the *Journal of American Studies* devoted special issues to energy in 2012, they chose oil as the framing topic [4,5]. When energy has been placed on the agenda as a plenary topic at national meetings, oil headlines the show, as at the 2013 American Society for Environmental History meeting ("The Fossil Fuel Dilemma: Vision, Values, and Technoscience in the Alberta Oil Sands"; panel presentation) or the 2013 American Society for Literature and the Environment meeting ("The Past, Present, and Future of Big Oil" by Antonia Juhasz). In a 2014 editorial promoting the potential of energy topics as a means to revitalize the humanities more generally, the three books cited by Dominic Boyer and Imre Szeman to represent the potential of the field focused on oil [6–9]. Nuclear power represents the only other energy source to draw comparable attention, largely in response to the Fukushima nuclear accident in 2010, which stimulated plenary discussions at the Society for Social Studies of Science/History of Science/Society for the History of Technology meeting in 2011 and a special issue of *Environmental History* in 2012. When the energy humanities as a field is presented to non-specialist audiences, it is almost always through the perspective of oil.

Another factor exacerbating petromyopia is that fact that the broad category of energy often gets narrowed into the study of oil. My strong hunch is that if I had access to the abstracts or papers of the conferences analyzed above that only had energy in their titles, oil would be the most common

theme. Similarly, oil tends to receive the lion's share of attention even when other energy sources are essential to the narrative. Consider two examples of excellent recent work in the energy humanities that nonetheless privilege oil. One is Matthew Huber's 2013 book *Lifeblood: Oil, Freedom, and the Forces of Capital* [7] (for my positive review of Huber's book, see [10]). Huber effectively demonstrates that the spread of neoliberalism as a pervasive ideology in American society benefited enormously from the materiality of new energy sources. Automobiles supported the rise of suburbs where many people had the appearance of living independently. Unlike in cities where people relied daily on public transit, driving their own automobiles gave the impression of independence; this, in turn, supported the spread of a vision of an individualized entrepreneurial life consistent with neoliberalism. Oil played a crucial role in linking lived experience with political imaginations. So too, as Huber notes, did electricity. People did not simply need personal transport to be independent—they also required assistance in the home that was supplied by electricity. As David Nye has clearly shown, appliances such as washing machines, refrigerators, vacuums, and dishwashers did a great deal to make suburbanization attractive to those who would no longer have easy access to servants, grocery stores within walking distance, or commercial laundry services [11]. Yet in the title and framing of *Lifeblood*, oil is emphasized while electricity stays beneath the surface; similarly, when I have seen the book discussed in person or in print, the focus is on oil and electricity rarely merits comment.

A second example of this phenomenon can be seen in Matthew Schneider-Meyerson's compelling 2015 *American Quarterly* review essay urging American Studies scholars to take the role of fossil fuels in American life more seriously. Noting that the field "has for the most part ignored climate change and the still-accelerating consumption of fossil fuels", he calls for greater attention to one of the major contributions of the United States to global society: "the development and dissemination of a way of life premised on consuming fossil fuels at a staggering rate" ([12], pp. 529–30) He is correct in his assessment and his essay is persuasive. Yet for all its many merits, his piece reflects the limitations of petromyopia. It is a review essay in which the books he highlights are overwhelmingly focused on oil—Stephanie LeMenager's *Living Oil*, Ross Barrett and Daniel Worden's edited volume *Oil Culture* and my own *Routes of Power* [8,13,14]. Of these works, only *Routes of Power* analyzes non-oil topics, giving roughly equal weight to coal, oil, and electricity. The call for attention to fossil fuels as the legacy of American life, in this manner, can easily become narrowed into a focus on oil.

On a personal level, as an energy scholar who was published on coal, oil, electricity, and nuclear energy, I have clearly observed others gravitating to my work on oil. This is particularly true in terms of media requests, as reporters are most often interested in oil. It is also appears true of academic audiences as well—my conference panels with oil in the title have been better attended, on the whole, than those on other energy topics. In fact, I have been very fortunate so far in avoiding the experience of presenting conference papers to empty rooms—the only exception to this was a roundtable on coal at the 2014 Organization for American Historians meeting. Despite having three published authors and a distinguished chair, the audience fluctuated between two and four members [15]. My guess is that if the panel were devoted to oil, the audience would have been considerably larger.

My concern, therefore, is not simply that there is more attention to oil than other topics in the energy humanities; it is a related worry that work on other energy subjects appears to have difficulty gaining comparable attention from fellow scholars, academic and public audiences, conference organizers, and journal editors.

3. Petromyopia and Its Discontents

If the preceding section is correct in arguing that oil represents an outsized share of attention from energy humanists, the next question becomes: is this a problem? Clearly oil is a compelling topic of social importance that draws attention from media and publics as well as scholars. So why worry?

One might, in fact, argue that oil rightfully deserves more attention than other energy topics. It does, after all, have a number of distinguishing characteristics. Unlike coal, natural gas, and electricity, large quantities of oil get shipped internationally regularly. This results in geopolitical tensions that are

not common with other energy sources (nuclear energy being a notable exception). As two US-led wars in the Middle East during the last quarter century demonstrate, there are clear connections between oil and international power struggles that merit extra focus from scholars. In addition, oil looms large in media accounts and the popular imagination—there are even blockbuster films in which control over petroleum is a major plotline. Since an important component of humanities research involves analyzing dominant discourses, it therefore makes a great deal of sense for humanists to examine this cultural trend. Moreover, oil companies are among the richest organizations ever created. 5 of the top 6 companies in the Global Fortune 500 list are oil companies, and their individual valuations exceed the annual budgets of numerous countries [16].

Yet as important as these topics are, my primary concern with petromyopia is the corresponding lack of attention given to other vital energy sources. Given the resonances of oil in the popular imagination, I have little doubt that oil will continue to be a subject for critical humanities research. The question, therefore, is what might we be missing? Here I will mention five illustrative examples: coal, electricity, natural gas, food, and alternative framings of energy studies. The list is not meant to be comprehensive, and without doubt, dozens of other examples could easily be added. In each case, these framings offer not simply new energy topics for scholarly analysis, but also provide different sets of actors, political contestations, and social dynamics than can be found within the confines of petromyopia.

The inattention to coal represents one of the worst effects of petromyopia. With the exception of the development of settled agriculture, coal has arguably been the single most consequential energy transition in shaping the modern world order. In 1750, when global coal use was minimal, historians such as Kenneth Pomeranz and Andre Gunder Frank have demonstrated the world was polycentric with relatively equivalent economic performance between Europe, India, and China, and likely an advantage for the Asian economies [17,18]. This balance of power occurred within what historians have called an organic energy regime—a world in which capturing solar flows provided an upper limit to economic growth and favored climates such as southern Asia where multiple crops could grow a year. By World War I, a small handful of European nations and the United States exerted hegemonic economic, military, and political power over the rest of the world. Coal played a foundational role as a necessary (though not sufficient) enabler of these changes [19]. Cheap and easy access to high quality coal in Britain, northern Europe, and America allowed these nations to pioneer a mineral energy regime that stimulated steady expansions of energy consumption impossible in an organic energy regime [14,20–22]. Capturing the energetic abundance of coal went hand-in-hand with developing an industrial and military economy capable of subjugating the rest of the world. Moreover, global inequities mirrored the unjust distribution of coal's benefits within industrialized nations. Capitalists and factory owners built massive fortunes; most laborers worked long hours for little pay under dangerous conditions. Coal facilitated the creation of a profoundly unequal world order.

Where does oil fit in this story of the rise and fall of global power over the last three centuries? As only a bit player. By the time of the First World War—a point at which European and American hegemony was likely at its most extreme—oil represented only a tiny supply of the world's energy. While oil consumption over the course of the twentieth century reflected the inequalities between the Global North and Global South and no doubt exacerbated them in some cases (particularly in the Middle East), petroleum only became a significant fraction of global energy consumption at a point when the starkest inequalities had already been established. Coal, not oil, set the stage for American and European hegemony and the modern world order.

Moreover, coal is not only appropriate for historical analysis. Despite its association with the past, coal remains highly relevant today. Peak coal, it is important to remember, has not been reached. Globally coal consumption is on the rise, and Americans burned more coal in 1950 than they did in 1900, and more in 2000 than in 1950 [2]. This continued reliance on coal has a number of repercussions. For one thing, coal produces more carbon dioxide per unit of energy released than oil or natural gas, so burning coal has an outsized influence on global warming. In addition, with coal use rising

most dramatically in the developing world, the air pollution it releases is creating dire public health effects in many places. The field of energy humanities, therefore, would be well served by building on recent works to say more about the past, present, and future of coal (see, as a few examples from the discipline of history, [20–28]). Such attention could reveal new insights into the links between energy and global inequality, public health, and the persistence of energy systems that are often perceived as old or outdated.

Electrification is a second essential energy topic that analyses of oil do little to illuminate. In industrialized societies today, electricity is by far the most commonly used form of energy. It permeates nearly all aspects of modern life, from illuminating and cooling homes to powering the information and communication technologies that knowledge workers usually spend at least half of their waking lives using. Even when many people relax, it is often through the use of an electrically-mediated technology, whether it be a television, computer, stereo, or reading light. Hundreds and perhaps thousands of times a day, we rely on elaborate systems to ensure that electricity is constantly available. Electricity is one of the clearest embodiments of today's energy-intensive lifestyle.

Yet the overlaps between oil and electricity are modest. From a production perspective, oil supplies very little of the energy required to make electricity, particularly since the 1970s: only 5% of global electricity production came from oil in 2012 (down from 24.8% in 1973) ([1], p. 24). This is not to suggest there are no overlaps: products of the petrochemical industry permeate electric appliances and Huber's previously discussed analysis of energy-intensive suburbanization shows a synergistic interplay between oil and electricity. However, in critical ways, the social consequences of electricity diverge from those of oil, as the systems involve a different cast of companies (regional *versus* multinational corporations), regulatory patterns (state-level utility commissions *versus* national and international regimes), infrastructures (grid *versus* tankers and pipelines), markets (regulated monopolies *versus* international markets), and consumption patterns (appliances *versus* transportation).

Moreover, most attention to renewable energy, including solar, wind, geothermal, and hydro, concerns the electricity sector. Yet since little oil is used in the production of electricity and comparably small quantities of electricity are currently devoted to the transportation sector, there is only modest overlap between most renewables and oil. Biofuels and electric cars are notable exceptions to this pattern, but they remain small fragments of the renewable energy and transportation sectors, respectively. The expansion of renewable energy will, for the most part, serve to replace coal, natural gas, or nuclear power, not oil. An exclusive focus on oil, therefore, provides only minor insight into the critical topic of renewable energy.

As a result, electricity deserves greater attention from energy humanists, as it opens topics including the integration of mechanical energy into nearly all aspects of daily life, the interconnections between individuals and monopolies, and the challenges and opportunities associated with most renewable energy systems. In tackling such areas, scholars can build on a number of classic studies [11,29–31]. The recent special issue of *Cultural Anthropology*, featuring articles by Dominic Boyer, Mike Anusas and Tim Ingold, Akhil Gupta, Tanja Winther and Harold Wilhite, and Canay Özden-Schilling is a promising step in this direction, as are recent books by American historians Paul Hirt, Andrew Needham, and Robert Lifset [32–39].

Natural gas represents a third topic appropriate for further study. In fact, there is a surprising lack of critical scholarly engagement with natural gas given that it now supplies over 20% of primary global energy ([1], p. 6). With the exception of recent interest in hydraulic fracturing ("fracking") and its social controversies, little attention has been paid to this sector. Undoubtedly a major part of this results from the fact that most natural gas is not marketed directly to consumers, but is instead purchased by large corporations—utilities and industrial operations such as fertilizer producers. Yet with surges in natural gas production and the frequent call for it to be a bridge fuel to a renewable energy future, there is considerable merit in giving more attention to natural gas.

A fourth example is food. Food studies has emerged as its own subject of interdisciplinary inquiry in recent years, yet there has not, to my knowledge, been a great deal of integration between food studies and energy humanities (for one recent example, see [40]). This topic, if the pun can be excused, appears ripe for picking. As with coal, there are numerous resonances both historically and in the contemporary world. For the vast majority of human history, food has been the main source of energy for humans. The central preoccupation of most individuals and groups over time has been to obtain and defend adequate supplies of food. Moreover, in such contexts, human and animal muscles provided the bulk of power, making food calories a foundational source of energy. Today, while food represents only a tiny fraction of energy use for those in developed nations, it remains indispensable. After all, our dozens of “energy slaves” would accomplish little for us if we lacked the caloric energy in food to sustain our bodies. Therefore, integrating the exciting new work in food studies and energy humanities represents another potential direction for work that could explore the biopolitics of food and energy, the politics of migrant farm labor, and shifting relationships between humans and the land.

Petromyopia also represents a potential limitation of energy scholarship, which is its tendency to organize inquiry along the line of fuels. In fairness, this is not a challenge exclusive to oil and the analysis I’ve undertaken to this point only reinforces this perspective by recommending supplementing oil with other energy sources. However, another alternative would be to abandon organizing our inquiries by fuel type altogether. After all, as Amory Lovins notably argued in 1976, “people do not want electricity or oil...but rather comfortable rooms, light, vehicular motion, food, tables, and other real things” ([41], p. 78). A focus on fuels, therefore, can have the effect of distracting scholars from why people desire energy in the first place and the real meanings it has for their daily lives. As a result, replacing petromyopia with coalmyopia, solarmyopia, or any other fuel would hardly be a notable improvement. Instead, by thinking beyond a fuels framework, energy humanists can expand our imaginations of what constitutes an energy transition and how energy matters to individual lives [42,43].

A final concern about petromyopia is that it may serve, unintentionally, to reify the power of oil over our lives. Claims that we live an age of oil or that our economy is petro-capitalist risk overstating the power of the oil industry and misrepresenting the diverse sources of energy that have created our high-energy societies. Petroleum is extremely important, without doubt, and as stated earlier, oil companies yield significant power due to their financial assets. In places that are oil-rich but have little diversification in their economies, oil companies no doubt have enormous influence. Yet they are not all-powerful. While I find Timothy Mitchell’s *Carbon Democracy* to be a remarkable tour-de-force brimming with fascinating insights, a quibble I have with the book is that oil companies are presented almost as Machiavellian super agents capable of nearly universal success in implementing their will [9]. In reality, like all large bureaucracies, oil companies are frequently bumbling, non-responsive, and inept [44]. Their goals are frequently thwarted and they must respond to social pressures, as the recent investigations into climate denial at Exxon reveal [45]. Moreover, essentializing oil can risk attributing too much power to an energy source and distract our attention from human agency [46]. The hold of oil on our lives, in short, is incomplete. As a scholarly collective, I believe it is both accurate and politically useful to emphasize the contingencies of petroleum consumption and the range of opportunities that exist both to challenge the power of oil companies and also to incorporate other energy sources more fully into our accounts.

4. Conclusions

Petromyopia presents a challenge for the energy humanities, though I should qualify that the condition does not appear dire and there are many positive signs. The quantitative evidence demonstrates that while oil is a dominant theme, there are clearly a large number of scholars working on non-oil energy sources. Review essays such as Matthew Schneider-Meyerson’s frame their analyses in broader terms than oil and a 2011 call for more attention to energy and literature in *PMLA* highlights a wide array of energy topics (though, unfortunately, it does not appear that *PMLA* has followed this

up by publishing any more energy essays) [12,47]. Moreover, at conferences, where graduate students are more likely to be represented, non-oil topics appear more frequently than in journal articles. It is possible, therefore, that the new wave of energy humanists is already working to rectify the imbalance. If so, I hope that this type of work gains greater recognition in reviews of the field, high profile journals, and conference plenary sessions.

My hope for the energy humanities, therefore, is that in addition to performing excellent work on oil, scholars embrace the full range of energy systems using the essential tools of humanities research. Conflating oil with energy unnecessarily limits the energy humanities. We are fortunate to have a plethora of important and pressing topics of direct social concern; it would be a shame for the field, our students, and our communities if we did not take full advantage of this opportunity.

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Abbreviations

The following abbreviations are used in this manuscript:

4S	Society for the Social Studies of Science
AESS	Association for Environmental Studies and Sciences
ASEH	American Society for Environmental History
ASLE	American Society for Literature and the Environment
PMLA	Publications of the Modern Language Association

Appendix A

The journals I examined included American Historical Review (4 articles); American Literary History (1 article); American Quarterly (4 articles); Antipode (0 articles); Critical Inquiry (2 articles); Cultural Anthropology (10 articles); Environmental History (20 articles); ISLE (Interdisciplinary Studies in Literature and Environment) (5 articles); Journal of Arts and Humanities (2 articles); Journal of American History (23 articles); Journal of American Studies (11 articles); Past and Present (3 articles); PMLA: Publications of the Modern Language Association (1 article); Resilience (1 article); Social Studies of Science (10.5 articles); and Social Text (0 articles). My search terms included: energy, oil, petro*¹, coal, natural gas, solar, wind, nuclear, atomic, frack*, hydro, electric*, wood and biomass. The date range was 2005–2015, and I included articles and review essays, but excluded individual book reviews. I quickly reviewed articles to exclude search results that used these terms but not in an energy context (such as pieces that discussed oil in the context of anointing). Based on title and text of article when available, I classified the 97.5 articles as follows: Oil (54 articles); Bio-energy (10 articles); Nuclear (9 articles); Electricity (6 articles); Energy as a general category (5 articles); Coal (4.5 articles); Hydro (4 articles); Natural Gas (2 articles); Solar (1 article); Wind (1 article); Fracking (1 article).

For conference paper analysis, I downloaded conference programs for the annual conferences from the web sites of the societies. In a few cases where programs were not online, I obtained copies through personal communication with professional society staff. In all cases, I used the same search terms as I did for the journal articles: energy, power, oil, petro*, coal, natural gas, frack*, solar, wind, hydro, wood, biofuel, renewable, nuclear, electric*.

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¹ The * denotes an open-ended search for words that begin with the letters indicated but may have different endings, such as electric, electricity, and electrical.

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