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Postmodern Prometheus A Discourse Analysis of Energy Dominance

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The administration of President Donald Trump is pursuing a policy agenda of "American energy dominance," which entails the promotion of fossil fuel extraction, use, and export. Administration officials and supporters often defend energy dominance on the grounds of national security and economic prosperity, but they also justify their energy policies in environmental terms. In this paper, we use discourse analysis to examine the ways in which the administration frames energy dominance from an environmental perspective. They appear to use what John Dryzek calls the Promethean discourse, but this is complicated by the administration's climate change denial, which calls into question the very notion of a discourse. We use two case studies to illustrate how energy dominance is described and justified. We conclude with a discussion of wider implications about climate, science, media, and democracy.

1. Introduction

Life in the United States, like any industrialized nation, depends on highenergy inputs. Developing, processing, and transporting energy in turn relies on complex social and technological networks. Managing those networks could broadly be construed as the province of US energy policy, which covers an enormous and diverse terrain. We can carve that territory in a variety of ways, with perhaps the crudest division being that between public (governments) and private (markets). On the private side, any number of further divisions could be made, say, between different kinds of companies or between individual consumers. On the public side, the main actors are local (municipal), state, and federal governments.

The federal government, then, is not all-powerful when it comes to energy policy. This is especially so in the largely market-driven US compared with countries that have nationalized mineral resources and state-owned energy companies. Non-national US actors can have big impacts. For example, in the face of the Trump administration's planned withdrawal from the Paris Agreement on climate change, multiple non-federal actors (cities, states, and businesses) reaffirmed their commitments to helping the US achieve its Paris climate goals. If these non-federal entities were a country, their economy would be the third largest in the world (America's Pledge Initiative on Climate, 2018).

Nonetheless, the federal government does exercise a great deal of influence over the direction of US energy policy. It does so in a variety of ways, including research and development, environmental regulations, federal land and water leasing, subsidies and other budgetary decisions, general foreign and economic policymaking, and more. Thus, federal energy policies are important topics for critical examination.

Within the federal government, the executive branch does much to set the agenda for energy policy. In the wake of the oil embargoes of the early 1970s, for example, the Nixon administration embraced "energy independence" (the ability to rely solely on energy produced domestically) as a strategic goal. Several administrations have since more or less adopted the goal of energy independence, including the Obama administration, which often referenced the need to free the country from foreign oil. However, energy independence has also long been controversial and many have questioned the wisdom and

potential impacts (political, economic, and practical) of seeking energy selfsufficiency, and have proposed alternative goals such as "energy resilience" (see Damgaard, 2018).

In May 2016, presidential candidate Donald Trump promised to make "American energy dominance" a strategic policy goal. Though the exact meaning of energy dominance is debated (see Raimi, 2017), the basic idea is to increase the extraction and exportation of fossil fuels. Energy dominance pushes the goal beyond self-sufficiency to becoming a net-exporter of energy (i.e., fossil fuels) in order to influence global markets and exercise geopolitical power. Once elected, President Trump began implementing his plan primarily through a raft of deregulatory activity.

There are many ways to read energy dominance as a strategic goal. In political terms, the emphasis on coal fits Trump's need for electoral votes and grassroots support in swing states and rural areas, not to mention the importance of appeasing a wealthy and influential donor class with strong ties to fossil fuel industries. In cultural terms, fossil fuels have come to stand in as bedrock 'conservative' symbols and as icons of an age before the disorienting forces of globalization, multiculturalism, and automation (see Schneider & Peeples, 2018). In geopolitical terms, fossil fuel exports can provide leverage to aid allies and undercut enemies. In economic terms, an emphasis on fossil fuel extraction promises jobs and growth.

All of these dimensions of energy dominance have been contentious. But the most controversial and consequential aspects of energy dominance pertain to the environment. Energy dominance is predicated on the denial of climate change, which President Trump considers a "hoax." This is in stark contrast to nearly every other nation and the Intergovernmental Panel on Climate Change (IPCC), the world's foremost scientific authority on the climate. These different views on climate and the impacts of fossil fuel use point to a deep division in US politics.

One way to frame this problem is in terms of "tribal epistemologies" or incommensurable worldviews. It seems as though the participants in US political discussions lack a common or shared reality. This stems at least in part from increasingly polarized partisanship along with a media landscape that filters people into like-minded echo chambers. It also stems from the erosion of trust in traditional gatekeepers of truth: science, the academy, the judiciary, and the media (see Roberts, 2017). This erosion has happened across the political spectrum but is especially pronounced on the right wing, which has developed over the past few decades a strong alternative mediascape in talk radio, Fox news, Breitbart, the Daily Caller, Infowars, and other outlets. With his repeated accusations of "fake news" and his demonization of mainstream media and institutions (including the IPCC), President Trump is pushing to new levels the long-standing US conservative movement's distrust of

and attack on institutions deemed to have a liberal bias.

This situation poses a challenge: can we find ways to bridge deep divides in order to understand other views and engage in productive dialogue? This strikes us as an important prerequisite for a robust democracy. In what follows, we attempt to understand how the Trump administration and their supporters justify the energy dominance agenda in environmental terms. In so doing, we will do our best to practice what philosophers call a "hermeneutic of faith," which means we will assume sincerity or goodfaith on the part of the administration. After all, there are good arguments to be made against environmental regulations and the precautionary discourses that often lie behind those regulations (cf. Sunstein, 2003).

The danger of assuming sincerity is that it may be naive. Thus, in our discussion we offer a "hermeneutic of suspicion" that looks for ulterior motives -- in this case, that any environmental justification of energy dominance is merely a way to greenwash powerful and self-centered interest groups. Energy dominance may be nothing more than plunder by oligarchs. To presume goodfaith arguments or logical consistency may be to presume too much.

To put it more broadly, the new Trump-wing of American conservatism may not be about an epistemology (or what we will call a discourse) at all. An epistemology or a discourse implies a rationally defensible understanding of reality and a sincere quest for truth that abides by some standards of coherence and consistency. By contrast, Eric Levitz (2018) may be right that there simply is no rational policy agenda behind much of what the Trump Administration does. There is no good-faith, evidence-based argument that President Trump actually won the popular vote in 2016, but nearly half of Republicans believe that. Similarly, there is no rational way to defend the notion that climate change is a hoax perpetuated by the Chinese. Yet such talk from the highest levels of government combined with a more general attack on science and the removal of climate change information on federal websites has real impacts on public opinion. In 2017, 53% of Republicans thought that most scientists believe climate change is occurring. In 2018, that number declined to 42% (Berke, 2018).

In seeking to understand the environmental justifications for energy dominance, we will use the political scientist John Dryzek's book The Politics of the Earth (2013). Dryzek takes a discourse approach to environmental issues, where "discourse" means roughly the worldviews that people use to make sense of environmental problems. A discourse, he argues, is a plausible perspective that is difficult to prove wrong in a simple or straightforward way. In using his framework, we will at first assume a hermeneutic of beneficence, that is, to assume that energy dominance is justified by a rationally defensible, sincere, and intelligible discourse.

The Promethean discourse is the closest candidate for the Trump administration's point of view – with its emphasis on free markets, human ingenuity, and infinite progress. Prometheus stole fire from the gods, giving humanity god-like technological powers. Though he is a figure from ancient Greek mythology, Prometheus is a fitting icon for the modern age with its quest to control nature for human material prosperity. Yet as we take a closer look at two case studies about energy dominance, it begins to look less like an expression of modernity and more like a form of what Dryzek calls "extreme postmodernism." Energy dominance may represent a postmodern Prometheus where truth itself is just another resource to manipulate in the service of power.

2. Energy Dominance

To understand the policy of energy dominance, it is important to first look at its origins in previous US energy policy goals. By 1970 the United States had become a net oil importer, so when the US faced an oil embargo in 1973, prices shot up dramatically (Homans, 2012). This led to the idea of an energy shortage, and President Nixon turned the nation's eyes towards the policy of "Energy Independence," the goal of relying solely on energy produced in the US. This marked the beginning of the focus on energy independence, an initiative seen in all subsequent administrations.

Another important development to note as a precursor to the energy

dominance agenda is the revolution in domestic oil and gas production that occurred under the Obama administration. Beginning around 2010, and thanks in large part to successful private-public R&D partnerships, the US began to reverse a decades-long dip in domestic oil and gas production. The key technologies enabling this fossil fuel renaissance were hydraulic fracturing, 3-D seismic imaging, and horizontal drilling (see Briggle, 2015). Indeed, even though the Obama administration is criticized by the Trump administration, there can be no denying that the former put in place the fossil fuel infrastructure that made the latter's campaign promises of energy dominance a practical possibility.

Energy dominance entails a complete self-sufficiency in energy production (where 'energy' is understood almost exclusively as fossil fuels), as well as a focus on coal, oil, and natural gas exports. The stated aims of this policy are to create American jobs and wealth, prevent hostile nations from using energy as a means of leverage against the US and its allies, and meet US demand via domestically attained energy.

Deregulation has been a defining task of the Trump administration from its first days when the new President signed Executive Order 13771 (January 30, 2017) directing agencies to repeal two existing regulations for each new regulation. Not surprisingly, then, energy dominance has been pursued primarily through deregulation. Indeed, just two months into his administration, President Trump issued Executive Order 13783, requiring all executive agencies to review any existing regulations "that potentially burden the development or use" of domestic sources of energy. The Environmental and Energy Law Program at Harvard University has since tracked the regulatory rollback efforts following from this order. By October 2018, the rollback tracker had 47 entries on its list, which includes both finalized rulemaking as well as policy proposals under review (Harvard Environmental Law 2018).

The deregulatory actions are broad in scope, including: opening more land and coastal waters to fossil fuel production, repealing the Stream Protection Rule (which had protected water resources from coal mining impacts), expediting pipeline construction, relaxing standards under the Clean Air Act for toxic emissions, and eliminating and curbing rules on greenhouse gas emissions. When it comes to greenhouse gas emissions, the most important deregulations are efforts to repeal the Clean Power Plan created by the Obama administration, weakening rules that govern methane leaks by natural gas producers, and lowering fuel efficiency standards for cars and trucks.

Another key tool for implementing the energy dominance agenda is the federal budget. The Trump administration's fiscal 2019 budget proposal included: increases for oil production on the outer continental shelf, a 24% increase for fossil fuel research and development (including clean coal technologies), a 34% overall cut to the EPA and an 18% cut specifically to the EPA's enforcement division, the elimination of the Global Climate Change Initiative, elimination of five programs at NASA that monitor climate change impacts, and elimination of the Advanced Research Projects Agency -- Energy (ARPA-E) Initiative, which funds highrisk research programs including gridscale battery storage technologies to aid the transition to renewables.

Of course Presidential budget proposals rarely survive intact through the Congressional process, but they nonetheless stand as statements of values and priorities. In order to sketch a more detailed and comprehensive picture of those values, we turn now from an empirical overview of energy dominance to our theoretical lens. We will use an environmental discourse framework in an attempt to understand the worldview behind energy dominance. In the next section, we introduce this framework, and in the section after that we apply the framework to two cases where the administration or its supporters discuss and justify the energy dominance agenda.

3. Environmental Discourses

Environmental issues are complex. They involve multiple interconnections across human and non-human systems that are studied by a variety of disciplines. As we have seen, for example, the environmental dimensions of energy policy cannot be disentangled from the economic and foreign policy dimensions. Despite this complexity, people manage to make sense of even the most difficult social and political issues. They do so by filtering what would otherwise be a cacophony of information through a set of assumptions, judgments, and premises that enable them to piece together a coherent story. This filter is a worldview, or what John Dryzek, in the Politics of the Earth (2013), calls a discourse, "a shared way of apprehending the world." In this section, we draw heavily from Dryzek's analysis, though we modify it in some ways.

According to Dryzek, our environmental discourse tells us what kinds of things exist and how they are related. It also fills out our narrative with key actors (and whether they are good or bad) and provides metaphors and other rhetorical devices for making sense of things (e.g., spaceship earth or nature as machine). One's discourse conditions how one defines and interprets environmental problems. A 'problem,' in other words, does not exist objectively or independent of human agency and conceptualization.

This does not mean that there is only discourse or social constructions. As Dryzek notes, "just because something is socially interpreted does not mean it is unreal" (p. 12). Pollution actually exists, species do go extinct, and habitat does in fact disappear or reappear. Yet people can understand such phenomena in different ways (often picking out different sets of data), depending on their conception of the natural world and the human place in it, how they prioritize different values, their attitude toward risk – in short, depending on their discourse.

Dryzek argues that complexity breeds a proliferation of discourses: "The more complex a situation, the larger is the number of plausible perspectives upon it—because the harder it is to prove any one of them wrong in any simple terms" (p. 9). Disagreement between discourses fuels debates about environmental problems – how to define them and what to do about them. One important question this raises is the extent to which we can become aware of our own discourses and whether they are susceptible to rational comparison and criticism.

For at least the past two-hundred years, industrialism has been the dominant discourse. It is defined by its "overarching commitment to growth in the quantity of goods and services produced and to the material wellbeing that growth brings" (p. 14). Modern ideologies as diverse as liberalism and Marxism share the industrial commitments to growth and material affluence. Though there were earlier critics of industrialism such as John Muir, Henry David Thoreau, and Aldo Leopold, it was not until the 1960s that this discourse came under sustained criticism. Rachel Carson, Paul Ehrlich, and others began to problematize industrialism, opening the possibility for alternative discourses.

In 1972, the Club of Rome published *The Limits to Growth*, which captured the essence of newly emerging discourses (Meadows et al., 1972). As the ecologist Garrett Hardin (1986) wrote: "Thou shalt not transgress the carrying capacity." Dryzek classifies such views into two kinds of 'radical' environmental discourses, Green Radicalism and Survivalism. Both call for the wholesale rejection of industrial society, primarily from the belief that its imperative of economic growth will run headlong into ecological limits.

Though culturally influential, these discourses remained on the margins of policymaking precisely because of their radical implications. No politician would be elected on a platform of, say, returning to small-scale agricultural communities or drastically curtailing consumption or reproductive rights. By far the most politically powerful form of environmental discourse became what Dryzek calls Problem Solving or, at times, Administrative Rationality. This discourse takes the basic social patterns and expectations of industrialism as given and seeks to make adjustments in ways that can account for environmental factors that had previously been treated as externalities or unintended consequences. The establishment of the Environmental Protection Agency, other forms of institutionalized environmental expertise, and the signing of major legislation such as the Clean Air and Clean Water Acts exemplify this discourse. Though not nearly as radical as the other discourses, Problem Solving

shares with them a focus on limits, usually framing those limits in terms of government regulations (often paired in a various ways with market mechanisms).

This explains the other crucial development across the 1960s and 1970s: the articulation of what Dryzek calls the Promethean discourse. When industrialism reigned relatively unchallenged, there was little need to explicitly defend it. As it came under attack, this changed, and a group of economists based initially at the independent research organization Resources for the Future began to articulate the Promethean (or Cornucopian) discourse. The objective was to counter the emphasis on *limits* that was central to the radical discourses in popular culture and the political discourse of administration and regulation. The economists Harold Barnett and Chandler Morse argued that scarcity is just another name for increase in price. Since real prices had dropped across the 20th century, natural resources were actually becoming more abundant.

Another important early contributor to the Promethean discourse was the economist Simon Kuznets. His research showed an inverted U shape relationship between income inequality and economic growth – income inequality first increased with growth but then decreased after a certain threshold. This Kuznets Curve was soon modified to show a similar relationship between negative environmental impact and economic growth. At first, a rising GDP brings environmental harms, but after the point of "peak impact," pollution and other harms start to decrease even as growth continues. This is often known as a process of "decoupling" environmental harm from economic growth.

The Promethean discourse is centered on the boundless potential of human intelligence harnessed by the free market. When prices increase, entrepreneurs in a free market are incentivized to develop new technologies to find more of the resource or invent an alternative. This phenomenon can be seen in the correlation between higher gas prices and more fuel-efficient technology in automobiles (Crabb & Johnson, 2010). For Prometheans, nature is effectively unlimited, because humans are clever enough to solve any problems that result from industrial production and consumption. Michael Shellenberger and Ted Nordhaus (2011) capture the essence of this discourse when they write that, "The solution to the unintended consequences of modernity is, and has always been, more modernity." The goal is to decouple economic growth from environmental harm largely through innovation, so that growth can continue in environmentally benign ways (see McDonough & Braungart, 2013).

Departing now slightly from Dryzek's taxonomy, we think there are two main camps within the Promethean discourse. They are distinguished primarily by their attitudes toward government regulations. The first camp is Ecological Modernization or ecomodernism. The Breakthrough Institute, an independent research organization (and home to Shellenberger and Nordhaus), offers the best formulation of ecomodernism. Ecomoderns argue that green capitalism will not arise automatically through the "invisible hand." Environmental criteria must be built into a redesigned system through conscious and coordinated intervention. Ideally, businesses will cooperate with this restructuring, because they see money in it for them. They might, for example, see savings from the prevention of pollution or recognize that solving a problem now will be less expensive than handling it in the future. However, this requires that businesses first pay for pollution (rather than treating water or air as a free dump), that they acknowledge problems exist, and that they are far-sighted enough to see past quarterly profits.

This is obviously not always the case, however, which is why ecomoderns often turn to regulations, subsidies, taxes, and other government interventions as important levers for moving society toward sustainability or decoupling. The Breakthrough Institute's "Ecomodernist Manifesto" (2015), for example, argues that adequately responding to climate change will require rapid energy transitions, which in turn requires "sustained public support for the development and deployment of clean energy technologies" (p. 24). Decarbonizing the human economy, ecomodernists argue, must and can be done through a mix of government and market mechanisms.

In contrast, the second Promethean camp is skeptical and often openly hostile to government regulations. We might call it the neoliberal Promethean camp insofar as it promotes a kind of free market fundamentalism where markets are seen as the only legitimate social organizing principle compatible with human freedom. The founder of this camp is the economist Julian Simon, who argued that the human mind is the "ultimate resource," that technology makes natural resources more (not less) abundant, and that trends in the growth of human material affluence can continue as long as free markets reign (see Simon, 1981).

Simon's brand of thinking had a profound impact on the administration of Ronald Reagan in the 1980s. The neoliberal Promethean discourse was used to justify broad swaths of environmental deregulation. Reagan appointed James Watt as his Secretary of the Interior and Anne Gorsuch (later Burford) as his EPA Administrator. Dryzek notes that both "were essentially hostile to most of the legislation they were supposed to be administering" (pp. 64-65). Watt pushed for opening up federal lands for resource extraction. Gorsuch Burford "turned policy making over to the polluters the EPA was supposed to regulate" (p. 65). The Reagan administration withdrew the US from a great deal of international environmental governance.

The similarities to the Trump administration with Ryan Zinke as Secretary of the Interior, Scott Pruitt as head of the EPA (until he resigned in the midst of growing scandals), and Rick Perry as Head of the Department of Energy (DOE) are readily apparent. Zinke has overseen the largest reduction in federal lands protection in the nation's history, Pruitt sued the EPA 14 times (often working closely with the oil and gas industry) when he was Attorney General of Oklahoma, and in his own bid for President, Perry vowed to abolish the DOE. Andrew Wheeler, who took over the EPA after Pruitt's resignation, was a lobbyist for the coal producer Murray Energy. Once again the highest level government officials are openly hostile to government, especially when it comes to environmental regulations. And, we now show, a very similar Promethean discourse is at work.

4. Energy Dominance and Environmental Discourse: Two Case Studies

We now offer two case studies to illustrate how the neoliberal Promethean discourse is used by the Trump administration to frame the energy dominance policy agenda. First, we analyze discourse from the Heartland Institute's "America First Energy Conference" held in November 2017 in Houston, Texas.¹ The Heartland Institute is one of the most influential right-wing think tanks on energy and the environment, and their energy conferences feature Trump administration officials, Republican members of Congress, as well as policy entrepreneurs and thought leaders. Next, we analyze the keynote address on the "New Energy Realism" delivered by Department of Energy Secretary Rick Perry at the Cambridge Energy Research Associates Week (CERAWeek) forum on March 7, 2018.² CERAWeek is the world's premier forum on energy policy and politics, attracting representatives from leading energy corporations as well as energy ministers from dozens of nations.

4.1 The Heartland Institute's America First Energy Conference

In this section, we draw from several of the speakers at the conference to indicate the ways in which a Promethean discourse was mobilized to describe and justify energy dominance.

Perhaps the most straightforward articulation of the Promethean discourse came from Todd Myers, Director of the Center for the Environment at the Washington Policy Center. He used the Kuznet's Curve to frame his talk. Modern technology, he argued, causes environmental problems but also solves them as long as the free market is allowed to operate. Myron Ebell, who headed the Trump Administration's EPA transition team, repeated the same basic story. He noted the horrible air quality in Pittsburgh in 1960 and the burning Cuyahoga River in Cleveland around the

¹ One of us (Briggle) attended the conference. Videos of all the presentations from the conference are available here: <u>http://americafirstenergy.org/videos/</u>.

² The transcript and video of his speech are available here: <u>https://www.energy.gov/articles/new-energy-</u><u>realism-secretary-perry-remarks-cera-week-prepared-</u><u>delivery</u>.

same time. He then noted that environmental conditions have vastly improved as the economies of those areas (and the nation) continued to grow. It was time now, he said, to "right size" (drastically cut) the EPA and environmental regulations. To continue on the trajectory of regulations under the Obama and other previous administrations would be like an anorexic person intensifying their caloric restriction.

Jay Lehr, Science Director for Heartland with a Hydrology Ph.D. from Princeton, described climate change as simply "insane" and promulgated by "hysterical" people on the left. In his speech, he advised the audience members to carry CO₂ monitors in their pockets to show people that elevated carbon levels indoors are common and no cause for alarm. "We are so fortunate that we have driven up atmospheric levels of CO₂," he said, "and I pray that you all will live to see the day when it stands at 600 ppm." Increased carbon is greening the Sahara desert and generally making the planet more hospitable for humans, he argued. Similarly, Fred Palmer, Senior VP at the major coal company Peabody Energy, said that, "Coal is electricity. Electricity is life. Life is green...Coal is green." And Joseph Bast, President and CEO of the Heartland Institute, asked the audience in his concluding remarks: "Can you believe what they have done to language...carbon *pollution?!"* He couldn't comprehend a worldview (or discourse) that would picture carbon as a problem.

This was one of two views on climate change at the conference, namely, that increased carbon is a net positive. The other view, as articulated by two climate scientists on a morning panel, is that there are too many uncertainties around the climate to draw any conclusions, especially to warrant any regulations that could hinder economic growth. At the conference, the Heartland Institute handed out free copies of their report Why Scientists Disagree about Global Warming by the Non-governmental International Panel on Climate Change (NIPCC 2017). The report casts doubt on climate science, seeks to discredit the IPCC and other climate science organizations, and argues that the climate change agenda is an attempt by big government to gain greater control over the lives of Americans.

The most popular panel was about overturning the endangerment finding made on December 7, 2009. This, one panelist said, was "a day that shall live in infamy," because that was the day the Obama administration succeeded in getting CO₂ listed as a threat to the "public health and welfare of current and future generations." The panelists described the endangerment finding as "monument to regulatory onanism." After all, carbon is either not a problem or a net benefit...why list it as a public health threat? Panelists proposed a "redteam, blue-team" exercise to "get honest science in there." There was a sense of urgency in the room that the "California model" of draconian regulations (such as the Clean Power Plan and the

endangerment finding) was threatening the livelihoods of Americans, even portending "Third World conditions."

In one of the last panels, Heath Lovell, Vice President of Public Affairs at Alliance Coal, expressed optimism that coal had a bright future. He said that reductions in the coal fleet were due less to automation and market forces than to unfair regulations promulgated by the Obama administration. Coal is now set for a resurgence and its primary market is not at home, but abroad. "We have a moral obligation," Mr. Lovell said, "to help the rest of the world live like we do." Over one billion people don't have electricity. Through coal exports, we won't just keep our mines open, more importantly we will fulfill our ethical duty toward the world's poor to increase their material well-being. Not just Americans, but "all the people of the world deserve the lowest cost energy."

Mr. Lovell cited The Moral Case for Fossil Fuels by Alex Epstein (2014), a book that was frequently touted at the conference and serves as a key intellectual touchstone for the policy entrepreneurs behind the energy dominance agenda. Epstein borrows heavily from Julian Simon's basic discourse to argue that fossil fuels have dramatically increased human material welfare and that continuing advances in technology have successfully mitigated the environmental costs of this growing affluence. Epstein further argues that fossil fuels have actually made the climate less dangerous. By enabling the construction of resilient infrastructures.

fossil fuels have shielded people from natural disasters. As a result, deaths caused by floods, droughts, hurricanes, and other natural disasters have precipitously dropped over the last several decades.

In short, the America First Energy Conference was steeped in the optimistic rhetoric of the Promethean discourse. Human ingenuity has unlocked massive stores of energy, which have made possible tremendous gains in the standard of living. Regulations threaten to strangle the creative engine of the free market that works to incentivize entrepreneurs and combine their ideas into innovations that bring further gains in human welfare. As prosperity increases, so does concern for the environment, and that concern is translated into reduced impacts thanks to technological advances.

However, the conference also indicated why it is not accurate to call this a neoliberal or free market version of Promethean discourse. A truly neoliberal Promethean discourse would be agnostic about types of energy. It would advocate for whichever energy source is the cheapest under fair market conditions the winner in a competition on a level playing field. It is increasingly obvious that solar and wind power often simply outcompete coal under existing market conditions. Yet, no one at the conference ever had a positive word to say about renewable energy. Indeed, the conference was soaked in disdain and mockery when it came to solar and wind power.

A good example is the opening speech by Joe Leimkuhler, Vice President of drilling for LLOG Exploration and former head of Shell's Gulf of Mexico operations. He analyzed all major energy sources to ask the question: "Can we be energy dominant in these fields?' For oil, coal, and natural gas, he argued that the answer is "yes" by looking at data on reserves, production, and technological trends. For "renewables" (his quotes) or what he called subsidy energy, the answer was "no." Indeed, it was for him and the audience literally laughable. When he talked about renewables, the logic of the analysis changed. For coal, oil, and gas, he never mentioned a single negative or downside. But for renewables, the downsides were his entire focus. His first slide on renewables left the engineering realm of charts (used to discuss fossil fuels) to show a picture of a wind turbine menacing a bird. The hypoxic dead zone in the Gulf of Mexico from agricultural runoff was, he argued, the fault of ethanol (a renewable energy). He even told a personal story about his disappointing experience with solar panels on his roof...a story that drew howls of laughter from the audience. It was a stunningly biased presentation by someone who purported to supply facts from a position of engineering expertise.

Another way to put the point is that the "moral case" Epstein is making is not for fossil fuels but for any energy that is abundant, cheap, and reliable (a point he acknowledges: Epstein 2014, p. 34). Yet when renewable forms of energy surpass fossil fuels by those measures, they are dismissed rather than embraced. And efforts are taken to "correct" the market to favor fossil fuels. For example, the Trump Administration proposed a grid resilience subsidy for coal (an idea that had first been floated at the conference), which obviously runs counter to a neoliberal agenda where subsidies constitute market distortions.

In short, the energy dominance agenda is not really a neoliberal form of Promethean discourse, because free markets are favored only when fossil fuels come out on top. Further, the many existing subsidies for fossil fuels are treated as purely neutral market conditions. This is what happens when energy is conflated with fossil fuels. One industry has been given privileged status as standing in for an entire sector of the economy. This is a far cry from the principles of free markets and fair competition, which raises questions about what's really driving the energy dominance agenda. We return to these in the discussion.

4.2 Rick Perry and the New Energy Realism

Mr. Perry began his address to CERA by touting the new liquefied natural gas (LNG) export facilities that had just become operational. This, he said, was part of an optimistic age in energy where new innovations are harnessing new resources. The "new energy realism" signifies this age of abundance. It is in contrast to the old energy realism of the 1970s when President Jimmy Carter and others claimed that "the days of energy abundance were over." The old realism postulated fundamental limits to resources and assumed that new technologies would bring greater environmental harms. The solution they offered, Perry said, was "draconian regulation of energy." But,

> These so-called realists could not have been more mistaken. Truth be told, we had no shortage of energy. What we had was a shortage of imagination and a loss of confidence in our ability to innovate.

How did we move from "perceived energy scarcity" to unprecedented abundance? "...taxes were cut and regulations kept simple and transparent, giving people both the freedom and the incentive to innovate." Supplies rose, costs fell, and "Our environment did not become worse. By nearly any measure, it became better, even as our economy expanded and energy development reached new heights."

Perry summarized things in a perfect expression of the Promethean discourse:

We don't have to choose between growing our economy and caring for our environment. By embracing innovation over regulation, we can benefit both. And THAT is the heart of our New Energy Realism.

He then put this picture in the moral framework of sharing. President Trump, "would like to share our energy bounty with the world and let the spirit of competition benefit consumers by providing more choices in the marketplace...Already we are sharing our natural gas..." LNG and coal and technology exports will "help developing countries...create their own energy renaissance and harness more energy to improve the lives of their citizens."

Unlike the group at the America First Energy Conference, Perry praised renewables. But he qualified that praise by arguing that renewables will remain marginal until at least 2040, and

> What are we supposed to do in the mean time? What are the people without electricity supposed to do? Remember what we have done through technology.....we have not only produced more fossil energy with it; we've made that energy cleaner. Since we're making coal cleaner and since our technology can affordably extract massive amounts of loweremissions natural gas, we're likely to continue to reduce the overall emissions of our fossil fuels.

"Thanks to the amazing power of human ingenuity and innovation," Perry said, "we don't have to accept hideous sacrifices that harm the poorest among us." Noticeably absent from his speech was any mention of climate change, which is an enormous omission given his role in promulgating policies that increase fossil fuel use. He simply ignores the elephant in the room. Whereas the ecomodern Prometheans accept climate change as a problem to be tackled through innovation, the Trump administration does not. It is worth wondering if this is best understood as a different interpretation of the same reality or as two different realities altogether.

5. Discussion and Assessment

Above, we discussed two camps of Prometheans: the ecomoderns and the neoliberals. Both argue that the path to sustainability is innovation, not limitation. And both argue that although modernization or industrialism has been environmentally destructive, it is also the key to protecting the environment. We suggested that the difference between the two camps was in their attitude toward regulations or government more generally. Ecomoderns often embrace a carbon tax, for example, as a legitimate climate change policy lever. The other camp recoils at the thought of a carbon tax, preferring purely market-based solutions.

But what about a camp that doesn't see a problem to begin with and, thus, no need for a solution? In this section, we consider the possibility that energy dominance is not the product of a neoliberal Promethean discourse and perhaps not best understood in terms of a discourse at all.

As our case studies showed, energy dominance is about fossil fuels more than free markets. Recall the claim by Mr. Palmer that "coal is electricity." In fact, coal is not electricity. It is one primary fuel from which the secondary fuel of electricity can be derived. Solar panels and wind turbines are alternative ways to generate electricity. And recall Mr. Perry's embrace of innovation and technology. So too, fossil fuels are not modern technology. It is true that fossil fuels drive our economy. But unlike, say, the iPhone, nobody actually wants coal, oil, or natural gas. A lump of coal in your Christmas stocking is not the ideal gift.

People want the commodities that fossil fuels provide, the power, heat, light, and cool air. Those commodities can, however, be provided in other ways. That's the thing about modern technology in a capitalist society. The ends (commodities) will be provided through whatever means are cheapest and most efficient. Thus, because they are peddling mere means, the fossil fuel industries are remarkably vulnerable despite all their power. And what they are vulnerable to is the very thing they so often praise: the free market. The kind of capitalism they claim to support is as blind as justice – it has no favored sons, not even fossil fuels. If energy dominance was about free markets, then why would the administration fight market forces in various attempts to prop up the coal

industry? And why would they remain silent on the enormous implicit subsidy provided to oil by the US military (see SAFE 2018), not to mention the even larger subsidy of treating the atmosphere as a free dump for greenhouse gasses?

This introduces a darker reading of the situation, that is, a hermeneutics of suspicion. Maybe the Trump Administration policies are not motivated by an underlying, consistent ideal of free markets, ingenuity, and human freedom. It could be far simpler than that: this is about money and power. It is about the entrenched power of the wealthiest industry the world has ever seen, a political system wide open to corporate influence, and a political party that has repackaged "conservatism" as an all-out resource grab.

According to this reading, the Promethean discourse from the Trump Administration, with its overtones of neoliberalism, is just a smoke screen. Administration officials might say they are not picking winners and losers but, of course, they are. It's just that they are not making their picks on the basis of a coherent discourse with some defensible notion of the common good. Rather, the administration is making its picks on the basis of political expedience – to favor the fossil fuel companies that funded their campaign and the industries that gave them a ticket to Electoral College success.

Indeed, a strong case can be made that the notion of an unbiased, free market in energy is nonsensical. As even Perry noted, "Government's picking winners and losers everyday" (Roberts 2018). In his speech, he said that under the old energy realism, "the government used one thumb to promote a favorite technology and the other hand to regulate those they didn't like." The same thing is happening under energy dominance or the new energy realism, it's just that technologies for fossil fuel exploitation are now the favorites. It is not that the market is somehow operating freely of any government influence. The market is inevitably structured by government policies - that is, decisions about which values will be reflected in market prices and to what extent. There is no neutrality to be had. Choices must be made, so as Perry noted the task is to "pick good."

"Picking good" ideally means choosing energy pathways that serve public values. In the face of climate change, it is increasingly difficult to argue that fossil fuels are the right choice for governments to pick (see Roberts 2018). Renewable energy sources reduce carbon emissions and air pollution - common goods that are not captured well by the market and thus provide good reasons for government support. In this reading, then the Promethean discourse provides a plausible story about public values for what is in reality an agenda driven by private interests. By selectively focusing on just the positive impacts of fossil fuels and dismissing climate change altogether, the Trump administration is able to provide a legitimizing patina to a reckless environmental agenda.

Dryzek calls this "greenwashing" and notes how public relations departments at corporations often spin their destructive activities in ways that look environmentally benign (see p. 13). But we think there is something much larger and systemic going on here than the behavior of PR firms. The rise of climate denial is tangled with changes in media and the erosion of democratic norms. How can we think through this tangle?

We could recast the distinction between camps of Prometheans. We could call ecomodernism a "good faith" Promethean discourse, that is, one intentionally and consistently pursuing a path to sustainability through innovation. The same could be said of a truly neoliberal Promethean discourse that was agnostic about types of energy and only sought those that won the competition on a level playing field (however that might be defined). One can, of course, argue with the wisdom or soundness of these discourses, but the point here is that they are sincere in their efforts to decouple environmental harm from economic growth. By contrast, we could call the Trump administration's brand a "bad faith" Promethean discourse. It takes, what are in reality, baldly political preferences for one industry and, in order to offer a public justification of the resulting policies, it cloaks them in a language of tech-fix modernization and human wellbeing.

The Promethean discourse, as one that pictures the compatibility of economic growth and environmentalism, is easily abused. It offers the rhetorical tools to greenwash just about any probusiness agenda. This entails a great deal of contortions. And eventually what has happened is that the Prometheans, those ultimate defenders of modernity, have twisted themselves into a peculiar and dangerous anti-modern position.

We are referring to climate change denial, which has become the bad faith Promethean strategy. Across the past two decades, right-wing American think tanks such as the Heritage Foundation and the Heartland Institute partnered with Koch Industries, Exxon Mobile, and other fossil fuel corporations to launch a campaign of doubt (see Oreskes and Conway 2010). They have successfully captured the Republican Party and polarized the issue of climate on partisan lines. Whereas good faith Prometheans acknowledge the reality of climate change but optimistically proffer solutions, the bad faith Prometheans simply deny the problem. If climate change is granted reality, then it spells ultimate doom for the fossil fuel industry. "Thus," Dryzek notes, "climate change cannot be allowed to exist" (p. 68).

A good illustration of the bad faith arguments behind the energy dominance agenda can be found in the Draft Environmental Impact Statement for the proposed cuts to fuel efficiency standards (NHTSA 2018). Remarkably, this Trump administration document predicts that global temperatures will be four degrees higher by 2100 on current development trajectories. The IPCC notes that at those temperatures, major coastal cities will be underwater, freshwater resources will be severely stressed, and extreme weather events will increase in frequency. Yet the report concludes that rather than cut emissions in an effort to reduce future warming, we should loosen restrictions on fuel efficiency, even though that will result in an additional 8 billion tons of carbon dioxide in the atmosphere by 2100.

The report justifies this conclusion by arguing that fuel efficiency standards alone would not be enough to meet carbon budget goals. That would require "substantial increases in technology innovation and adoption compared to today's levels and would require the economy and the vehicle fleet to substantially move away from the use of fossil fuels, which is not currently technologically feasible or economically practicable" (NHTSA 2018, p. 5-30). In other words, since one rule to improve fuel efficiency won't solve the entire climate problem, it is not worth doing. This is not a good-faith argument. And it is not true to the Promethean spirit – that defining optimism of modernity – with its defeatist view about *currently* feasible technology. Indeed, key to Julian Simon's original Promethean view is a faith that future technologies (not currently feasible or even yet known) will come to the rescue. Indeed, regulations can play a central role even in Simon's view of the Promethean discourse, because they (like

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Dryzek called the climate-denial wing of the Prometheans "an extreme postmodernism" where truth and reason become just other names for power. This postmodernism is not best understood as itself another kind of discourse. Rather, it represents the abdication of the core, unifying values enabling dialogue between discourses: civility, rationality, good-faith, and evidenced-based arguments. In other words, energy dominance may best be understood not as the articulation of a coherent worldview or one among several rationally defensible environmental discourses. Rather, it may be another case study in the power of the corporate elite and the right-wing media universe to generate public opinions among loyal followers, opinions with little basis in reality (see Levitz, 2018).

The Promethean discourse may give a plausible patina to a program of smash-and-grab exploitation. But if significant parts of society drift further from the core values and institutions of democracy, not even the patina will be necessary. All that will be needed is a strong leader, a clear and comforting message, and an echo chamber.

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