Why is it that if you characterize yourself as “very conservative,” you are twenty times more likely to be dismissive of the threat of climate change than if you consider yourself “very liberal”? Or that if you are a Republican, you are four-and-a-half times more likely to be dismissive about climate change than alarmed, and if you are a Democrat, you are seven times more likely to be alarmed than dismissive? How is it that political beliefs are so strongly predictive of beliefs about a purely scientific issue? Climate change does not touch upon closely held theological views, like evolution, and climate change is not an ultimately unresolvable moral issue, like reproductive rights. Simply put, either we are changing the Earth’s climate, or we are not. That is an empirical question, albeit with enormous complexities. But the climate change polls demonstrate that people seem to skim over the scientific complexities and just treat the question as if it were an unresolvable moral or political dilemma.

It does seem odd that environmental issues should be political, as if there were moral values wrapped up inside technical, scientific, and statistical analyses. There is something postmodern about that. It is as if both “liberals” and “conservatives” have this enduring...
skepticism about whether environmental issues are ever what they appear to be. Postmodernism has penetrated architecture, art, literature, music, and even law. It would appear that it has also influenced the way that people view the science of the environment.

But why? What makes environmental science ripe for this permanent inquisition, but not economics, or political science, or biology, or physics? Why do people seem to feel that environmental science is just another way of stacking the deck, when they do not feel that way about many other fields?

It is cognitively easier to feel than it is to think. Perhaps environmental issues—most notably climate change—make people feel something powerful and crowd out their rational thoughts. Environmental issues have a way of not just communicating some dry scientific fact; they also implicitly challenge some fundamental assumptions and beliefs about an industrial society that has created wealth that was unimaginable a century ago, while also creating inequalities and even harms that could scarcely be imagined. In other words, what people feel about environmental issues is tied up in what they feel about our industrial society.

Perhaps what is so frightening about climate change is not its potentially catastrophic consequences—that we could see more Category 3, 4, or 5 hurricanes (though not more total hurricanes); 4

4. Id. at 89–92.
5. Id. at 62–68.
6. Id. at 69–73.
7. Id. at 73–76.
8. In the legal academy, it helped give rise to Critical Legal Studies (CLS), or the “Crits.” See, e.g., RICHARD DELGADO, CRITICAL RACE THEORY: AN INTRODUCTION 5 (2d ed. 2011) (“[Critical Race Theory] also draws from certain European [postmodern] philosophers and theorists, such as Antonio Gramsci, Michel Foucault, and Jacques Derrida . . . . From critical legal studies, the group borrowed the idea of legal indeterminacy . . . .”).
9. Physicist Alan Sokal famously—or infamously—submitted a hoax article to the postmodernist journal Social Text, pretending to argue as a postmodernist would: that physics was hopelessly indeterminate and incapable of objective measurement. Alan Sokal, Transgressing the Boundaries: Towards a Transformative Hermeneutics of Quantum Gravity, 14 SOCIAL TEXT 217 (1996).
10. See Kerry Emanuel, Increasing Destructiveness of Tropical Cyclones over the Past 30 Years, 436 NATURE 686, 686 (2005) (“Theory and modeling predict that hurricane intensity should increase with increasing global mean temperatures, but work on the detection of trends in hurricane activity has focused mostly on their frequency and shows no trend.”); Peter J. Webster et al., Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment, 309 SCI. 1044 (2005) (finding hurricane intensity will increase even if frequency does not).
that droughts like the one that plagued the United States in 2012 could be annual events;\textsuperscript{11} that along with persistent droughts come extreme rainfall events that produce calamitous flooding;\textsuperscript{12} or that changes in the acidity of delicately balanced oceans could decimate the phytoplankton at the bottom of the food chain, with catastrophic consequences for those at the top (us).\textsuperscript{13} Instead, what may be so frightening about climate change is what it means to our identities as members of a productive society. Even before Tom Brokaw declared the generation that endured World War II the “greatest generation,”\textsuperscript{14} people of the post-World War II era possessed the sense that they had pushed American life forward, but that succeeding generations, saddled with selfishness, narcissism, and infighting, had squandered its opportunities. What if the moral of that story were turned on its head, and it was our grandfathers who are to blame for rushing blindly into a fossil-fuel-fired society, irresponsibly ignoring its environmental implications? What if instead of being providers, the greatest generation actually mortgaged the future of its children and grandchildren? Maybe climate change is just the most recent, the most emotional, and the most morally-tinged chapter of an ongoing political debate about whether the greatest generation really was the greatest generation, or whether it will prove to be the generation that has doomed the world to an anarchic and impoverished future. That starts to sound more like a political and moral drama, rather than the pursuit of a dry scientific question.

In an unguarded moment during a television interview, conservative and notorious climate skeptic and former chairman of the Senate Committee on Environment and Public Works James Inhofe said, “I was actually on your side of this issue when I was

\textsuperscript{11} See Robert Henson, A Rough Guide to Climate Change: Climate Change and El Niño, WEATHERWISE, Jan./Feb. 2007, at 32 (discussing drought predictions).

\textsuperscript{12} See Peter Gleick, Water, in CLIMATE CHANGE SCIENCE AND POLICY 74, 75–76 (S.H. Schneider et al. eds., 2009) (citation omitted) (noting that flooding consequences may be as serious as those caused by drought).

\textsuperscript{13} See Ulf Riebesell et al., Reduced Calcification of Marine Plankton in Response to Increased Atmospheric CO\textsubscript{2}, 407 NATURE 364 (2000) (discussing scientific projections regarding the decreased production of calcium carbonate); Christopher L. Sabine et al., The Oceanic Sink for Anthropogenic CO\textsubscript{2}, 305 SCI. 367 (2005) (discussing effects of CO\textsubscript{2} settling in the ocean); THE ROYAL SOCIETY, OCEAN ACIDIFICATION DUE TO INCREASING ATMOSPHERIC CARBON DIOXIDE 35 (2005), available at http://royalsociety.org/uploadedFiles/Royal_Society_Content/policy/publications/2005/9634.pdf (suggesting possible economic consequences of ocean acidification).

\textsuperscript{14} See generally TOM BROKAW, THE GREATEST GENERATION (1998).
chairing that committee and I first heard about this. I thought it must be true until I found out what it cost. If climate change wasn’t so expensive, maybe I’d believe it.”15 In a capsule, that is why people feel before thinking about climate change and when confronted with environmental issues generally—these are issues that people seem to think have huge economic implications, and therefore huge social implications. And if conservatives and liberals still polarize around the question of redistributive justice, then environmental issues with large economic and social implications align very tightly with where you stand on wealth redistribution. And there is this beautiful symmetry of irrationality—people who most reliably call themselves “liberal” or “conservative” are those who are the most predictable, and frankly, the least thoughtful about environmental issues like climate change.

Is there a way out of this stalemate? There will eventually be a political shift, such that either Republicans or Democrats will need to make some very dramatic changes from within. But a naked political resolution will likely say very little about the correct course. A political solution would just be the raw power of one side imposing itself on the other—an outcome eerily consistent with postmodernist warnings.16 It would either be an extreme liberal or extreme conservative solution, and it is unlikely that it would be a particularly good one. When asked about favored policies, eighty-nine percent of those alarmed about climate change (liberals) would favor regulating carbon dioxide as a pollutant—that is, regulating under the Clean Air Act, which would be much less efficient than imposing a carbon tax or a cap-and-trade system.17 Of course, those dismissive of climate change would favor doing nothing. They would also, however, favor


16. See JEAN FRANÇOIS LYOTARD, THE POSTMODERN CONDITION: A REPORT ON KNOWLEDGE 46 (1979) (“Scientists, technicians and instruments are purchased not to find truth, but to augment power.”). See also id. at 5 (“Knowledge is and will be produced in order to be sold, it is and will be consumed in order to be valorized in a new production: in both cases, the goal is exchange. Knowledge ceases to be an end in itself, it loses its ‘use-value.’”).

17. LIESEROWITZ, supra note 1, at 41 tbl.16.

expanded drilling for oil and gas off the U.S. coast.\textsuperscript{19} For climate change, and for energy policy, there are no Band-Aids; neither of these extreme solutions would be very effective.

There is no rational way out of this morass except to be remorselessly and persistently data driven. It is one thing to have a tint on one’s glasses, be it green or greenback. Of course one should be a critical consumer of new views on science and technology. But that does not mean out-of-hand rejection of anything that makes one feel uncomfortable. Being a critical thinker also means having the capacity to be self-critical, to challenge one’s own underlying beliefs and assumptions. Too often, people of all political stripes hold others to a higher standard than the one to which they hold themselves. And this self-reinforcing self-righteousness is only made easier by the Internet—it has become costless to obtain the psychic joy of finding someone, somewhere, who agrees with you. People filter information by how it makes them feel.

A conservative could take heart that over time and over many issues, being data driven will yield outcomes that are friendly to conservatives at least as often, perhaps more so, as they are friendly to liberals. Over time, emotional objections to free trade\textsuperscript{20} gave way to palpable evidence that it bettered the economic lot of the vast majority of people in trading countries.\textsuperscript{21} Data-driven conservatives understood this, while liberals wrung their hands. Usually, conservatives more so than liberals have favored smaller government and the reduction or elimination of government subsidies, though that broad topic can vary quite a bit depending on the subsidy, and whether it is conferred upon an important constituent. Data-driven conservatives have often been ahead of the political curve on the phase-out of subsidies, particularly when they promote activities that produce environmental harms.\textsuperscript{22} Over time and over many issues,

\textsuperscript{19} LIESEROWITZ, supra note 1, at 41 tbl.16.
\textsuperscript{21} Id. at 126–41 (finding empirical evidence that NAFTA had only modest effects on U.S. employment, increased industrial integration and efficiency, and achieved gains from regional integration).
\textsuperscript{22} Barton H. Thompson, Jr., Conservative Environmental Thought: The Bush Administration and Environmental Policy, 32 ECOL. L.Q. 307, 325 ("A variety of conservative environmentalists argue that one of the most effective means of improving environmental
being data driven will lead one to believe in reform of public schooling, market-oriented environmental regulation, a diminished role for labor unions, and generally freer markets, all cherished goals of conservatives, in theory. For all of these issues, one can sense that a conservative view is one that is on the right side of history.

Most importantly, being data driven certainly means not turning away from science. MIT climate scientist Kerry Emanuel, once a prominent Republican, has publicly lamented what he perceives as hostility to science in the Republican party, and he has received death threats for it. There is, in fact, a principled link between science and conservatism. That link is a commitment to objectivism, a belief that objective answers exist, and that even if they are wrong (or ultimately they are), progress is obtained by moving forward in search of answers. Physicist Alan Sokal, who lampooned postmodernism in his hoax article, Transgressing the Boundaries: Towards a Transformative Hermeneutics of Quantum Gravity, played one of the cruelest (or most satisfying, depending on one’s viewpoint) jokes on the “self-proclaimed Left.” He submitted an article to the postmodernist journal Social Text purporting to argue that physics

conditions is to eliminate governmental subsidies that encourage environmentally harmful activities.”).

23. Neela Banerjee, Scientist Proves Conservatism and Belief in Climate Change Aren’t Incompatible, L.A. TIMES (Jan. 5, 2011), http://articles.latimes.com/2011/jan/05/nation/la-na-scientist-climate-20110105 (“I am a rare example of a Republican scientist, but I am seriously thinking about changing affiliation owing to the Republicans’ increasingly anti-science stance . . . . The best way to elevate the number of Republican scientists is to get Republican politicians to stop beating up on science and scientists.”).


25. See generally Sokal, supra note 9.

26. Alan D. Sokal, A Physicist Experiments with Cultural Studies, 6 LINGUA FRANCA 62 (1996) (“Politically, I’m angered because most (though not all) of this silliness is emanating from the self-proclaimed Left. We’re witnessing here a profound historical volte-face. For most of the past two centuries, the Left has been identified with science and against obscurantism; we have believed that rational thought and the fearless analysis of objective reality (both natural and social) are incisive tools for combating the mystifications promoted by the powerful—not to mention being desirable human ends in their own right. The recent turn of many ‘progressive’ or ‘leftist’ academic humanists and social scientists toward one or another form of epistemic relativism betrays this worthy heritage and undermines the already fragile prospects for progressive social critique. Theorizing about ‘the social construction of reality’ won’t help us find an effective treatment for AIDS or devise strategies for preventing global warming. Nor can we combat false ideas in history, sociology, economics and politics if we reject the notions of truth and falsity.”).
was, just like literature, inherently subjectivist and just another “form of epistemic relativism.” In embarrassing the journal and the postmodernists that celebrated the apparent coming out of a bona fide hard scientist (a physicist!), Sokal hoped to shock like-minded liberals into rejecting epistemic relativism, and instead forging ahead with empirical inquiry. But it is not a call that The Left has completely embraced.

What should conservatives do when The Left tacks towards relativism, subjectivism, and postmodernism? Conservatives should be data driven; they should tack towards empiricism. Empiricism is not just the political enemy of postmodernism; it is its intellectual foil. To lend coherence to a set of political beliefs, an intellectual program has to serve as its base. Theological and moral beliefs aside, even widely held beliefs are fleeting when they are based on nothing but faith and emotion. Ultimately, an indifferent and globalized world economy will punish fantastic beliefs about economics and science.

Turning towards empiricism requires the harder task of getting people to think before feeling. However, conservatives have demonstrated this kind of courage and discipline before, even on environmental issues. It was a Republican president, Richard Nixon, who pushed through perhaps the three most significant environmental laws in the history of the world: the National Environmental Policy Act, the Clean Air Act, and the Clean Water Act. It was another Republican president, George H.W. Bush, who managed to outflank a fractured Democratic party to push through emissions trading for sulfur dioxide in the Clean Air Act Amendments of 1990.

And here is what is really surprising about both Nixon’s and Bush Sr.’s legislative accomplishments: all of these legislative achievements are viewed in modern terms as being somewhat anachronistic. The Clean Air Act is an inefficient way of regulating widespread pollutants. The fact that the only significant federal

27. Id.


attempts at addressing climate change led by Democrats have been cap-and-trade programs is a recognition by leading Democrats that the Clean Air Act is not the best way to address climate change. And the cap-and-trade concept is one that was only made plausible in the U.S. Congress because of President George H.W. Bush’s accomplishment. But the Clean Air Act Amendments of 1990 were based on assumptions about the environmental damages of acid rain caused by sulfur dioxide pollution, assumptions that are now seen as being errant. But no one serious contends that we should do away with any of the above. Rather, the National Environmental Policy Act, the Clean Air Act, the Clean Water Act, and the Clean Air Act Amendments of 1990 all represented significant steps of progress, grand initiatives that have pushed environmental policy forward. The Clean Air Act, blunt as it is as a regulatory instrument, has saved thousands of lives from air pollution and has realized economic benefits an order of magnitude greater than the compliance costs. No one serious believes that the Clean Air Act has not been worth it. And while the ecological benefits of reducing sulfur-dioxide pollution are not as large as originally believed, the harm to human health in the form of fine particulate matter—a form of pollution poorly understood in 1990—has made the Clean Air Act Amendments of 1990 one of the most beneficial legislative acts ever. Sometimes, taking a step forward can be risky, and it can produce something


33. UNITED STATES ENVTL. PROT. AGENCY, EXECUTIVE SUMMARY, FINAL REPORT TO CONGRESS ON BENEFITS AND COSTS OF THE CLEAN AIR ACT 1990 TO 2010 iii tbl.ES-1 (1999), available at http://www.epa.gov/air/sect812/1990-2010/fullrept.pdf (showing benefits potentially ten times that of costs, with a mean estimate showing benefits four times as much as costs).

34. Richard Schmalensee & Robert N. Stavins, The SO2 Allowance Trading System: The Ironic History of a Grand Experiment, 27 J. ECON. PERSP. 103, 109 (2013) (“[I]t turns out that the ecological benefits of the program have been relatively small . . . .”).

35. The benefits of the Clean Air Act Amendments of 1990 have recently been estimated to be about $175 billion to $425 billion, for human health impacts alone. The benefits of avoided human health impacts from fine particulate matter range from $170 billion to $410 billion. NAT’L ACID PRECIPITATION ASSESSMENT PROGRAM, NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM REPORT TO CONGRESS 2011: AN INTEGRATED ASSESSMENT ES-3 (2011). The benefits of avoided human health impacts from ozone range from $4.1 billion to $17 billion. Id. at 15. The costs of compliance were estimated to be about $3 billion per year. Letter from John P. Holdren to Congress, Executive Office of the President, National Science and Technology Council, Dec. 28, 2011, in NAT’L ACID PRECIPITATION ASSESSMENT PROGRAM, supra.
suboptimal. But these steps forward are often required before something significant can be learned. Besides, the alternative is stasis and stagnation. A globalized world will brutally punish a society satisfied with the status quo.

A conservative vision of the environment, moving forward, must be data driven, and must be grounded in science. Science is the only touchstone that could be objective and fair. If we—liberals and conservatives and everyone in between—choose, consciously or unconsciously, to sift our beliefs through some sort of an emotional filter, we resign ourselves to deciding everything while debating nothing. When applied to environmental science, postmodernism leads to a dark, cynical world where environmental problems are intractable and environmental solutions are impossible. Data-driven conservatives can buck this trend and, in the process, help avoid this dystopian environmental future.