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TRUTH, INQUIRY, AND DEMOCRATIC AUTHORITY IN THE CLIMATE DEBATE

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n February 15, 2011, State Representative Joe Read introduced HB 549 to the Montana legislature. According to its title, it was: "An Act Stating Montana's Position on Global Warming." If passed, Montana's position governing future policy or law would be that "(a) global warming is beneficial to the welfare and business climate of Montana; (b) reasonable amounts of carbon dioxide released into the atmosphere have no verifiable impacts on the environment; and (c) global warming is a natural occurrence and human activity has not accelerated it." Read has openly admitted that he had not conferred with any scientists in drafting the bill and that he is motivated primarily by a belief that the federal government uses climate policy to gain revenue and consolidate power, even going so far as to manipulate federal grants to manufacture data: "If you follow the money, the science has been pushed toward where the money is coming from. The money is coming from the federal government. I believe global science is an ideal, not a true science. . . . As a citizen legislature, we are inclined to believe with the sun on our hands and our face, and we're not seeing the global warming." While the scientific community is said to be corrupted by wealth and politics, the judgment of the lay public is unimpeachable. Thankfully, the bill has since died in committee and has little chance of becoming state law. However, it remains fascinating as an attempt to legislate in violation of scientific truth.

Though it is tempting to dismiss Representative Read's bill as an amusing and marginal case, it is not an isolated one on either the state or national level. Read's bill may have failed, but it represents a larger attempt to eliminate climate truths by legislative action. For example, in direct opposition to their own Coastal Resources Commission, North Carolina state lawmakers have attempted to deny predicted climate-change-related sea level rises by means of mere fiat. While many other states are preparing for 1- to 2-meter increases in the coming century, these lawmakers have sought to legislatively cap the rise at 15 inches for the sake of future state policy. When this effort failed, new legislation was introduced to weaken the requirements that commissioners have scientific expertise and be free of compromising business interests. On April 7, 2011, the U.S. House of Representatives

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voted along party lines to repeal the Environmental Protection Agency's (EPA's) regulatory authority regarding climate change.³ During the course of congressional debate, House Democrats introduced an amendment requiring legislators to accept the EPA's finding that climate change is real and a threat to public health and welfare. And, again, scientists were dismissed as pursuing their own political agenda rather than serving the public. Ted Poe (R-TX) claimed: "E.P.A. is on a mission to destroy American industry. When regulators, especially regulators at the E.P.A., go to work, they get in a big room and sit around a conference table drinking their lattes and say, 'Who can we regulate today?' because that's what regulators do. Regulators regulate, all on the so-called premise of protecting us from ourselves." Looking to the future, Lamar Smith (R-TX) has introduced the High Quality Research Act, which would require that the findings of any research conducted with federal funding, which is a significant percentage, would have to receive committee approval from the House of Representatives.

In the following, I will discuss a concern for both democratic philosophy and environmental activism: the problematic relation between truth and democracy present in political debates over climate change. In these cases of explicit rejection of empirical fact as the basis of sound public policy, there is a general question of the proper ground of democratic political authority. When these laws pass, are the people obliged to obey them? We have two basic, reasonable, and yet conflicting intuitions. Within a democracy, authority is rooted both in (1) the truth, and (2) popular consent. However, as the climate debate reveals, these are not necessarily aligned. Are citizens obliged to obey laws when they are based on only truth or popular consent alone?⁵

I argue here that the answer to this question is not provided by a theoretical reconciliation of truth and consent, but a practical one. Laws have authority insofar as they approximate the will of an ideal experimental community, which entails the reconciliation of expert and lay communities. To defend this position, I first set out what I take to be the problem—the conflict of two intuitions regarding the source of democratic authority. Second, I propose a solution grounded in the pragmatist theory of truth and inquiry and argue that, from within a pragmatist model, the genuine conflict is not a theoretical one between truth and popular consent, but a practical one between expert and lay communities. Third, I defend this solution by recalling Walter Lippmann's famed criticism of democracy's epistemic limits. Lastly, I will present the practical implications of a pragmatist model of truth and democratic authority for the development of climate policy.⁶

1. POLITICAL INSTITUTIONS IN TENSION

The relation between truth and democratic authority is problematic because of the co-existence of two competing yet reasonable intuitions: For political authority to be normatively binding, it must be grounded in (1) the consent of

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the people, and (2) the truth. However, it is not necessarily the case that what is the outcome of public consensus and what is true are the same thing. In this section, I argue that each intuition is correct but neither is sufficient by itself to ground democratic authority.

It is etymologically true that democratic authority rests with the people. Within liberal democracy, all citizens are presumed to be free, equal, and deserving of respect. Given that, the exercise of coercive authority must be justifiable, in principle if not in fact, to the people affected by the law. In those cases where the law expresses the will of the people, that is, where there are no egregious distortions introduced into the process of collective will-formation by monied interests, propaganda, or violence, or where there are no violations of basic rights and liberties, then all citizens are obliged to obey or be sanctioned. Though this has long roots in the liberal political tradition, this procedural model of legitimacy has particular favor in the wake of John Rawls's *Political Liberalism* and deliberative models of democracy that hold that political legitimacy is not grounded in substantive metaphysical or moral commitments, but only in the procedures of public justification. Put more simply, if the law passed fairly, then I have to recognize it as legitimate, even if I believe it to be based in untruths. Were a bill to be passed defining climate change as a non-human process, then I may work to have that law repealed, but it is the law of the land. Given that climate policy affects the democratic public and climate research is often funded by the public, there is a prima facie obligation to obey the will of the public, even in the technical field of climate science.

However, this counters the basic intuition that I am not obliged to obey a law that is out of touch with reality. We intuitively hold that participants must abide by minimal epistemic requirements if their position is to be considered. For example, were my fellow citizens to support a law resting on false beliefs regarding climate change, I would not feel legitimately bound to change school science curricula. Were I a high school earth sciences teacher, I might obey out of fear of unemployment, but I would not feel normatively obliged. Following this intuition, many democratic theorists have rebelled against Rawls's "epistemic ambivalence," holding that truth matters to democracy both as a substantive end of democratic politics and as a requirement that its procedures be epistemically sound.⁷ Simple fairness of procedure is not sufficient for political authority. The people could decide that flipping a coin or rolling dice—unbiased means of making decisions—may be the most fair way of determining policy, but that would not seem to ground their authority to coerce citizens. We tend to believe that power alone, even if it is power arising from popular consent, does not define the good, irrespective of truth. A certain degree of epistemic authority would seem to be necessary, perhaps even sufficient.

Therefore, our second competing intuition is that political authority is, in some way, grounded in the truth. For example, were the Montana or North Carolina

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legislatures or Congress to determine that public policy must proceed as if climate change is anthropogenic or the theory of evolution is scientific truth, and if they are in fact true, then that law is legitimately binding insofar as it relies on facts. Correlatively, I would not be obliged to obey any law that contravened those facts. A democrat is repulsed by the claim that African Americans and women are intrinsically morally and intellectually inferior not only because it violates the minimal conditions for deliberation over the future of the democratic order, nor only because it violates deeply held democratic values such as tolerance, equality, and mutual respect, but also because the claim is simply false. However, as I will now argue, truth alone is also an insufficient ground for democratic authority.

The scientific community holds anthropogenic climate change to be a fact. Countless scientific studies and dozens of scientific societies have concluded that climate change exists, that humanity is responsible, and that it has serious moral and environmental consequences. Though scientists differ over details and there are some outliers who doubt the consensus, the American Association for the Advancement of Science's open letter on the matter is clear:

As you consider climate change legislation, we, as leaders of scientific organizations, write to state the consensus scientific view. Observations throughout the world make it clear that climate change is occurring, and rigorous scientific research demonstrates that the greenhouse gases emitted by human activities are the primary driver. These conclusions are based on multiple independent lines of evidence, and contrary assertions are inconsistent with an objective assessment of the vast body of peer-reviewed science.⁸

The eighteen signatories include the American Meteorological Society, American Chemical Society, and American Geophysical Union, each of which has written their own statements affirming the fact of anthropogenic climate change. In addition to scientific societies spanning all relevant areas of study, dozens of national and international academies of science have reached the same conclusion, and it is almost universally accepted in climatological research. Naomi Oreskes's survey of all peer-reviewed abstracts on global climate change between 1993 and 2003 found that not one disputed that climate change is happening and that it has been caused by humanity. Among experts, there is no fundamental controversy.

Though scientific consensus must always be open to revision, and there is always the possibility that it is incorrect, there is compelling reason to accept the scientific consensus on anthropogenic climate change as true. One may be a fallibilist and yet confidently assert truths. For the sake of the present argument, then, let us proceed on the assumption that anthropogenic climate change is a fact and statements denying its existence are false.

It is tempting to dismiss State Representative Joe Read and other climate change denying politicians as being out of touch with their own constituents, akin to representatives who oppose gun control while their constituents poll firmly

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on the other side. One may claim that elected officials are out of touch with the truth, but the democratic public is not and there is no general problem. However, this will not work for the climate debate. First, for practical purposes of law and science policy, the representatives act as the public. Second, the public does not align with climate scientists. Third, even if the public did accord with truth on the climate debate, we could turn to evolutionary theory, and the problem would arise again.

While there may be broad consensus within the scientific community, there is not consensus among the lay public. According to one Gallup poll, an increasing percentage of Americans believe that claims regarding climate change have been greatly exaggerated: from a consistent 30–33 percent from 1998 to 2007 to a sharp rise to 48 percent in 2010. There has been a corresponding decline since 2008 of those who believe that climate change will have serious effects or that it is caused by humans. Most interesting for the present argument, there has been a sharp decline—65 percent to 52 percent—of Americans who believe that the existence of anthropogenic climate change is scientific consensus. Rather, they are shifting to the belief that scientists are themselves unsure, despite the overwhelming evidence to the contrary.

Given that most Americans have no direct knowledge of climate science, it is not surprising that they would be unaware of the scientific consensus. But such a clear shift is curious, as it is not as if direct knowledge of climate science was common prior to 2008 and suddenly declined. What is more likely is that changing public opinion reflects non-scientific factors such as political partisanship. This hypothesis was borne out by the University of New Hampshire's Carsey Institute's study of the link between political affiliation and belief in climate change. Ironically, the size of the political divide was directly linked to the respondent's perceived level of expertise. Among those who did not claim to be well-informed on the matter, 23 percent of Republicans and 52 percent of Democrats believed that climate change exists and is caused by humanity. Among those who did claim to be well-informed, the divide increased to 19 percent and 78 percent. 12 Increase of partisanship, increase of ignorance, and increase of perceived expertise among Republican respondents likely reflect the effects of ideologically narrow exposure to news media and political messages. Even more brazenly, political operatives such as Frank Luntz have openly tried to undercut the public's awareness of scientific consensus: "Should the public come to believe that the scientific issues are settled, their views about global warming will change accordingly. Therefore, you need to continue to make the lack of scientific certainty a primary issue."13 Though, to be fair, increased correctness among Democrats is likely because of partisanship and a similarly narrow filter—though, in this case, one coincident with scientific consensus. Such partisanship and ignorance of scientific fact is magnified when media conglomerates make explicit policy to deny climate

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change, or wealthy individuals spend vast amounts to support think tanks to do the same. 14

Given that popular consensus is not a sufficient basis for political authority and that there is a wide gap between popular belief and scientific fact that is influenced by sheer political ideology, it is tempting to make truth the sole basis of political authority and turn climate policy over to climate scientists alone. However, this horn of the dilemma has its own problems.

As noted above, the importance of truth to democracy is a prominent topic in contemporary political theory. Much of this debate has centered on the essentially deliberative quality of democracy, that democratic outcomes arise from the exchange of reasons in an inclusive and egalitarian process of argumentation. Democracy, it is argued, uniquely possesses normatively justified procedures. The justification of democracy is then interwoven with its aptitude to produce right outcomes. Democracy is epistemically justified, as it is the best procedure for producing knowledge or truth. Since democratic principles of inclusion and deliberation increase the probability of achieving a correct outcome, democratic authority is uniquely justified. 16

Variants of the epistemic justification of democracy have arisen in pragmatist political theory. As pragmatism draws a direct connection between truth and processes of public and experimental inquiry, pragmatist defenders of democracy have argued that (1) democracy is the only political form that mirrors the epistemically superior methods of experimental science and, therefore, it is uniquely truth-apt;¹⁷ and (2) democratic norms are quasi-transcendentally justified as the conditions for the possibility of reasonably asserting beliefs as true.¹⁸ In each case, the internal link between truth and public justification provides the normative ground for democracy.

However, the epistemic justification of democracy has encountered the frequent objection that, if truth-aptness is the basis of political legitimacy, then there may be non-democratic procedures that are even better suited to attain true outcomes. This concern has led some to narrow the scope of the epistemic justification to the claim that while deliberative models of democracy are epistemically superior to other democratic models, democracy-as-such is justified either entirely or in part by its other, intrinsic values such as self-governance or preservation of liberty. To make truth not only a necessary condition, but also a sufficient condition for political authority summons up Allan Bloom's fear of Plato's proto-totalitarian philosopher-kings who alone claim truth that gives them the authority to rule over others. Even if the philosopher-kings were actually in possession of the truth, our democratic intuitions are offended by their rule because (a) political authorities have a prima facie obligation to get the citizen's consent, and (b) in a liberal democracy that values control over one's private life, people are allowed to lived ignorantly. Of course, one could deny that ignorant citizens are not being

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reasonable, and there might be some merit to that claim, but it is not obvious that there is no room for reasonable disagreement on the truth. In sum, while it might be more likely to produce true outcomes, it would offend our democratic intuitions to turn climate policy over entirely to climate scientists.

For the purposes of this argument, let us assume that both truth and democratic self-governance are goods and it is better to harmonize them than to eliminate either. The ideal is to abandon neither the instrumental-epistemic value of democratic procedures (correctness of decision making) nor their other value (self-determination, preservation of natural liberties, etc.), though concrete cases may require compromise or trade-offs. Any laws designed to address anthropogenic climate change are then politically problematic, as they must avoid two extremes. We are left with the problem of the legitimacy of laws that may (a) be derived from the democratic process and expressive of popular belief but are based on falsehoods, or (b) reflect scientific consensus but do not satisfy the requirement that democratic laws reflect the popular will.

2. RECONCILING TRUTH AND CONSENT IN THEORY

To overcome that abstract tension between truth and popular consent, I propose that we turn to the account of truth and inquiry found in American philosophical pragmatism.²⁰ Historically, philosophical pragmatism has attempted to circumvent entrenched philosophical dualisms rather than solve them on their own terms. The pragmatists' response when pulled between competing ideals is to structure institutions or processes so that ideals are harmonized. It is a concrete issue of reconstructing situations to harmonize desired ends, not an abstract issue of reconciling or subordinating concepts. Practical or moral judgment is not complete until the situation creating the original tension is itself reconstructed, properly eventuating in new habits of action. Within a pragmatist theory of inquiry, the tension between the normative bases of democratic legitimacy is reconciled in theory because the conditions necessary for good inquiry are the same as those that secure both truth and consent. Insofar as political and scientific institutions and political decision-making processes provide the conditions for good inquiry, they alleviate the tension between truth and popular consent.²¹ The issue of practical reconciliation is deferred until the final section.

A sketch of the pragmatist theory of truth is necessary. From its inception, the pragmatist theory of truth has been maligned as the assertion that the true is simply that which works—"works" understood to mean that which is satisfactory or allows a person to get what he wants. Hence, Bertrand Russell's objection that no amount of personal satisfaction is going to make "the present king of France is bald" true. However, pragmatism actually understands truth as the outcome of an ideal inquiry. Charles Peirce defined the truth as "[t]he opinion which is *fated*

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to be ultimately *agreed* to by all who investigate is what we mean by the truth, and the objected represented in this opinion is the real."²² This was reformulated by William James as

"[t]he true," to put it briefly, is only the expedient in the way of our thinking, just as "the right" is only the expedient in the way of our behaving. Expedient in almost any fashion; and expedient in the long run and on the whole of course. . . . The "absolutely" true, meaning no farther [sic] experience will ever alter, is that ideal vanishing-point towards which we imagine that all of our temporary truths will some day converge.²³

John Dewey also elaborated upon Peirce, citing his account of truth as the limit concept of inquiry as informing Dewey's own notion of "warranted assertability," which replaced "truth."²⁴ To some, the idea that truth is "fated" is too troubling. Cheryl Misak and Robert Talisse, cited above, have removed the teleological element and defined truth as that opinion which defeats all objections. Even in this last case, the pragmatist holds that the truth is not simply sitting "out there" to be discovered, but is in part "made" by the process of inquiry, of exposing a belief to public scrutiny and experimentation.

Inquiry entails a community of those who inquire. The more inquirers introducing hypotheses and testing them against experience, assuming that they use the self-correcting methods of science, the more reliable the outcomes. Any community of inquiry that excludes legitimate sources of evidence or ignores the outcomes of tests because they upset traditional beliefs or social divisions would not be able to claim that its conclusions are true. It is then impossible for the pragmatists to have held that the true is that which is merely satisfactory or pleasing to some individual or finite community. Truth is a function of inquiry. To assert truth is to assert that the belief would be found true under the ideal conditions of an undistorted community of inquiry inclusive of all evidence and participants and extended over an indefinite amount of time. It is not what "works" for an individual. Truths are both the most warranted beliefs we have as the result of previous inquiry and relatively stable platforms for future action. The true is that which has been shown fruitful for future conduct.

With this brief sketch in hand, let us return to the issue of democratic authority. Misak and Talisse, among others, have argued that there are implicit democratic norms built into the pragmatist model of truth and inquiry. Anyone who asserts true beliefs inevitably commits himself to defending those beliefs against reasons and evidence in an ongoing, inclusive, evidence-based, and respectful debate. Among all of the pragmatists, and most clearly in the work of John Dewey, scientific and democratic practice are isomorphic. A democratic public engages in the same sort of reflective, inclusive, experimental, and self-correcting enterprise as the scientific community, though with regard to broader problems, broader sets of relevant ideals, and different tests.

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This appeal to an ideal community of inquiry accounts for the tension we may feel between our respect for popular consent and truth. Following the model of the ideal experimental community, the legitimacy of public policy is dependent on whether that policy is the outcome of an inclusive and experimental community. Because inquiry extends indefinitely, the outcome of any democratic deliberation is always provisional, as is any truth-claim. However, there is a difference between present policy outcomes and the regulative ideal to be found once the last man has had his say, the answer "fated" to be agreed upon. One could assert that the present deliberative outcome arose from fair procedures and yet is still untrue because one can claim that a more inclusive or extended inquiry will reveal the present untruth/injustice. One may say: "Your position may have won in a fair debate, but I believe the debate will eventually swing my way. In the meantime, I have to obey laws based on the best answer we currently have." The dissenting pragmatist citizen affirms not only that the current policy is expressive of a reasonable popular will, but also that it will be proven false in the course of a future, more ideal inquiry.

There is an implicit norm of political reasonableness. Unreasonableness is not in appealing to thick beliefs about what is true or good—as some liberal conceptions of political public reason argue—but in the infallibilism of those who have not tied their concept of truth to public processes of inquiry. There is a significant difference between asserting that legitimate political authority rests on a revealed dogmatic truth and asserting that political authority is legitimate because, at this point and extrapolated from the best evidence and reasons, its judgments are correct. Of course, even the dogmatic believer holds that his dogma is fated to be agreed upon by those who would but recognize it. However, they have severed its intrinsic connection to an actual ongoing inquiry. So long as those with whom I disagree are sincerely open to reasons and evidence, their objections are reasonable. I may believe they are wrong, but not that they are unreasonable. However, I am simultaneously committed to the belief that my position will eventually win out, given ideal conditions (or, at least, that my position is one of an exclusive set of reasonable truth candidates, while theirs is not).

From within a pragmatist model of truth and inquiry, there is no conceptual tension between the authority of the truth and that of the people. The true *is* the consensus of the public, assuming that the public follows the methods of good inquiry, which entail an inclusive community extended over indefinite time. Rather, the tension between truth and popular consent is reconstructed as that between well-ordered, evidence-based, inclusive, and self-reflective communities of inquiry and inchoate, blind, exclusive, and unreflective ones. Put crudely, the tension is between communities of experts and non-experts. In the case of climate change, it is between climate scientists and other relatively informed and principled inquirers, and the general public who may be ideologically blinkered

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or, through no fault of their own, simply ignorant. However, as we will see in the next section, this does not entail that we should hand all responsibility for public policy to expert communities.

3. REVISING THE DEWEY-LIPPMANN DEBATE

Arguably, this reformulation of the tension between truth and consent of the governed does not address the underlying concern—when deciding on public policy, particularly as it depends on scientific knowledge, we are ill-served by putting it in the hands of the blinkered or ignorant. One could argue that the public would be better served by leaving political decisions in the hands of the scientific community, which is alone capable of attaining truth. This argument was made by Walter Lippmann in his famed dispute with John Dewey in the 1920s. Lippmann, a journalist and former student of William James, was a rising pragmatist and Progressive, but he lost hope in the wake of World War I that the people would be able to take an active and informed role in their own governance. He is uniquely positioned to offer an epistocratic critique of the present pragmatist argument.

Lippmann contended that the people can never know the truth because they cannot have direct experience of the great majority of issues they would be called upon as citizens to judge. Due to the simple limits of human cognition and experience, the public is unable to approximate the scientific community. They are left within a pseudo-environment mediated by stereotypes. As a consequence, it is impossible for the masses to assert truths relevant to public policy. The reconciliation of truth and politics is to be found only among the technocrats. Only those with technical expertise are in a position to make informed judgments about what is in the best interest of the whole, and this class of political scientists must advise those in political power, or exercise that power directly. The inchoate community of citizens simply cannot form a coherent, scientifically rigorous, public, and self-reflective community of inquiry. Truth and the "democratic" public may be reconciled only among elites.

Given that, truth is attainable only among the elite, and it is by virtue of this truth (and the public good that results from possessing it) that they have political authority. These elites have the task of using publicly held stereotypes or symbols to direct the masses to desire policies rooted in the truth. Experts manufacture agreement from the diverse and conflicting images of the world found in the popular mind. As for the masses, they can function at best as a plebiscite recalling one set of political elites found to be unsatisfactory and replacing them with another. Their ability to confirm or deny the truth of public policy is crude and indirect, not subtle or participatory. Hence, it is difficult to call this a democracy in any robust sense. However, given the fact that the public is unable to articulate itself and to know the truth, it is better that social scientists and their kind direct the masses than leave them to economic elites pursuing private advantage to

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the detriment of the whole. Lippmann's technocracy may not be democratic in procedure, but it does pursue the good of the *demos*.

Dewey replied to Lippmann's *The Phantom Public* and *Public Opinion* by writing *The Public and Its Problems*. We need not discuss the details, but the central argument was that Lippmann is correct in his critique of contemporary democratic practice, but incorrect in the conclusions he draws. Dewey wholeheartedly agreed that the American public then (as now) was distracted, ignorant, and more interested in trivia than the problems affecting the public at large. However, he deeply disagreed with Lippmann's conclusions that the public was inherently incapable of either articulating its will or proposing and testing policies designed to resolve public problems and that the public would be better served by handing political authority over to the technocratic elite.

First, Dewey argued, the inability of the masses to articulate themselves into publics was a matter of contingent conditions, not of human nature. Lippmann's critique, Dewey charged, was not of democracy as such, but of the present simulacrum governed by commercial interests. The problem of forming a Public aware of its needs and capable of organizing itself to address them was a contingent one of communication. As means of communication improve, the public is better able to understand the extended consequences of action and become aware of their common needs. For example, insofar as we are able to see the phenomenon of climate change on a global scale, we are better able to see it as a common concern and something in need of common action. Dewey denied that we are condemned to pseudo-environments comprised of symbols manipulated by political elites or newsmen like Lippmann. Admittedly, Dewey's own attempt to establish a newspaper dedicated to the sharing of unbiased data of public import—Thought News—was an unmitigated failure. Nevertheless, the task is to develop superior means by which the public could articulate itself as something like a scientific community. He had not given up hope that such means were possible.

Dewey distinguished between raw and effective intelligence. Citizens may lack the raw, inborn intelligence required for omnicompetent citizenship. However, to use his example, the present-day shade-tree mechanic has nothing of Isaac Newton's raw intelligence, yet he has practical knowledge of automobiles that far outstrips Newton's. The mechanic's culture embodies vast technical knowledge, providing the average person with an effective intelligence wrought by communication. "A more intelligent state of social affairs, one more informed by knowledge, more directed by intelligence, would not improve original endowments one whit, but it would raise the level upon which the intelligence of all operates." Intelligence is a social product and, given different social conditions, different levels of effective intelligence will result. Dewey argued, and one could easily argue today, that we are in dire need of improved social intelligence. Among the conditions for such improvement are the cultivation of the methods of inquiry and publicity of information. Dewey identified barriers to inquiry and publicity in 1927 that

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are familiar today: *de jure* intellectual freedom lacking *de facto* institutional support, superficiality and sensationalism, advertising, propaganda, nationalism, the sanctity of custom, academic specialization, and, perhaps fundamentally, the application of the results of scientific intelligence to human affairs from outside, but without making human affairs themselves more intelligent.²⁷

For Lippmann, the failure of democracy was a matter of philosophical anthropology, of human nature and its epistemological limits. For Dewey, it was a matter for critical social theory, of institutions and their ability to cultivate communication and inquiry. Whether it is possible to overcome the seemingly inborn limits of human cognition by means of communication and inquiry has not been truly tested, as such a test would require first instituting the conditions of inquiry that are so far sorely lacking. Which side is correct can be determined only experimentally and only after good inquiry has become customary. "Until secrecy, bias, misrepresentation, and propaganda as well as sheer ignorance are replaced by inquiry and publicity, we have no way of telling how apt for judgment of social policies the existing intelligence of the masses may be."28 Dewey then argued the counterfactual that were inquiry to become a matter of public life, then public intelligence would certainly rise and the resolution of public problems would be more likely. However, the safer point is simply that the experiment has not yet been conducted and, therefore, the results cannot be known. In an experiment, one varies the independent variable to see the consequence for the dependent one. In this case, the level of institutionalized inquiry and communication must be varied to see the result for public intelligence. Lippmann had not taken that step. Ironically, his defense of the scientific elite depended on bad scientific method.

Second, and more damning, the elitist-epistemic argument fails on its own terms. Dewey denied that handing over political authority to well-formed communities of elite inquirers would succeed in attaining truth for two reasons. One, when elites are sequestered from the general public, they have a tendency, often unwitting, to take their own concerns as those of the public. Insofar as the narrow, scientific community of inquiry does not share in the larger public and inchoate one, it loses the ability to articulate public problems. Two, though the scientific method includes procedures to root out unreflective groupthink, communities of experts are still vulnerable to it. Elite communities of inquiry require the feedback that only the wider public can provide to know if their policies are working. To use Dewey's metaphor, the public may not know how to fashion a shoe, but they know when it pinches. A community of elites cut off from the broader public therefore faces difficulties both identifying problems and measuring the success of their proposed solutions, two critical elements of scientific experimentation.

James Bohman extends Dewey's pragmatist argument that the scientific community, if it is to have knowledge, must include and deliberate with non-elites.²⁹ The tests to be conducted in the regulation and improvement of public life are

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so wide in scope, and the methods to be used so open to dispute, that a narrow community of inquirers is unable to perform them. Given the limitations of what is possible within the model of elite control, democracy is better understood as a process of cooperative inquiry. The relation between scientific expertise and political decision making "is mediated by the larger public who tests both values and ends in light of available techniques and also techniques and strategies in light of shared interests, norms, and values," which, in turn, "requires extensive and reciprocal communication between experts and the wider public." Absent popular, democratic engagement in public policy, specifically regarding judgments of the credibility of experts and the terms of negotiation between experts and non-experts, we may not assert that the conclusions of the community of expert inquirers are the truth.³¹

Technocratic or epistocratic governance therefore offends not only our democratic intuition that all deserve some share in governance, but also the truth intuition. Recall that within the pragmatist model of inquiry, a community of inquiry that excludes potential sources of hypotheses and experimental feedback weakens its claim to truth. The community of inquiry must be maximally inclusive. Experts who cut themselves off from public input (or non-expert experimentation) undercut their status as truth-holders and thereby their own claim to political authority. Admittedly, some do have expertise in good inquiry, and should be prima facie trusted, but their inquiries must be open to revision in light of non-experts' experience. If political authority rests on epistemic superiority, and epistemic superiority relies on democratic participation, then the epistocrat loses authority over the public as they distance themselves from it.³²

In sum, the tension is not between popular consent and truth as the basis of democratic authority, but between publics that are relatively distracted, ideological, and blind, and those that are not. Dewey understood the fundamental task to be that of transforming our presently muddled citizenry into a democratic community of inquiry. This cannot be done by investing experts with political power and isolating them from the broader public, but only by instituting the methods of scientific inquiry more broadly.

4. RECONCILING TRUTH AND CONSENT IN PRACTICE

With that in mind, let us return to the original question. That question is whether citizens have an obligation to acknowledge the authority of laws like those denying the truth of climate change. The provisional answer has been to turn the abstract issue of the conceptual relation between truth and popular consent into a practical one of integrating expert and lay communities. Pragmatist political theory is then committed less to resolving the question of determining the abstract conditions of legitimacy than in making present political practice approximate an ideal inquiry—and therefore reach more legitimate outcomes. The unification of

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_s n public policy and truth functions as a regulative ideal in political practice rather than a problem for political philosophers.

Let us then turn to some consequences of the pragmatist model. First, this analysis accords with our intuition that there is something fundamentally absurd in trying to legislate with disregard for scientific fact, as in the case of the Montana state legislature. Truthful laws must be the outcome of an ideal community of inquiry, not the fiat of a political body or the inarticulate intuition of how the sun feels on one's face. If anything, the politicization of science is an attempt to shut down inquiry in the interest of tenacity, ideology, or self-interest. Second, if the public is to become a more ideal community of inquiry, then elite communities must be brought into contact with the general public and public discussion must be given scientific-democratic structure. For example, scientific inquiry must be protected from political interference, but, at the same time, scientifically grounded public policy must be subject to peer-review boards. There should also be public distribution of proposed regulations and public forums for objection and discussion.

There have been many experiments in democratic deliberation between experts and non-experts relevant to the climate debate. James Bohman, in the account summarized above, describes the way in which AIDS treatment was improved by drawing on the expertise of patients. And patient participation was not simply informative, but challenged epistemic norms and the expert model of how knowledge is produced.³³ Further experiments in deliberative governance have been tried in public land use in western Colorado; health and education policy in São Paolo, Brazil; and waterfront urban design in Philadelphia.³⁴ On the international level, Robert Goodin and Steven Ratner have proposed Global Citizens' Juries as an attempt to introduce a deliberative, democratic element to the determination of *jus cogens*, the "higher" moral law that limits the exercise of states.³⁵

Specifically, there have been fledgling attempts to develop wider democratic deliberation on climate change. On the small scale, deliberative polling on climate policy and the university was conducted at Carnegie Mellon University in 2008 and 2009. Deliberative polls are a well-known attempt by James Fishkin of Stanford University's Center for Deliberative Democracy to overcome the inherent informational and reflective weakness of the standard poll by providing background information, time to respectfully discuss the topic with other participants, and opportunities to question experts in the relevant field.³⁶ These polls resulted in higher levels of concern regarding the issue and calls for Carnegie Mellon to adopt energy-efficient policies, develop curricula, and support environmental research. On a larger scale, World Wide Views on Global Warming, a citizens' deliberation group based in Denmark, gathered four thousand people from thirty-eight countries in 2009 for a deliberative poll on the concurrent UN climate policy meeting in Copenhagen. The result was nine policy recommendations to reduce emissions and strengthen international cooperation.³⁷ Similarly, Europolis's "Deliberative Polity-Making Project" was a successful deliberative poll on immigration, the European Union, and climate change.³⁸

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Of course, deliberative polling is not the same as robust citizen participation on environmental policy decision making, but it is a step toward that goal. The development of a culture of public inquiry—meaning both the cultivation of good inquiry among the public and the incorporation of publicity into expert communities of inquiry—is an enormous task, and it would be prudent to acknowledge certain practical and epistemic limits. First, it is very unlikely that any community of inquiry will come to universal agreement on what is true, especially in the value-thick area of politics. Some positions are falsifiable, but most debates are within the realm of the not-yet-determined-but-not-clearly-false. However, experimental inquiry is more likely to achieve consensus than other methods. In practice, the hope is not so much to attain popular consent to the one True policy, but to exclude those policies that are clearly rooted in falsehoods. Even if rigorous inquiry cannot state the Truth, it may establish falsity as a boundary condition for political authority. This more moderate aim still achieves the outcome of delegitimizing laws denying climate change.

It is also very unlikely that the public will ever become an ideal community of inquiry, or closely approximate the scientific community of experts. There is truth to Lippmann's claims that the public does not have the direct knowledge of the world, technical background, or simple time to be omnicompetent in all matters of public policy. That said, Dewey never claimed that they could. Rather, he argued that they could function as more than a mere plebiscite by providing information, proposing hypotheses, and generating feedback. Citizens may also question what constitutes expertise and can keep watch over unjustified exclusions from the process of inquiry. As argued above, non-experts can serve a valuable function, even if they are not within the scientific community of inquiry proper.

Third, climate experts must resist the belief that scientific expertise is sufficient for the best policy outcomes. Reiner Grundmann and Nico Stehr have detailed the complex relationships between knowledge and policy in the climate debate. They emphasize that the "linear-rational" model, which holds that "if science produces true and valid knowledge, this can be used in the political process, where it produces the 'right' political decisions and effectively resolves politically motivated debates." In analyzing the tumultuous climate debate and its contrast with the successful reduction of ozone-destroying chlorofluorocarbons, they expose the need for scientific advocacy while also criticizing the Intergovernmental Panel on Climate Change's institutional biases and highlighting the many difficulties of changing public opinion and of resolving environmental problems through political means.⁴⁰

Lastly, as frequently occurs in discussions of democracy, problems are multiplied on the international level. Environmental concerns like climate change do not stop at the water's edge. In Dewey's account, communities of inquiry articulate themselves out of those who are aware that they share a common concern. If there are to be experimentally warranted policies to address climate change, they must be the result of an international community of inquiry. However, even

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those inquirers backed by international political organizations presently lack the resources to test hypotheses or to sanction those who would not recognize their political authority. Possession of truth alone does not result in political power. National interest holds sway. International objectors at the United States' unwillingness to sign the Kyoto Protocol charge that we seek to limit economic development in other nations while saddling them with the environmental consequences of our economic success. China also claims that despite its enormous economic growth and even greater greenhouse gas emissions, it is not obliged to abide by the Kyoto Protocol. There is no real incentive for the people of one nation to fear the effects of their policies on other peoples or on future generations.

To conclude, though the pragmatist model of truth and inquiry may point a way to resolving the abstract, theoretical issue of reconciling the divided roots of democratic authority in both truth and the consent of the governed, this is only a beginning. There is the task of institutionalizing these insights on the domestic and international political levels, which is much more daunting. The abstract problem of harmonizing two competing grounds of democratic legitimacy is not complete until it has been made effective in remade habits, customs, and institutions. Given the practical and epistemic limits of that task, there will inevitably be an element of the tragic. Political decisions will be made and debates like those over climate change will continue in the course of approaching an ideal democratic and experimental community.

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NOTES

This article originated as a paper at the Workshop on Pragmatism, Realism, Ethics, and Science at the McGill Centre for International Peace and Security in 2011. A version was presented at the 2011 New England Political Science Association annual meeting. I thank the participants, particularly Michael Morrell, for their helpful questions, criticisms, and comments. I would also thank the participants of the University of Copenhagen's 2013 "Workshop on Factual Disagreement and Political Legitimacy." Lastly, I thank Helena de Bres and Catherine Wearing of Wellesley College for their early comments.

- 1. Johnson, "Wonk Room Interviews Montana Legislator."
- 2. Henderson, "Coastal N.C. Counties"; Jarvis, "GOP Is Poised to Restructure Coastal Oversight."
- 3. House Resolution 910 (112th Congress), "Energy Tax Prevention Act of 2011," March 3, 2011.
 - 4. Broder, "House Votes."
- 5. Of course, one may accept the fact of anthropogenic climate change and still believe that policies to address it should not be adopted because, for example, they are too

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costly. The public or their representatives may accept the facts but make different value judgments. However, these examples show that it is not only a matter of value disagreement; policy choices may also separately disregard empirical fact, which is the focus of this article.

- 6. Note: This problem of the relation between truth, popular consent and democratic authority is not exclusive to the climate debate. It is present in the debate over evolutionary theory in public school biology curricula, to choose one example among many others.
 - 7. For a recent anthology on the topic, see Elkins and Norris, *Truth and Democracy*.
- 8. American Association for the Advancement of Science, "Statement on Climate Change."
- 9. National Research Council, *America's Climate Choices*; Intergovernmental Panel on Climate Change, "Climate Change 2013."
- 10. Oreskes, "Beyond the Ivory Tower." Oreskes's survey has come under criticism that it reflects bandwagoning in the scientific community; see Grundmann and Stehr, *Power of Scientific Knowledge*, 167–73.
 - 11. Newport, "American's Global Warming Concerns."
 - 12. Hamilton, "Climate Change."
 - 13. Quoted in Lee, "GOP Changes Environmental Message."
- 14. Huertas and Adler, "Is News Corp. Failing Science?"; Goldenberg, "Secret Funding Helped Build Vast Network"; see also Oreskes and Conway, *Merchants of Doubt*, chap. 6.
- 15. Other potential sources of democratic legitimacy, such as social stability or protection of individual rights, are not treated here. I do not claim that the two sources of democratic legitimacy discussed in this article are the sole sources of legitimacy, but I only focus on the tension between two particular sources.
- 16. See Cohen, "Epistemic Conception of Democracy"; Estlund, *Democratic Authority*; Gaus, *Justificatory Liberalism*. It should be noted that the epistemic justification of democracy does not hold that particular democratic outcomes are inevitably true, only that it is generally more truth-apt than other procedures. However, in this argument, I am concerned with the question of the normative authority of particular outcomes, not of democracy as such.
- 17. Anderson, "Epistemology of Democracy"; Putnam, *Renewing Philosophy*; Westbrook, *Democratic Hope*.
 - 18. Misak, Truth, Politics, Morality; Talisse, Pragmatist Philosophy of Democracy.
 - 19. Martí, "Epistemic Conception of Deliberative Democracy."
- 20. I do not claim that American philosophical pragmatism is the only theory that would be able to bridge the gap. Arguably, any theory that understood truth within the context of inquiry or ideal public justification could do.
- 21. Two provisos: First, pragmatism has been enlisted by Bryan Norton, Andrew Weston, and Andrew Light (among others) in an attempt to rescue environmental philosophy from irrelevance to the broader environmental movement. For Light in particular, environmental philosophy must be oriented ultimately toward preservation of the environment. Therefore, it must help form consensus on environmental issues, both within

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__s __n the community of environmental experts and between experts and the broader public, and provide politically effective justifications of desirable public policies. I share both the concern for practical relevance and a hope to overcome the distance between experts and the general public, but it is not my intention to measure the virtues and vices of this pragmatist approach to environmental philosophy generally. Second, I do not attempt to elaborate or defend a general theory of truth, pragmatist or otherwise. The aim is to address a problem within political theory, not to argue for or against "environmental pragmatism" or the pragmatist theory of truth.

- 22. Peirce, "How to Make Our Ideas Clear," CP 5:407; I have cited his *Collected Papers*, noting volume, then paragraph number.
 - 23. James, Pragmatism, 106.
- 24. Dewey, *Collected Works*, LW 12:343n; following standard practice, I have cited Dewey's work by volume and page number of the collected works; "LW 12," for example, denotes Vol. 12 of the *Later Works*.
 - 25. Lippmann, Phantom Public; Lippmann, Public Opinion.
 - 26. Dewey, LW 2:366.
 - 27. Dewey, LW 2:339-44.
 - 28. Dewey, LW 2:366.
- 29. More accurately, Bohman's explicit argument is that epistemic improvements among elites have damaging effects for democracy, not truth, and we are therefore obliged to institute non-elite participation if we value democracy. However, his argument shows that not only is democracy threatened, but so is truth.
 - 30. Bohman, "Democracy as Inquiry," 597, 599.
- 31. David Estlund makes a similar point in criticism of epistocratic government. Rooting legitimacy in truth or knowledge held by a class of experts alone fails because we would be unable to secure public agreement on who constituted the experts. Insofar as it violates our basic democratic belief that all citizens are free, equal, and deserving of respect, it violates the requirement that law be in principle justifiable to the people. See Estlund, *Democratic Authority*, 35–36.
- 32. For a compelling contemporary version of this argument, see Landemore, *Democratic Reason*.
 - 33. Bohman, "Democracy as Inquiry," 599-601.
- 34. Each is discussed in Gastil and Levine, *Deliberative Democracy Handbook*, 164–96.
 - 35. Goodin and Ratner, "Democratizing International Law."
 - 36. Fishkin, Voice of the People.
 - 37. World Wide Views on Global Warming, "From the World's Citizens."
 - 38. Europolis, "Deliberative Polity-Making Project."
 - 39. Grundmann and Stehr, Power of Scientific Knowledge, chap. 6.
 - 40. Ibid., chaps. 4-5.

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