

Of Democracy, Science and Elephants

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Our field was founded on a special relationship between science and democracy. To me, it's a noble vision but it was problematic from the beginning, and now it's in serious trouble.

Let me explain this by telling you a bit about my academic coming-of-age that isn't on my resume. I emerged from graduate school with a PhD in Political Science never having had a single course in public policy, yet suddenly I found myself birthed into this new field.

I had done my dissertation on the German national health insurance system. I chose the topic because I wanted to help create universal health insurance in the U.S. and I thought Germany's model was the most politically feasible one. I don't remember whether I even used the word "policy" in my dissertation. All I know is that I tried to make it as "political science-y" as possible. I made sure to put the word "power" in the title.¹

Four universities invited me for job interviews, three of them in political science departments. After my job talk at each of those three, I was asked "What's political about health care?" or "Why would a political scientist study medicine?" Needless to say, I didn't get an offer from any of them.

The fourth place I interviewed, Duke University, had just received foundation funding to create a public policy program. Since one of the three policy areas the program was going to cover was health policy, they thought I'd fit. Besides, I was a woman. It was 1974, feminism was in full flower, and the new policy program needed one of us for show.

I wasn't sure what this new field of Public Policy *was* exactly, but at least it had a name for what I cared about as a political scientist. Not wars, election campaigns, secret deals in smoke-filled rooms, nor any of the other ways people *get* power. I care about what elected leaders and public officials *do* with their power once they have it.

Once I learned the mission of this new field, I was all in. The mission, simply stated, was to put science in the service of government. As I saw it, the notion of democracy was baked into the field's DNA. Specialized policy analysts would advise governments on the best way solve whatever problems the voters had elected them to solve. What could be more inspiring than a field dedicated to fulfilling the promise of Democracy?

1 — Stone, D. (1980). *The Limits of Professional Power: National Health Care in the Federal Republic of Germany*. University of Chicago Press.

But I had a lot to learn about my idealism. In a nutshell, democracy isn't democracy, science isn't science, and—shhhhh money is the elephant in the room.

The founders of the Duke program self-consciously named it “The Institute of Policy *Sciences*,” rather than “Public Policy,” like most of the other programs created at the time. They leaned so hard on the word “science” and even made it plural, because the traditional disciplinary departments considered policy “soft.” Some said the new Institute faculty would be “the policy-wolity crowd.” Using the word science in the title was a way of appropriating its symbolism and cultural authority to legitimate the new program.

The program director hired a dozen newly-minted PhDs and tasked us with inventing courses to teach students how to bring science to government. We had the kind of missionary zeal found in all social movements, and indeed, the field of public policy really *was* a social movement. We saw ourselves as societal healers.

The faculty included mostly quantitative types, especially economists and decision-theorists. They taught students how to strip an issue of its social context, reduce it to a set of binary decisions, and find the one best policy option to achieve a goal.

I was assigned to teach a core, required course whose title I was given: “The Politics of the Policymaking Process.” It seemed doable, until I realized I was supposed to teach the students how to get their ideal policy solutions through the political maze and implemented. In other words, I had to reconcile democracy and science.

I was in trouble. I knew government didn't operate with anything like that kind of neat political machinery. I couldn't tell students to pull this lever and turn that dial and out would come their well-analyzed policy solution. I wormed my way out of the dilemma by creating the materials that became my textbook, *Policy Paradox*.²

It's not a how-to manual like the Duke faculty hoped for. It's more like a field guide to how real people manipulate ideas and frame issues to fight about the goals of government, and to build support for their favored policies.

Flash forward to 2017, almost 35 years after the first edition. I was expecting to revise the book again and had been savoring the revision as a journey of intellectual discovery, like every other revision. I even had a drawer full of articles and news clippings in folders labeled for each chapter. Then Donald Trump was elected President of the United States. He appointed Cabinet members who openly aimed to destroy the departments they were meant to head. I thought, and still think, Trump's election was a *coup d'état* by non-military means.

The more I thought about how to revise *Policy Paradox*, the more I realized how much I had always taken for granted: for example, that public officials are basically public spirited, even as they pursue narrower group interests; that public officials *want* government to work; and that with rare exceptions, they respect the law. How could I simply re-write the same book when none of these things was true?

In hindsight, not only my book but the entire public policy field was predicated on a stable system of democracy. Democracy wasn't perfect, by any means, and social scientists were hard

2 — The first edition came out in 1988, called *Policy Paradox and Political Reason* published by Harper Collins. There have been three more editions, substantially revised and updated, all called *Policy Paradox: The Art of Political Decision Making*, published by W.W. Norton in 1997, 2002 and 2012.

at work detailing its deficiencies. But still, I think I and others like John Kingdon, Helen Ingram, Frank Baumgartner, Paul Pierson and Jacob Hacker all believed we were revealing monkey wrenches in essentially democratic machinery. We aimed to show people how to maneuver within those ridiculously complicated contraptions.

In the last few years, I've come to believe that the essential idea of democracy is paradoxical and could never have worked the way it was supposed to. The mystery is how it has held together for so long in so many places.

Democracy's essence is popular sovereignty. "Government *of* the people, *by* the people and *for* the people," in Abraham Lincoln's famous slogan. The very notion of popular sovereignty assumes there is such a beast as "popular will" and that it's possible to determine what it is.

Nobody has ever really resolved those questions, but everyone seems to agree that elections can force popular will out into the open, like a magician can pull a rabbit from a hat. Election campaigns are supposed to let citizens tell candidates what their problems are and what solutions they want. Through a system of voting, "the people" choose leaders and give them a mandate. Then their leaders implement solutions to their problems. I'm oversimplifying, but you get the gist.

Elections are also the mechanism for conferring legitimacy on public officials. In theory, participating in elections convinces citizens that their leaders are responsive to their wishes. But there's a wide gulf between what candidates promise in their campaigns and what they do once they take office. The ritual of elections closes that gap. Lining up, marking ballots, depositing ballots in a box, and counting ballots—all these very physical and visible bodily motions do the psychological work of making people feel they've had a say. These periodic rituals dramatize the idea of popular sovereignty and make it believable.

Elections are really staged dramas that enable the so-called "willing suspension of disbelief." That's the process of self-delusion by which theater-goers pretend that what's happening on stage is real. You go to the polls, you cast your ballot, you watch the returns on TV, and Poof! You feel yourself becoming part of the popular will . . . unless your candidate loses. Then the magic breaks down. Political scientists call this "the loser effect." Voters who supported losing candidates trust elections less than those who feel they've won. Compared to voters whose preferred candidates won an election, voters whose candidates lost are less convinced that government responds to their needs, and they're less satisfied with democracy overall.

"The loser effect" came to life for me when I read Barbara Kingsolver's novel *The Poisonwood Bible*. The book is historical fiction about the Belgian Congo's transition to independence in 1960. A young Congolese man who's supposed to help run his village's first election expresses his doubts to one of the American missionaries:

It seems odd that if one man gets fifty votes and the other gets forty-nine, the first one wins altogether and the second one plumb loses. That means almost half the people will be unhappy [...] and in a village that's left halfway unhappy, you haven't heard the end of it. There is sure to be trouble somewhere down the line.³

Leave it to a fiction writer to make us understand how *strange* democracy feels to people who haven't grown up with it. To quote Kingsolver, democracy is bound to lead to trouble, and we haven't heard the end of it.

3 — Kingsolver, B. (1998). *The Poisonwood Bible*. Harper Perennial. pp. 265-266.

We haven't heard the end of it because there are yet more contradictions lurking in the heart of democracy. For all the theater of elections, for all the stage sets we call "polling stations," for all the people acting the part of honest clerks and monitors, and for all the citizens filing across the stage one by one to cast their ballots—behind all that drama, *government officials choose their voters*, not the other way around.

Officials already in power choose their voters first and foremost by defining the rules of suffrage—who is eligible to vote. Short of making people ineligible to vote, officials can make it hard for them to vote. They can limit the number of polling stations and voting hours. They can restrict absentee voting. They can run out of empty ballots and "lose" completed ballots. And in the United States and a few other systems, they can draw electoral maps to ensure that their own party has a majority of supporters in almost every district, a tactic called Gerrymandering.

United States politicians probably exploit Gerrymandering more than those in any other government that passes the smell test for democracy. In large part, this is because the U.S. has a winner-take-all, two-party system; and in many states, incumbents have legal authority to re-draw the boundaries of voting districts. Even if no other democracy is quite so riddled with these problems as the United States, though, I find the U.S. situation particularly troubling. Historically, the U.S. has had a reputation as a strong democracy and has been a model for other nations. The intensity of democratic corrosion in the U.S. shines neon spotlights on the Democracy Paradox: *Leaders in power control the process by which the people choose their future leaders*. No wonder that even the most robust democracies can easily slip across the border into autocracy.

Public officials are ordinary mortals. They're endowed with a full set of human flaws—greed, envy, bias, and selfishness, to name a few. So what ensures that they will make policies to solve the people's problems rather than become autocrats?

Enter the idea of Rule of Law. It promises that even though Rulers are ordinary mortals, once they take office, they will be beholden to higher principles and to serving the common good. They always put the law above themselves.

At least, that's the theory. The Rule of Law that is supposed to rescue Democracy from its paradox is mired in its own paradox. On the one hand, laws are supposed to ensure that officials serve the people. On the other hand, officials make the laws. Those with power to write the laws can design them to their own advantage. As we've seen, they can craft laws that increase their strength in future elections. They can also craft laws that permit them to do whatever they want—say, pollute water and air, or replace residential neighborhoods with lucrative business parks. Once public officials have passed laws to serve their own purposes, they can merrily pursue their self-interest against the broader public interest, all while staying technically within the law.

Then there's the problem of ambiguity. Laws aren't made of barbed-wire and cement. They're made of words. Ambiguous words. Plato wrote that for laws to work perfectly, "Everyman" would need "a legislator to sit at his side all through his life, prescribing for him the exact particulars of his duty".⁴ Obviously, we don't each have our personal legislator telling us at every moment how to comply with the law. So how do we make the Rule of Law *real*?

4 — I got this quotation third-hand, so I can't vouch for it, but even if Plato never wrote it, it's a great idea. My version is from Leif Carter, *Reason in Law*, 2nd rev. ed. (Boston: Little Brown, 1984, p. 310. Carter got it from Robert Coover, *New York Times Book Review*, January 14, 1978, p. 27.

Norms, or informal rules, are the second line of defense. Norms are unwritten codes of conduct that are common knowledge within a community. For the most part, they're widely accepted and obeyed. When someone steps out of line, others enforce the norm with punishment ranging from shaming to ostracizing. Norms are invisible, impossible to see or to document. Yet, they're by far the strongest form of authority that holds a society together, stronger than laws. This is where the anthropologists and interpretive social scientists among us come in. You make the invisible knowable. You reveal the rules-of-thumb and the things people take for granted about how to behave and what's wrong and what's right.

According to the authors of *How Democracies Die*, all successful democracies rely on norms even more than laws. Perhaps the most important norm is "mutual toleration" or a shared belief that political opposition is legitimate. Opponents have a right to fight for their goals, so long as the goal isn't to permanently destroy the other side. Norms are the "guardrails" that prevent democracies from falling into civil war or dictatorship. Unfortunately, we usually don't notice how weak they've become until it's too late.⁵

Can science come to the rescue? The founding mission of our field is to bring scientific knowledge to policymakers and persuade them to use it. How do we, as social scientists, fit into the democracy conundrum?

In democratic theory, the Will of the People is the sole source of legitimate authority for government. "Popular sovereignty" is almost a synonym for democracy. But science is altogether a different source of authority. It doesn't come from "the people." It comes from a select few experts who have, or claim to have, superior knowledge about how to solve the people's problems. Insofar as we in our field do policy analysis, we claim this kind of non-democratic authority.

Policy experts began trying to insert themselves into policymaking long before the nineteen-sixties and seventies, when our field took on its academic identity. From Plato's Philosopher Kings to today's policy analysts, experts have been claiming greater authority than "the common people" pretty much from the get-go of political theory. Within this great span of history, I want to touch down in England in the year 1774. The election for representatives to Parliament has just concluded. Edmund Burke, one of the winners from the town of Bristol, gives a most unusual victory speech to his constituents.⁶ Instead of mouthing the usual "thankyous" and promising to fulfill their wishes, here is what he said, sentence by sentence:

[It is a representative's duty to his constituents] to sacrifice his repose, his pleasures, his satisfactions to theirs, and above all, . . . to prefer their interest to his own.

This first statement is the version of democracy we all learned in high school civics and the one I began this talk with. Elected officials must not act to satisfy their own desires. Instead, they must carry out the will of the people.

But his *unbiased* opinion, his *mature* judgment, his *enlightened* conscience, he ought not to sacrifice to you, to any man, or to any set of men living.

This second statement is where it gets interesting. Burke says he doesn't take his orders from the people who just elected him. He will follow instead his "*unbiased* opinion," "*mature* judgment" and "*enlightened* conscience". These words I've highlighted are words of praise, congratulatory testimonials to a person of high character. With these words, Burke puts himself *above*

5 — Levitsky S., & Ziblatt D. (2018). *How Democracies Die*. Crown.

6 — Burke, E. (Nov. 3, 1774). Speech to the Electors at Bristol at the Conclusion of the Poll. Emphases added. <https://press-pubs.uchicago.edu/founders/documents/v1ch13s7.html>

the people he represents and serves. In a way, it's a back-handed insult. "I've got something you don't."

Let me clarify that Burke isn't talking about himself here, but rather, about his concept of a representative's role in general. He wrote this speech as a rejoinder to another fellow who'd also been elected as a representative to Parliament. The other fellow said that a representative's *own will* should always be subservient to his constituents' instructions. But clearly, Burke is talking about himself here and how he intends to carry out his job. This speech became one of the great statements about what representative democracy should mean.

Going back to Burke now, from where does an elected representative like Burke get his "*unbiased* opinion," his "*mature judgment*" and his "*enlightened conscience*"?

These he does not derive from your pleasure; no, nor from the Law and the Constitution.

They are a trust from Providence

Most definitely not from the voters and their wishes, which Burke derides as "your pleasure." Nor from "the Law or the Constitution." His unbiased, mature and enlightened thoughts are "a trust from Providence." I don't know what Burke meant by Providence. He didn't say "God" or "the Divine." But he clearly meant that public officials should take their direction from some higher source than human beings. Perhaps Burke's "Providence" is what we today would call Truth.

Edmund Burke's debate with his colleague is the same debate we know today as the wisdom-of-the-crowd versus expertise. Lest you have any doubt which side he's on, hear this:

If Government were a matter of Will upon any side, yours [the electors'], without question, ought to be superior. But *Government and Legislation are matters of reason and judgement*, and not of inclination.⁷

So much for popular will as the basis of democracy.

Burke is generally considered a father of conservatism, but I'm more interested in him because he makes a compelling case for why expertise should override popular will. In Burke, we find legitimation for our field, that is, for those who see themselves at least partly as scientific policy analysts. Ironically, perhaps we can also find in Burke seeds of the popular revolt against scientific expertise that exploded during the Covid pandemic. Because, when Burke tells voters he hears Providence whispering objectivity, maturity and enlightenment into his ears, the voters might well ask, "Where do *you* get off? Why should we believe you have a pipeline to Providence?"

"Science is but an image of the truth" attributed to Francis Bacon⁸

Let's return to the present moment now and ask, "How does modern science get its claim to legitimate authority within a democratic system of government? Where do scientists get off claiming they have a pipeline to Truth? I would argue that in modern times, the claim is based on two things: numbers and the scientific method, or what I'd rather call the *scientific mindset*. It may surprise you that I put numbers first. That's because I'm frankly obsessed by them and

⁷ — *ibid.*

⁸ — Wood, J. (1893). *Dictionary of Quotations from Ancient and Modern, English and Foreign Sources*. 383:3.

their undeserved cultural authority, and because they're intricately connected with democracy and science.

Democracy's connection to numbers is obvious: in democracies, we choose both governments and polices by counting votes. The connection between science and numbers is a little less obvious. The scientific mindset, boiled down to its essence, rests on testing beliefs against empirical evidence. Scientists construct situations to test their theories and observe the results of their tests. But they don't merely look or watch, as the word observe suggests. More often than not, they *count* how many times the results go one way and how many times results go another way. They rely on numbers to tell them what their tests show. Scientific truth has become increasingly quantitative, so let's do some numbers before we return to the scientific mindset.

Numbers have an aura of extreme precision that makes them seem like bearers of Truth. In the policy world, when government and funders demand "hard evidence," they mean "Show me the numbers." When people claim their policy proposals are "evidence-based," they mean they have numbers to back them up. Numbers have become synonymous with "hard data," "evidence" and "facts." Numbers are considered more objective than words. They don't lie, despite what we've all heard about "lies, damned lies and statistics."

But do numbers tell the truth? Do they "speak for themselves," as the saying goes?

A cartoon by Edward Koren shows figures seated on a stage. Each figure's body is in the shape of a numeral; each has some kind of eyes, nose and mouth; and each has two tiny legs dangling off its chair. A human figure standing at the podium says, "Tonight we're going to let the statistics speak for themselves".⁹ Koren uses a standard cartoonist trick here. He starts with a saying people use without thinking. "The statistics speak for themselves." Then he draws a literal representation that reveals how absurd the saying is. Numbers can't walk up to the podium, much less speak, because they're creations of human imagination, just as surely as the numbers on stage in the cartoon were drawn by a human artist.

When we count, we have to make judgments about what counts as the thing we want to count. I can best explain this idea with a children's counting lesson from the Sesame Street book *1,2,3 Count with Elmo*.¹⁰ In the illustration for the number six, Cookie Monster has six glasses of milk that are exactly the same—same size, shape, and color. Cookie Monster's six cookies, though, are not exactly the same. They are the same size and shape but they each have a different kind of frosting. Yet both sets of objects are counted as containing six items.

In case you're thinking "Aren't you being ridiculously picky? What's the problem?", let's do a thought experiment. Imagine I've just baked these cookies and I invite six children to choose their favorite one and eat it. The first kid chooses the one with chocolate dots. The second kid chooses the one with the vanilla frosting or the one with pink squiggles. And so on, until the sixth child gets whichever one is left, maybe that one on the lower right with a big blob of red stuff. He cries because he wanted one of the others. Does he think my cookie offer was fair? No way. He might argue with me: "You said there were six cookies, but there weren't. There were two yummy things; three boring things, and one disgusting yucky thing. You shouldn't count them all the same because they're not."

9 — Koren, E. (Dec. 9, 1974). Tonight we're going to let the statistics speak for themselves. *The New Yorker*. Accessible here: <https://www.cartoonstock.com/search-s1?type=images&cartoonist=edwardkoren,Edward+Koren&page=1&caption=statistics&expanded=CC38725>.

10 — Sesame Workshop (2013). *1 2 3 Count with Elmo*. White Plains, Reader's Digest Children's Books.

And this is why numbers aren't objective. They're filled through and through with individual judgment. These judgments have consequences. As my inner child just explained to you, this is why numbers are a matter of justice.

There are several lessons hiding deep inside this counting book—lessons that no one ever teaches children explicitly.

Lesson 1: The crucial fact about a number isn't how big or small it is. The crucial fact is *who counted?* Who classified the thing being counted? It matters whether kids or grown-ups decide what counts as a cookie.

Lesson 2: As any cookie-loving kid can tell you, *counting is a form of power.* It's the power to decide what matters.

Lesson 3: Things don't have to *be* exactly the same in order to *count* as the same. This is something we adults take for granted so we don't even teach it to kids. I made up my cookie story to imprint it in your brain.

Lesson 4: in order to be able to count, kids need to learn what things adults *believe* are the same and what things adults believe are different.



Cartoon by Charles E. Siler¹¹

I showed this cartoon to my cousin. She didn't understand. "What's the problem? Of course Obama's black," she said. "Look at him. Would you say he's white?" I had to think about that. Why didn't she think this cartoon raises any issues?

11 — Siler C. E. (February 18, 2011). We deny that race is a factor but Obama is always referred to as a black man. Image reproduced with permission from Rhonda E. Miller, rights holder of Charles E. Siler.

My cousin looks at one feature of Obama—namely, the color of his skin. From that, she sees a clear answer how to categorize his race. The cartoonist, Charles Siler, considers another feature of Obama—namely, the races of his parents. From that, Siler sees a puzzle. If race is biological, something derived from parental genes, which parent gives Obama his race? The cartoonist and I both see yet another feature that determines Obama's race. This one has nothing to do with Obama. It has to do with how *other people* perceive him and treat him.

The rules for categorizing anything are cultural. They're made up by people and enforced by people. There's nothing objective about them. For me, this cartoon is not only about race. It's also a powerful statement about counting, because all counting depends on categorizing. Before you can tally up the numbers, you have to decide what counts and what doesn't.

All the data we use to assess discrimination by race, ethnicity and other demographic categories comes from counts of population subgroups. But all the statistics on these topics are based on arbitrary cultural counting rules like the one in Chuck Siler's Obama cartoon. Until about 1960 in the U.S. and much later in South Africa, governments counted race the same way my cousin did: "Look at this person. Would you say he's black or white?" By the way, the person looking was usually a white government official.

Whether we're talking about simple material things like cookies or complex abstract things like race, counting involves a lot of cultural baggage and personal judgment. Since the scientific method depends so heavily on classifying and counting, all this ambiguity and variability poses a challenge for the scientific ideal of objectivity. Why, then, should we entrust our public policy decisions to science?

"Why should we trust science? Because it doesn't trust itself".

John Wright, La Trobe University¹²

Most contemporary philosophers of science agree that although total objectivity isn't possible, the essence of science is trying to approach it. Scientists have developed numerous ways to creep up on objectivity.

First and foremost, there's the concept of reproducibility and its cousin, reliability. Scientists test the value of other people's conclusions by replicating their work step by step, and trying to get the same results. Reliability means that when different observers look at the same research material, they agree on how to classify and count things. If they don't agree at first, the lead researcher might provide more training and group discussion to nudge team members toward consensus.

Crucially, science is a collective enterprise. Individual scientists hatch their theories and do their research, alone or in small groups. At the same time, they share their research more widely, by participating in conferences and scientific societies, gathering informal criticisms and suggestions from colleagues, and submitting their work to more formal peer review. Naomi Oreskes argues that this collective nature of science helps it progress towards more objectivity, or a more accurate pictures of how the world works.

However, if "science is fundamentally consensual," as feminist philosophers of science have argued, isn't it just a glorified form of social conformity?¹³ You probably all know Hans Chris-

12 — Wright, J. (Sept. 18, 2022). Why should we trust science? Because it doesn't trust itself. *The Conversation*. <https://theconversation.com/why-should-we-trust-science-because-it-doesnt-trust-itself-188988>.

13 — Oreskes, N. (2019). *Why Trust Science?*. Princeton University Press. p. 55. The quotation is Oreskes summary of major point of feminist philosophers of science.

tian Anderson's fable about a hyper fashion-conscious Emperor. A pair of sly thieves tricked him into believing they could make him a splendid suit of fabric so fine that it was visible only to highly intelligent people. When the Emperor paraded through the streets naked to show off his new finery, no one dared laugh or point out that he was stark naked, lest they reveal their stupidity. Everyone cheered because they were afraid to challenge power. Only a child who hadn't yet been acculturated to political norms dared speak the plain truth of what his senses told him.

The moral of the story? Just because everyone agrees on what they see, doesn't mean that what they *think they see* is the real thing. If everyone in the world agrees that Obama is black, does that make him black? All we can say with certainty is that everyone *says* they think he's black. We still don't understand what blackness is or means, sociologically, psychologically, economically or politically.

In science, perfect reliability would mean that all observers agree one hundred percent on how to classify and count what they observe. As a procedure for reaching Truth, so-called "reliability" rests on the wisdom-of-the-crowd. To be sure, in scientific research, that crowd is not a street mob. It's a highly selected group of trained researchers. Of experts. Still, the procedures for creating reliability make them vulnerable to Groupthink. The group's ways of seeing, the things it takes for granted, become the standard for objectivity. As in Han Christian Anderson's tale, it takes either a lot of courage or a lot of innocence to disagree with the group.

"In diversity there is epistemic strength". Naomi Oreskes¹⁴

Naomi Oreskes suggests how scientific communities can nurture the equivalent of innocent children. I'm using innocence here as a metaphor for two things: first, being impervious to assumptions that everyone else takes for granted; and second, trusting one's own senses and experiences over conventional wisdom. As long as scientific communities include scientists of diverse backgrounds and experiences, Oreskes says, the process of questioning each other's assumptions and interpretations will counteract the blind spots and biases of individual members.

In case bad and/or biased research slips through all the informal social mechanisms of science, Peer review serves as the tough final gatekeeper, like the star soccer goalie who prevents all but the best shots from entering the goal. For many people, it is this part of the science process that gives experts their claim to authority.

"Peer review," Oreskes says, "is what makes science science—and not just a form of *opinion*. The idea is simple: no scientific claim can be considered legitimate until it has undergone critical scrutiny by other experts".¹⁵ I highlight this characterization of science because it speaks to the dilemma that Edmund Burke posed for democratic theory. How should public officials decide policy questions? Should they follow popular will—the people's "pleasures," as Burke snarked? Or should they base their policy decisions on the unbiased opinions, mature judgments, and superior knowledge of experts and scientists, to slightly tweak Burke?

I strongly support the idea that public policy should be guided by science, as I suspect most of you do, too. It's a fundamental premise of our field. Nevertheless, I'm troubled by claims for peer review as the last bastion of tough scrutiny. There's a squishiness to peer review that belies its tough image. The peer review process starts and ends with human judgment, and it's sometimes hard to tell the difference between judgment and opinion.

14 — op. cit. p. 55.

15 — Oreskes N., & Conway E. M. (2010). *Merchants of Doubt*. Bloomsbury Press, p. 154; emphasis in original.

Most of you have had experience with peer review. You've no doubt noticed that reviewers often respond differently to the same manuscript. They're troubled by different things and suggest you eliminate or add different sections. When that happens, do you feel you've received an objective reading of your work, or that there could really be one? Speaking for myself, when my work has been accepted for publication, I don't conclude that I passed some objective test. I know that I benefited from a certain amount of luck in who the judges were. I know, because I have a pile of rejections for the same work.

Despite peer review's reputé as a tough process, it has an in-group sense about it. Researchers submit their papers and grant proposals to places they think are going to be hospitable—hospitable not only to their research topics, but to their points of view and approaches to the topic. Editors and grant-makers handpick scholars to perform peer review. They can potentially select reviewers who are likely to be favorably or unfavorably predisposed. I'm not saying peer review is always that manipulative, only that editors have a lot of room for discretion in choosing reviewers and interpreting their reviews.

Academic journals and professional societies are communities of like-minded people who, more often than not, have started a new journal or association out of frustration. Their work hasn't been taken seriously by the mainstream journals or they've branched off into areas of inquiry the existing journals don't cover. They start a new journal to make a place for themselves and for younger scholars they mentor. Their peer reviewing is going to be kinder and gentler—not necessarily less *rigorous* in terms of scientific standards, but less *rigor mortis* in terms of being alive to new topics and ways of thinking.

Here, too, I speak from personal experience. As I said, early in my career very few political scientists saw health care as something worth studying. At the annual meetings of the American Political Science Association, I found a handful of colleagues who shared my interest. We started a new journal called *Journal of Health Politics, Policy and Law*. We put ourselves on the editorial board. We reviewed each other's work and, as the numbers show, we had and still have a high acceptance rate compared to mainstream political science journals. Does this mean the scientific quality of our articles is lower? I can't speak to whether we're getting closer to the Truth, but I think we've shined a light into some dark policy crevices and created a vast body of new policy understanding. Perhaps the highest praise we can give peer review is that it renders science a little more democratic, a little more responsive to "popular will," albeit a certain elite popular will.

I've talked for almost an hour without mentioning the elephant in the room. I've talked about the two sources of authority that legitimize public policy decisions—popular will and expertise. I've talked about some of the internal contradictions within democratic theory and science. I couldn't have discussed any of these ideas with a straight face, though, unless I put on blinders and pretended not to notice money. And this pretense is what I think is now the central dilemma of our field.

Remember our field's founding mission: namely, to use science to improve democratic governance. In neither democratic theory nor the epistemic ideal of science does *money* figure as a legitimate source of authority. Democracy is not supposed to mean, "You pay your money and you get your policy." Science isn't supposed to mean, "You pay your money and you get your result."

Except that now both are true. When I say "now," I don't mean that the power of the wealthy to manipulate public policy is something new. It isn't. It goes back forever. What is new is that

we now have extraordinary documentation of exactly *whose* money is buying off science and democracy in the last half century or so, and how. And probably the scale of money's clout is far greater now than it has ever been.

I'll start with science because by all accounts, the science-for-hire strategy pioneered the government-for-hire strategy.¹⁶ When the Tobacco industry was threatened by strong scientific evidence that smoking causes cancer, it fought back by commissioning studies to cast doubt on the tobacco-cancer link. The industry's strategists didn't try to *disprove* the cancer-smoking link with solid scientific research. They figured that to delay any regulatory action, they needed only to demonstrate that the link hadn't yet been proven definitively. Then they mounted a public relations campaign to persuade smokers and the general public that smoking should be considered innocent until proven guilty. Besides massive advertising, they created fake grass-roots "smokers' rights" groups to pressure policymakers who might be considering limits on selling tobacco.

The tobacco industry's "Doubt Strategy" became the playbook for numerous other industries whose products or production processes cause great harms. The playbook gave rise to a new "product defense industry," devoted to preventing government from regulating activities that are highly dangerous to people but highly profitable for corporations. David Michaels, who headed the Occupational Safety and Health Administration under Obama, spent much of his tenure fighting the product defense industry so that his agency could simply do its job—protect safety and health.

After stepping down from his government job, Michaels reverse engineered the product defense industry's tactics to create what amounts to a handbook for science saboteurs. It appears in a chapter of *The Triumph of Doubt* called "Science for Sale".¹⁷ If Michaels were into irony, he might have called the chapter, "How to exploit standard scientific techniques to undermine science and gum up the machinery of government."

I'll mention only one tactic from Michael's handbook here: peer review. Publication in a peer-reviewed journal is supposed to be the mechanism that separates science from opinion. We know that academic peer review is not all as pure as scientists would like to believe, but in the product defense area, a new species of vanity journals has evolved. These journals are directly or indirectly subsidized by industry. The editorial boards are staffed by scientists with strong financial ties to the industries. Some of the editors and writers have even done product defense work themselves, for lucrative fees. Typically the editorial boards include a few scientists who are not industry consultants, for a little bit of protective cover. The journals have innocuous, scientific-sounding names, such as *Regulatory Toxicology and Pharmacology*. They are for all purposes industry fronts to gain scientific credibility for their self-interested, politically motivated, anti-science positions.¹⁸

Thanks to political economists, journalists, historians and others, we know a lot more about how the product defense industry served as the model for the Super Rich to control government. About how money buys candidates for public office, buys elections, buys legislators, regulators, sometimes judges; and ultimately buys policies. How money stymies law enforcement against wealthy corporations and oligarchs. How money buys public opinion and attitudes. How it buys intellectuals, teachers, experts and research.

16 — This is the argument put forth by Naomi Oreskes and Erik M. Conway in *Merchants of Doubt* and later developed and expanded by many others.

17 — Michaels D. (2020). *The Triumph of Doubt: Dark money and the science of deception*. Oxford University Press.

18 — *op. cit.* pp. 23-25.

And most importantly, we know how money shapes the dominant public narrative about the role of government and its relationship to business. Scholars have elaborated this public narrative under the rubric of Neoliberalism. Neoliberalism is usually cast as a set of ideas about liberating “free markets” from government regulation, privatizing most government functions, and reducing taxes on wealthy, corporate “job creators.” But to see Neoliberalism as a set of ideas is to miss the point. Neoliberalism is a system of governance in which Money holds the power. As a set of ideas, neoliberalism is simply the way owners of capital justify their political domination by making it seem good for everybody—that is, democratic.

Jane Mayer's book, *Dark Money*, portrays a network of hyper-rich corporate leaders who used their multi-millions and billions to bend American government to their own purposes—namely, making more money by doing whatever they pleased, regardless of the consequences for the broad public, and regardless of the law.¹⁹ Mayer's book is about the U.S. but *Dark Money* is everywhere. Moreover, everything that American super-wealthy corporate leaders did to reshape domestic political culture and policy spread outwards to transform governments and political culture in Europe and the rest of the world. More recently, the public narrative goes beyond economics to justify a nexus of far-right cultural and religious ideas. These include white supremacy, Christian supremacy, ending immigration, subjugating women and LGBTQ people; and breaking up the European Union and any other international alliances that might try to regulate economic actors.²⁰ I'd be remiss if I didn't acknowledge that the Left uses money to “buy” politicians and policies, too. But the scale is different by several orders of magnitude and the Right is winning.²¹

* * *

In our field, we're fond of talking about the “diffusion of innovation” and “diffusion of knowledge.” The diffusion metaphor masks what's most important. It masks agency. All that intellectual transformation didn't simply diffuse like gas molecules through the earth's atmosphere. Big Money pumped the ideas of the great intellectual transformation around the world.

Jane Mayer's *Dark Money* focuses on Charles and David Koch, two brothers who financed and orchestrated so much of the right-wing rise to power in American and European politics. In the late 1980s, Charles Koch hatched a three-part plan to bend American government to his vision of public policy.²² Simplified only slightly, the plan looks like this:

Phase 1. Create new ideas.

Phase 2. Turn the ideas into policies and persuade officials to adopt them.

Phase 3. Market the ideas and policies to citizens and politicians.

Koch's plan gives me the creeps, because its broad outline sounds an awful lot like what I was supposed to teach my Duke University students, and what our field aims to do: bend government to our vision of the best public policies.

19 — Mayer J. (2016). *Dark Money: The hidden history of the billionaires behind the rise of the Radical Right*. Penguin Random House.

20 — See for example: Fitzgerald M., & Provost, C. (July 10 2019). The American dark money behind Europe's far right. *New York Review of Books*.

<https://www.nybooks.com/online/2019/07/10/the-american-dark-money-behind-europes-far-right/>
Norris, S. (2023). *Bodies Under Siege: How the far-right attack on reproductive rights went global*. Verso..

21 — Cohen, R. (Dec. 2, 2021). *The Democratic Dilemma on Dark Money*. American Prospect.
<https://prospect.org/power/democratic-dilemma-on-dark-money/>

22 — The plan was actually conceived by one of Charles Koch's proteges and eventually “chief political lieutenant,” as Jane Mayer describes him. See Mayer, 2016, pp. 172-173.

In Phase 1, the Kochs funded intellectuals to create ideas that make the Big Money worldview appear as the best public policy for everyone. They funded university research centers, teaching programs and individual conservative professors. At law schools, they funded “Law and Economics” courses, whose central tenet is that economic considerations should be paramount in resolving legal conflicts. Efficiency over fairness or justice.

In phase 2, the Kochs funded conservative think tanks to turn out academic-style policy analyses. These analyses were then reduced to short briefing memos a policymaker could read in the 10-minute cab ride from the Washington D.C. airport to the Capitol office buildings.

In Phase 3, the Kochs created fake grassroots citizen groups to pressure politicians to implement the policies. They frame every government regulation or law they don’t like as a matter of individual rights and freedoms. This frame persuades citizens that *they* have a big stake in opposing whatever policy the Super Rich want to defeat. The Kochs also fund rallies and protests against laws they don’t like, as they did to fight President Obama’s health care plan. These protests, of course, make for great TV coverage depicting strong grassroots opposition to the politician or policy in question. And of course, Phase 3 involved a little bit of money, too.

In 1999, Koch Industries was convicted of defrauding the federal government by overstating amounts of oil it sold to the government. At the same time, Koch Industries was sued for gross violations of environmental protection and occupational safety laws, though the Kochs escaped conviction on those. Later, Charles Koch said these events were the wake up call that galvanized him into political action. He wrote, “We were caught unprepared by the rapid increase in regulation. . . While business was becoming increasingly regulated, we kept thinking and acting as if we lived in a pure market economy”.²³

When I read this quotation as I was preparing this talk, I had an eerie sense that with a little tweaking, it should be *our* wake-up call: “While Big Business and the Super Rich were quietly taking over government and corrupting science, we kept thinking and acting as if we live in a democracy where popular will and scientific expertise are the primary bases of policy decisions.”

If the founding mission of our field was to bring science *into* government, we need to focus now on how to get money *out of* government and science. In hindsight, I wonder whether democracy and science were so vulnerable to hostile takeover by money because of the internal contradictions I’ve explored in this talk. Has democracy been vulnerable to money because democratic theory didn’t have a good answer to the questions “What is popular will?” and “How can we know what it is?” Elections, interest groups and public opinion surveys are woefully inadequate for the task. These mechanisms each have their weaknesses and money exploited them. Money created sham popular will by manipulating public opinion and creating shell interest groups to speak Money’s interests to Power.

I wonder, too, whether science was vulnerable to takeover by money because measurement is one of science’s critical tools, yet numbers aren’t as free of assumptions and subjective judgments as we would like to believe. Nor is the social model for validating scientific claims as foolproof as scientists wish, and sometimes pretend it to be.

So now that we’ve talked about it, what are we going *do* about getting money out of government and science? I’m honestly not sure whether our tools are up to the task. Short of matching the money wielded by the hyper-rich—unlikely—how do we seize back some of the political power

23 — Koch, C. (2007). *The Science of Success*, as quoted in Mayer, 2016, p. 169.

they've already cornered? The best tool we have is *issue framing*. We've shown how advocates sometimes succeed when they re-define problems and re-frame issues. We've developed good tools for reframing, especially causal stories and symbols. But the hyper-rich understand issue framing, too, and they have immense fortunes to spend on crafting new frames and blasting them through schools and the media. Unlike us academics, they don't rely on spontaneous "take up" of their stories by policymakers. Instead, they pay big bucks to persuade citizens and policymakers to take up their ideas.

I wonder whether some of the other tools we've developed are up to the task. When I was teaching courses on policy analysis for international students, I asked them what problems were most important to them. Corruption was the hands-down winner. I consulted colleagues and scoured the literature for tools they could use to fix it. What I found was either admissions of defeat—"it's very difficult"—or useless calls for greater transparency, improved public management, and political and economic reform. Yes, but how? I wanted to tear my hair out. I'll never forget one day when I had given students some materials on how to read statistics critically. A Cambodian student who had never before spoken in class raised her hand and whispered, "If I questioned the government's statistics, I'd be put in jail."

One is supposed to end a talk like this with constructive suggestions and a big dose of hope. Taking a cue from Charles Koch, we need to reimagine how well our conceptual tools work in a world where democracy, rule of law, and scientific integrity can't be taken for granted. Maybe we need to put ourselves in the shoes of people like my Cambodian student, and design tools for them.

As for hope, in our field it comes most often in the form of a "crisis" that opens a "window of opportunity" for big change. I can't even offer you that hope, because neither a global economic recession, nor a global pandemic, nor devastating storms, wildfires, floods—none of those genuine crises has opened any windows more than a tiny crack.

I can only hope I've galvanized you with a terrifying wake-up call. Whatever else you're working on, make time to fight for science and democracy. Write and publish in whatever professional style you must in order to get your degree or keep your job. Then, leave the ivory tower every so often to *write* for real people and *engage* with real people. Hope is to found in small places and small projects with people you can actually hug.

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