How America Lost Faith in Expertise

And Why That's a Giant Problem

Tom Nichols

Post published the results of a poll that asked Americans about whether the United States should intervene militarily in Ukraine. Only one in six could identify Ukraine on a map; the median response was off by about 1,800 miles. But this lack of knowledge did not stop people from expressing pointed views. In fact, the respondents favored intervention in direct proportion to their ignorance. Put another way, the people who thought Ukraine was located in Latin America or Australia were the most enthusiastic about using military force there.

The following year, Public Policy Polling asked a broad sample of Democratic and Republican primary voters whether they would support bombing Agrabah. Nearly a third of Republican respondents said they would, versus 13 percent who opposed the idea. Democratic preferences were roughly reversed; 36 percent were opposed, and 19 percent were in favor. Agrabah doesn't exist. It's the fictional country in the 1992 Disney film *Aladdin*. Liberals crowed that the poll showed Republicans' aggressive tendencies. Conservatives countered that it showed Democrats' reflexive pacifism. Experts in national security couldn't fail to notice that 43 percent of Republicans and 55 percent of Democrats polled had an actual, defined view on bombing a place in a cartoon.

Increasingly, incidents like this are the norm rather than the exception. It's not just that people don't know a lot about science or politics or geography. They don't, but that's an old problem. The bigger concern

TOM NICHOLS is Professor of National Security Affairs at the U.S. Naval War College. He is the author of *The Death of Expertise: The Campaign Against Established Knowledge and Why It Matters* (Oxford University Press, 2017), from which this essay is adapted. Follow him on Twitter @RadioFreeTom. The views expressed here are his own.

today is that Americans have reached a point where ignorance—at least regarding what is generally considered established knowledge in public policy—is seen as an actual virtue. To reject the advice of experts is to assert autonomy, a way for Americans to demonstrate their independence from nefarious elites—and insulate their increasingly fragile egos from ever being told they're wrong.

This isn't the same thing as the traditional American distaste for intellectuals and know-it-alls. I'm a professor, and I get it: most people don't like professors. And I'm used to people disagreeing with me on lots of things. Principled, informed arguments are a sign of intellectual health and vitality in a democracy. I'm worried because we no longer have those kinds of arguments, just angry shouting matches.

When I started working in Washington in the 1980s, I quickly learned that random people I met would instruct me in what the government should do about any number of things, particularly my own specialties of arms control and foreign policy. At first I was surprised, but I came to realize that this was understandable and even to some extent desirable. We live in a democracy, and many people have strong opinions about public life. Over time, I found that other policy specialists had similar experiences, with laypeople subjecting them to lengthy disquisitions on taxes, budgets, immigration, the environment, and many other subjects. If you work on public policy, such interactions go with the job, and at their best, they help keep you intellectually honest.

In later years, however, I started hearing the same stories from doctors and lawyers and teachers and many other professionals. These were stories not about patients or clients or students raising informed questions but about them telling the professionals why their professional advice was actually misguided or even wrong. The idea that the expert was giving considered, experienced advice worth taking seriously was simply dismissed.

I fear we are moving beyond a natural skepticism regarding expert claims to the death of the ideal of expertise itself: a Google-fueled, Wikipedia-based, blog-sodden collapse of any division between professionals and laypeople, teachers and students, knowers and wonderers—in other words, between those with achievement in an area and those with none. By the death of expertise, I do not mean the death of actual expert abilities, the knowledge of specific things that sets some people apart from others in various areas. There will always be doctors

and lawyers and engineers and other specialists. And most sane people go straight to them if they break a bone or get arrested or need to build a bridge. But that represents a kind of reliance on experts as technicians, the use of established knowledge as an off-the-shelf convenience as desired. "Stitch this cut in my leg, but don't lecture me about my diet." (More than two-thirds of Americans are overweight.) "Help me beat this tax problem, but don't remind me that I should have a will." (Roughly half of Americans with children haven't written one.) "Keep my country safe, but don't confuse me with details about national security tradeoffs." (Most U.S. citizens have no clue what the government spends on the military or what its policies are on most security matters.)

The larger discussions, from what constitutes a nutritious diet to what actions will best further U.S. interests, require conversations between ordinary citizens and experts. But increasingly, citizens don't want to have those conversations. Rather, they want to weigh in and have their opinions treated with deep respect and their preferences honored not on the strength of their arguments or on the evidence they present but based on their feelings, emotions, and whatever stray information they may have picked up here or there along the way.

This is a very bad thing. A modern society cannot function without a social division of labor. No one is an expert on everything. We prosper because we specialize, developing formal and informal mechanisms and practices that allow us to trust one another in those specializations and gain the collective benefit of our individual expertise. If that trust dissipates, eventually both democracy and expertise will be fatally corrupted, because neither democratic leaders nor their expert advisers want to tangle with an ignorant electorate. At that point, expertise will no longer serve the public interest; it will serve the interest of whatever clique is paying its bills or taking the popular temperature at any given moment. And such an outcome is already perilously near.

A LITTLE LEARNING IS A DANGEROUS THING

Over a half century ago, the historian Richard Hofstadter wrote that "the complexity of modern life has steadily whittled away the functions the ordinary citizen can intelligently and comprehendingly perform for himself."

In the original American populistic dream, the omnicompetence of the common man was fundamental and indispensable. It was believed that he could, without much special preparation, pursue the professions and run the government. Today he knows that he cannot even make his breakfast without using devices, more or less mysterious to him, which expertise has put at his disposal; and when he sits down to breakfast and looks at his morning newspaper, he reads about a whole range of vital and intricate issues and acknowledges, if he is candid with himself, that he has not acquired competence to judge most of them.

Hofstadter argued that this overwhelming complexity produced feelings of helplessness and anger among a citizenry that knew itself to be increasingly at the mercy of more sophisticated elites. "What used to be a jocular and usually benign ridicule of intellect and formal training has turned into a malign resentment of the intellectual in his capacity as expert," he noted. "Once the intellectual was gently ridiculed because he was not needed; now he is fiercely resented because he is needed too much."

In 2015, the law professor Ilya Somin observed that the problem had persisted and even metastasized over time. The "size and complexity of government," he wrote, have made it "more difficult for voters with limited knowledge to monitor and evaluate the government's many activities. The result is a polity in which the people often cannot exercise their sovereignty responsibly and effectively." Despite decades of advances in education, technology, and life opportunities, voters now are no better able to guide public policy than they were in Hofstadter's day, and in many respects, they are even less capable of doing so.

The problem cannot be reduced to politics, class, or geography. Today, campaigns against established knowledge are often led by people who have all the tools they need to know better. For example, the anti-vaccine movement—one of the classic contemporary examples of this phenomenon—has gained its greatest reach among people such as the educated suburbanites in Marin County, outside San Francisco, where at the peak of the craze, in 2012, almost eight percent of parents requested a personal belief exemption from the obligation to vaccinate their children before enrolling them in school. These parents were not medical professionals, but they had just enough education to believe that they could challenge established

medical science, and they felt empowered to do so—even at the cost of the health of their own and everybody else's children.

DON'T KNOW MUCH

Experts can be defined loosely as people who have mastered the specialized skills and bodies of knowledge relevant to a particular occupation and who routinely rely on them in their daily work. Put another way, experts are the people who know considerably more about a given subject than the rest of us, and to whom we usually turn for education or advice on that topic. They don't know everything, and they're not always right, but they constitute an authoritative minority whose views on a topic are more likely to be right than those of the public at large.

How do we identify who these experts are? In part, by formal training, education, and professional experience, applied over the course of a career. Teachers, nurses, and plumbers all have to acquire certification of some kind to exercise their skills, as a signal to others that their abilities have been reviewed by their peers and met a basic standard of competence. Credentialism can run amok, and guilds can use it cynically to generate revenue or protect their fiefdoms with unnecessary barriers to entry. But it can also reflect actual learning and professional competence, helping separate real experts from amateurs or charlatans.

Beyond credentials lies talent, an immutable but real quality that creates differences in status even within expert communities. And beyond both lies a mindset, an acceptance of membership in a broader community of specialists devoted to ever-greater understanding of a particular subject. Experts agree to evaluation and correction by other experts. Every professional group and expert community has watchdogs, boards, accreditors, and certification authorities whose job is to police its own members and ensure that they are competent and live up to the standards of their own specialty.

Experts are often wrong, and the good ones among them are the first to admit it—because their own professional disciplines are based not on some ideal of perfect knowledge and competence but on a constant process of identifying errors and correcting them, which ultimately drives intellectual progress. Yet these days, members of the public search for expert errors and revel in finding them—not to improve understanding but rather to give themselves license to disregard all expert advice they don't like.

Part of the problem is that some people think they're experts when in fact they're not. We've all been trapped at a party where one of the

least informed people in the room holds court, confidently lecturing the other guests with a cascade of banalities and misinformation. This sort of experience isn't just in your imagination. It's real, and it's called "the Dunning-Kruger effect," after the research psychologists David Dunning and Justin Kruger. The essence of the effect is that the less skilled

We are moving toward a Google-fueled, Wikipedia-based collapse of any division between professionals and laypeople.

or competent you are, the more confident you are that you're actually very good at what you do. The psychologists' central finding: "Not only do [such people] reach erroneous conclusions and make unfortunate choices, but their incompetence robs them of the ability to realize it."

To some extent, this is true of everybody, in the same way that few people are willing to accept that they have a lousy sense of humor or a grating personality. As it turns out, most people rate themselves higher than others would regarding a variety of skills. (Think of the writer Garrison Keillor's fictional town of Lake Wobegon, where "all the children are above average.") But it turns out that less competent people overestimate themselves more than others do. As Dunning wrote in 2014,

A whole battery of studies . . . have confirmed that people who don't know much about a given set of cognitive, technical, or social skills tend to grossly overestimate their prowess and performance, whether it's grammar, emotional intelligence, logical reasoning, firearm care and safety, debating, or financial knowledge. College students who hand in exams that will earn them Ds and Fs tend to think their efforts will be worthy of far higher grades; low-performing chess players, bridge players, and medical students, and elderly people applying for a renewed driver's license, similarly overestimate their competence by a long shot.

The reason turns out to be the absence of a quality called "metacognition," the ability to step back and see your own cognitive processes in perspective. Good singers know when they've hit a sour note, good directors know when a scene in a play isn't working, and intellectually self-aware people know when they're out of their depth. Their less

successful counterparts can't tell—which can lead to a lot of bad music, boring drama, and maddening conversations. Worse, it's very hard to educate or inform people who, when in doubt, just make stuff up. The least competent people turn out to be the ones least likely to realize they are wrong and others are right, the most likely to respond to their own ignorance by trying to fake it, and the least able to learn anything.

SURREALITY-BASED COMMUNITY

The problems for democracy posed by the least competent are serious. But even competent and highly intelligent people encounter problems in trying to comprehend complicated issues of public policy with which they are not professionally conversant. Most prominent of those problems is confirmation bias, the tendency to look for information that corroborates what we already believe. Scientists and researchers grapple with this all the time as a professional hazard, which is why, before presenting or publishing their work, they try to make sure their findings are robust and pass a reality check from qualified colleagues without a personal investment in the outcome of the project. This peer-review process is generally invisible to laypeople, however, because the checking and adjustments take place before the final product is released.

Outside the academy, in contrast, arguments and debates usually have no external review or accountability at all. Facts come and go as people find convenient at the moment, making arguments unfalsifiable and intellectual progress impossible. And unfortunately, because common sense is not enough to understand or judge plausible alternative policy options, the gap between informed specialists and uninformed laypeople often gets filled with crude simplifications or conspiracy theories.

Conspiracy theories are attractive to people who have a hard time making sense of a complicated world and little patience for boring, detailed explanations. They are also a way for people to give context and meaning to events that frighten them. Without a coherent explanation for why terrible things happen to innocent people, they would have to accept such occurrences as nothing more than the random cruelty of either an uncaring universe or an incomprehensible deity.

And just as individuals facing grief and confusion look for meaning where none may exist, so, too, will entire societies gravitate toward outlandish theories when collectively subjected to a terrible national experience. Conspiracy theories and the awed reasoning behind them, as the Canadian writer Jonathan Kay has noted, become especially seductive "in any society that has suffered an epic, collectively felt trauma." This is why they spiked in popularity after World War I, the Russian Revolution, the Kennedy assassination, the 9/11 attacks, and other major disasters—and are growing now in response to destabilizing contemporary trends, such as the economic and social dislocations of globalization and persistent terrorism.

At their worst, conspiracy theories can produce a moral panic in which innocent people get hurt. But even when they seem trivial, their prevalence undermines the sort of reasoned interpersonal discourse on which liberal democracy depends. Why? Because by definition, conspiracy theories are unfalsifiable: experts who contradict them demonstrate that they, too, are part of the conspiracy.

The addition of politics, finally, makes things even more complicated. Political beliefs among both laypeople and experts are subject to the same confirmation bias that plagues thinking about other issues. But misguided beliefs about politics and other subjective matters are even harder to shake, because political views are deeply rooted in a person's self-image and most cherished beliefs. Put another way, what we believe says something important about how we see ourselves, making disconfirmation of such beliefs a wrenching process that our minds stubbornly resist.

As a result, unable to see their own biases, most people simply drive one another crazy arguing rather than accept answers that contradict what they already think about the subject—and shoot the messenger, to boot. A 2015 study by scholars at Ohio State University, for example, tested the reactions of liberals and conservatives to certain kinds of news stories and found that both groups tended to discount scientific theories that contradicted their worldviews. Even more disturbing, the study found that when exposed to scientific research that challenged their views, both liberals and conservatives reacted by doubting the science rather than themselves.

WELCOME TO THE IDIOCRACY

Ask an expert about the death of expertise, and you will probably get a rant about the influence of the Internet. People who once had to turn to specialists in any given field now plug search terms into a Web browser and get answers in seconds—so why should they rely on some remote clerisy of snooty eggheads? Information technology, however, is not the primary problem. The digital age has simply accelerated the collapse of communication between experts and laypeople by offering an apparent shortcut to erudition. It has allowed people to mimic intellectual accomplishment by indulging in an illusion of expertise provided by a limitless supply of facts.

But facts are not the same as knowledge or ability—and on the Internet, they're not even always facts. Of all the axiomatic "laws"

The countless dumpsters of nonsense parked on the Internet are an expert's nightmare.

that describe Internet usage, the most important may be the predigital insight of the science fiction writer Theodore Sturgeon, whose eponymous rule states that "90 percent of everything is crap." More than a billion websites now exist. The good news is that even if Sturgeon's cynicism holds, that yields 100 million

pretty good sites—including those of all the reputable publications of the world; the homepages of universities, think tanks, research institutions, and nongovernmental organizations; and vast numbers of other edifying sources of good information.

The bad news, of course, is that to find any of this, you have to navigate through a blizzard of useless or misleading garbage posted by everyone from well-intentioned grandmothers to propagandists for the Islamic State (or ISIS). Some of the smartest people on earth have a significant presence on the Internet. Some of the stupidest people, however, reside just one click away. The countless dumpsters of nonsense parked on the Internet are an expert's nightmare. Ordinary people who already had to make hard choices about where to get their information when there were a few dozen newspapers, magazines, and television channels now face endless webpages produced by anyone willing to pay for an online presence.

Of course, this is no more and no less than an updated version of the basic paradox of the printing press. As the writer Nicholas Carr pointed out, the arrival of Gutenberg's invention in the fifteenth century set off a "round of teeth gnashing" among early humanists, who worried that "printed books and broadsheets would undermine religious authority, demean the work of scholars and scribes, and spread sedition and debauchery." The Internet is the printing press at the speed of fiber optics.

The convenience of the Internet is a tremendous boon, but mostly for people already trained in research and who have some idea what they're looking for. It does little good, unfortunately, for a student or an untrained layperson who has never been taught how to judge the provenance of information or the reputability of a writer.

Libraries, or at least their reference and academic sections, once served as a kind of first cut through the noise of the marketplace. The Internet, however, is less a library than a giant repository where anyone can dump anything. In practice, this means that a search for information will rely on algorithms usually developed by for-profit companies using opaque criteria. Actual research is hard and often boring. It requires the ability to find authentic information, sort through it, analyze it, and apply it. But why bother with all that tedious hoop jumping when the screen in front of us presents neat and pretty answers in seconds?

Technological optimists will argue that these objections are just so much old-think, a relic of how things used to be done, and unnecessary now because people can tap directly into the so-called wisdom of crowds. It is true that the aggregated judgments of large groups of ordinary people sometimes produce better results than the judgments of any individual, even a specialist. This is because the aggregation process helps wash out a lot of random misperception, confirmation bias, and the like. Yet not everything is amenable to the vote of a crowd. Understanding how a virus is transmitted from one human being to another is not the same thing as guessing the number of jellybeans in a glass jar. And as the comedian John Oliver has pointed out, you don't need to gather opinions on a fact: "You might as well have a poll asking, 'Which number is bigger, 15 or 5?' or 'Do owls exist?' or 'Are there hats?'"

Moreover, the whole point of the wisdom of crowds is that the members of the crowd supposedly bring to bear various independent opinions on any given topic. In fact, however, the Internet tends to generate communities of the like-minded, groups dedicated to confirming their own preexisting beliefs rather than challenging them. And social media only amplifies this echo chamber, miring millions of Americans in their own political and intellectual biases.

EXPERTISE AND DEMOCRACY

Experts fail often, in various ways. The most innocent and most common are what we might think of as the ordinary failures of science. Individuals, or even entire professions, observe a phenomenon or

examine a problem, come up with theories about it or solutions for it, and then test them. Sometimes they're right, and sometimes they're wrong, but most errors are eventually corrected. Intellectual progress includes a lot of blind alleys and wrong turns along the way.

Other forms of expert failure are more worrisome. Experts can go wrong, for example, when they try to stretch their expertise from one area to another. This is less a failure of expertise than a sort of

Like anti-vaccine parents, ignorant voters end up punishing society at large for their own mistakes.

minor fraud—somebody claiming the general mantle of authority even though he or she is not a real expert in the specific area under discussion—and it is frequent and pernicious and can undermine the credibility of an entire field. (I recognize that I myself risk that transgression. But my observations

and conclusions are informed not only by my experience of being an expert in my own area but also by the work of scholars who study the role of expertise in society and by discussions I have had with many other experts in a variety of fields.) And finally, there is the rarest but most dangerous category: outright deception and malfeasance, in which experts intentionally falsify their results or rent out their professional authority to the highest bidder.

When they do fail, experts must own their mistakes, air them publicly, and show the steps they are taking to correct them. This happens less than it should in the world of public policy, because the standards for judging policy work tend to be more subjective and politicized than the academic norm. Still, for their own credibility, policy professionals should be more transparent, honest, and self-critical about their far-from-perfect track records. Laypeople, for their part, must educate themselves about the difference between errors and incompetence, corruption, or outright fraud and cut the professionals some slack regarding the former while insisting on punishment for the latter. As the philosopher Bertrand Russell once wrote, the proper attitude of a layperson toward experts should be a combination of skepticism and humility:

The skepticism that I advocate amounts only to this: (1) that when the experts are agreed, the opposite opinion cannot be held to be certain; (2) that when they are not agreed, no opinion can be regarded as

certain by a non-expert; and (3) that when they all hold that no sufficient grounds for a positive opinion exist, the ordinary man would do well to suspend his judgment.

As Russell noted, "These propositions may seem mild, yet, if accepted, they would absolutely revolutionize human life"—because the results would challenge so much of what so many people feel most strongly.

Government and expertise rely on each other, especially in a democracy. The technological and economic progress that ensures the well-being of a population requires a division of labor, which in turn leads to the creation of professions. Professionalism encourages experts to do their best to serve their clients, respect their own knowledge boundaries, and demand that their boundaries be respected by others, as part of an overall service to the ultimate client: society itself.

Dictatorships, too, demand this same service of experts, but they extract it by threat and direct its use by command. This is why dictatorships are actually less efficient and less productive than democracies (despite some popular stereotypes to the contrary). In a democracy, the expert's service to the public is part of the social contract. Citizens delegate the power of decision on myriad issues to elected representatives and their expert advisers, while experts, for their part, ask that their efforts be received in good faith by a public that has informed itself enough—a key requirement—to make reasoned judgments.

This relationship between experts and citizens rests on a foundation of mutual respect and trust. When that foundation erodes, experts and laypeople become warring factions and democracy itself can become a casualty, decaying into mob rule or elitist technocracy. Living in a world awash in gadgets and once unimaginable conveniences and entertainments, Americans (and many other Westerners) have become almost childlike in their refusal to learn enough to govern themselves or to guide the policies that affect their lives. This is a collapse of functional citizenship, and it enables a cascade of other baleful consequences.

In the absence of informed citizens, for example, more knowledgeable administrative and intellectual elites do in fact take over the daily direction of the state and society. The Austrian economist F. A. Hayek wrote in 1960, "The greatest danger to liberty today comes from the men who are most needed and most powerful in modern government, namely, the efficient expert administrators exclusively concerned with what they regard as the public good."

There is a great deal of truth in this. Unelected bureaucrats and policy specialists in many spheres exert tremendous influence on the daily lives of Americans. Today, however, this situation exists by default rather than design. And populism actually reinforces this elitism, because the celebration of ignorance cannot launch communications satellites, negotiate the rights of U.S. citizens overseas, or provide effective medications. Faced with a public that has no idea how most things work, experts disengage, choosing to speak mostly to one another.

Meanwhile, Americans have developed increasingly unrealistic expectations of what their political and economic systems can provide, and this sense of entitlement fuels continual disappointment and anger. When people are told that ending poverty or preventing terrorism or stimulating economic growth is a lot harder than it looks, they roll their eyes. Unable to comprehend all the complexity around them, they choose instead to comprehend almost none of it and then sullenly blame elites for seizing control of their lives.

"A REPUBLIC, IF YOU CAN KEEP IT"

Experts can only propose; elected leaders dispose. And politicians are very rarely experts on any of the innumerable subjects that come before them for a decision. By definition, nobody can be an expert on China policy and health care and climate change and immigration and taxation, all at the same time—which is why during, say, congressional hearings on a subject, actual experts are usually brought in to advise the elected laypeople charged with making authoritative decisions.

In 1787, Benjamin Franklin was supposedly asked what would emerge from the Constitutional Convention being held in Philadelphia. "A republic," Franklin answered, "if you can keep it." Americans too easily forget that the form of government under which they live was not designed for mass decisions about complicated issues. Neither, of course, was it designed for rule by a tiny group of technocrats or experts. Rather, it was meant to be the vehicle by which an informed electorate could choose other people to represent them, come up to speed on important questions, and make decisions on the public's behalf.

The workings of such a representative democracy, however, are exponentially more difficult when the electorate is not competent to judge the matters at hand. Laypeople complain about the rule of experts and demand greater involvement in complicated national questions, but many of them express their anger and make these demands only after abdicating their own important role in the process: namely, to stay informed and politically literate enough to choose representatives who can act wisely on their behalf. As Somin has written, "When we elect government officials based on ignorance, they rule over not only those who voted for them but all of society. When we exercise power over other people, we have a moral obligation to do so in at least a reasonably informed way." Like anti-vaccine parents, ignorant voters end up punishing society at large for their own mistakes.

Too few citizens today understand democracy to mean a condition of political equality in which all get the franchise and are equal in the eyes of the law. Rather, they think of it as a state of actual equality, in which every opinion is as good as any other, regardless of the logic or evidentiary base behind it. But that is not how a republic is meant to work, and the sooner American society establishes new ground rules for productive engagement between educated elites and the society around them, the better.

Experts need to remember, always, that they are the servants of a democratic society and a republican government. Their citizen masters, however, must equip themselves not just with education but also with the kind of civic virtue that keeps them involved in the running of their own country. Laypeople cannot do without experts, and they must accept this reality without rancor. Experts, likewise, must accept that they get a hearing, not a veto, and that their advice will not always be taken. At this point, the bonds tying the system together are dangerously frayed. Unless some sort of trust and mutual respect can be restored, public discourse will be polluted by unearned respect for unfounded opinions. And in such an environment, anything and everything becomes possible, including the end of democracy and republican government itself.