

Guided By The Beauty Of Our Weapons

Posted on March 24, 2017 by Scott Alexander



Content note: *kind of talking around Trump supporters and similar groups as if they're not there.*

I

Tim Harford writes [The Problem With Facts](#), which uses Brexit and Trump as jumping-off points to argue that people are mostly imperious to facts and resistant to logic:

All this adds up to a depressing picture for those of us who aren't ready to live in a post-truth world. Facts, it seems, are toothless. Trying to refute a bold, memorable lie with a fiddly set of facts can often serve to reinforce the myth. Important truths are often stale and dull, and it is easy to manufacture new, more engaging claims. And giving people more facts can backfire, as those facts provoke a defensive reaction in someone who badly wants to stick to their existing world view. "This is dark stuff," says Reifler. "We're in a pretty scary and dark time."

He admits he has no easy answers, but cites some studies showing that “scientific curiosity” seems to help people become interested in facts again. He thinks maybe we can inspire scientific curiosity by linking scientific truths to human interest stories, by weaving compelling narratives, and by finding “a Carl Sagan or David Attenborough of social science”.

I think this is generally a good article and makes important points, but there are three issues I want to highlight as possibly pointing to a deeper pattern.

First, the article makes the very strong claim that “facts are toothless” – then tries to convince its readers of this using facts. For example, the article highlights a study by Nyhan & Reifler which finds a “backfire effect” – correcting people’s misconceptions only makes them cling to those misconceptions more strongly. Harford expects us to be impressed by this study. But how is this different from all of those social science facts to which he believes humans are mostly impervious?

Second, Nyhan & Reifler’s work on the backfire effect is probably not true. The original study establishing its existence [failed](#) to replicate (see eg [Porter & Wood, 2016](#)). This isn’t directly contrary to Harford’s argument, because Harford doesn’t cite the original study – he cites a slight extension of it done a year later by the same team that comes to a slightly different conclusion. But given that the entire field is now in serious doubt, I feel like it would have been judicious to mention some of this in the article. This is especially true given that the article itself is about the way that false

ideas spread by people never double-checking their beliefs. It seems to me that if you believe in an epidemic of falsehood so widespread that the very ability to separate fact from fiction is under threat, it ought to inspire a state of [CONSTANT VIGILANCE](#), where you obsessively question each of your beliefs. Yet Harford writes an entire article about a worldwide plague of false beliefs without mustering enough vigilance to see if the relevant studies are true or not.

Third, Harford describes his article as being about *agnotology*, “the study of how ignorance is deliberately produced”. His key example is tobacco companies sowing doubt about the negative health effects of smoking – for example, he talks about tobacco companies sponsoring (accurate) research into all of the non-smoking-related causes of disease so that everyone focused on those instead. But his solution – telling engaging stories, adding a human interest element, enjoyable documentaries in the style of Carl Sagan – seems unusually unsuited to the problem. The National Institute of Health can make an engaging human interest documentary about a smoker who got lung cancer. And the tobacco companies can make an engaging human interest documentary about a guy who got cancer because of asbestos, then was saved by tobacco-sponsored research. Opponents of Brexit can make an engaging documentary about all the reasons Brexit would be bad, and then proponents of Brexit can make an engaging documentary about all the reasons Brexit would be good. If you get good documentary-makers, I assume both will be equally convincing regardless of what the true facts are.

All three of these points are slightly unfair. The first because Harford's stronger statements about facts are probably exaggerations, and he just meant that in *certain* cases people ignore evidence. The second because the specific study cited wasn't the one that failed to replicate and Harford's thesis might be that it was different enough from the original that it's probably true. And the third because the documentaries were just one idea meant to serve a broader goal of increasing "scientific curiosity", a construct which has been shown in studies to be helpful in getting people to believe true things.

But I worry that taken together, they suggest an unspoken premise of the piece. It isn't that *people* are impervious to facts. Harford doesn't expect his reader to be impervious to facts, he doesn't expect documentary-makers to be impervious to facts, and he certainly doesn't expect *himself* to be impervious to facts. The problem is that there's some weird tribe of fact-immune troglodytes out there, going around refusing vaccines and voting for Brexit, and the rest of us have to figure out what to do about them. The fundamental problem is one of *transmission*: how can we make knowledge percolate down from the fact-loving elite to the fact-impervious masses?

And I don't want to condemn this too hard, because it's obviously true up to a point. Medical researchers have lots of useful facts about vaccines. Statisticians know some great facts about the link between tobacco and cancer (shame about [Ronald Fisher](#), though). Probably there are even some social scientists who have a fact or two.

Yet [as I've argued before](#), excessive focus on things like vaccine denialists teaches the wrong habits. It's a desire to take a degenerate case, the rare situation where one side is obviously right and the other bizarrely wrong, and make it into the flagship example for modeling all human disagreement. Imagine a theory of jurisprudence designed only to smack down sovereign citizens, or a government pro-innovation policy based entirely on warning inventors against perpetual motion machines.

And in this wider context, part of me wonders if the focus on transmission is part of the problem. Everyone from statisticians to Brexiteers knows that they are right. The only remaining problem is how to convince others. Go on Facebook and you will find a million people with a million different opinions, each confident in her own judgment, each zealously devoted to informing everyone else.

Imagine a classroom where everyone believes they're the teacher and everyone else is students. They all fight each other for space at the blackboard, give lectures that nobody listens to, assign homework that nobody does. When everyone gets abysmal test scores, one of the teachers has an idea: *I need a more engaging curriculum*. Sure. That'll help.



A new Nathan Robinson article: [Debate Vs. Persuasion](#). It goes through the same steps as the Harford article, this time from the perspective of the political Left. Deploying what Robinson calls

“Purely Logical Debate” against Trump supporters hasn’t worked. Some leftists think the answer is violence. But this may be premature; instead, we should try the tools of rhetoric, emotional appeal, and other forms of discourse that aren’t Purely Logical Debate. In conclusion, Bernie Would Have Won.

I think giving up on argumentation, reason, and language, just because Purely Logical Debate doesn’t work, is a mistake. It’s easy to think that if we can’t convince the right with facts, there’s no hope at all for public discourse. But this might not suggest anything about the possibilities of persuasion and dialogue. Instead, it might suggest that mere facts are rhetorically insufficient to get people excited about your political program.

The resemblance to Harford is obvious. You can’t convince people with facts. But you *might* be able to convince people with facts carefully intermixed with human interest, compelling narrative, and emotional appeal.

Once again, I think this is generally a good article and makes important points. But I still want to challenge whether things are quite as bad as it says.

Google [“debating Trump supporters is”](#), and you realize where the article is coming from. It’s page after page of “debating Trump supporters is pointless”, “debating Trump supporters is a waste of time”, and “debating Trump supporters is like [funny metaphor for

thing that doesn't work]". The overall picture you get is of a world full of Trump opponents and supporters debating on every street corner, until finally, after months of banging their heads against the wall, everyone collectively decided it was futile.

Yet I have the opposite impression. Somehow a sharply polarized country went through a historically divisive election with *essentially no debate taking place*.

Am I about to [No True Scotsman](#) the hell out of the word "debate"? Maybe. But I feel like in using the exaggerated phrase "Purely Logical Debate, Robinson has given me leave to define the term as strictly as I like. So here's what I think are minimum standards to deserve the capital letters:

1. Debate where two people with opposing views are *talking* to each other (or writing, or IMing, or some form of bilateral communication). Not a pundit putting an article on *Huffington Post* and demanding Trump supporters read it. Not even a Trump supporter who comments on the article with a counterargument that the author will never read. Two people who have chosen to engage and to listen to one another.
2. Debate where both people want to be there, and have chosen to enter into the debate in the hopes of getting something productive out of it. So not something where someone posts a "HILLARY IS A CROOK" meme on Facebook, someone gets really angry and lists all the reasons Trump is an even bigger crook, and then the original poster gets angry

and has to tell them why they're wrong. Two people who have made it their business to come together at a certain time in order to compare opinions.

3. Debate conducted in the spirit of mutual respect and collaborative truth-seeking. Both people reject personal attacks or 'gotcha' style digs. Both people understand that the other person is *around* the same level of intelligence as they are and may have some useful things to say. Both people understand that they themselves might have some false beliefs that the other person will be able to correct for them. Both people go into the debate with the hope of convincing their opponent, but not completely rejecting the possibility that their opponent might convince them also.
4. Debate conducted outside of a high-pressure point-scoring environment. No audience cheering on both participants to respond as quickly and biting as possible. If it can't be done online, at least do it with a smartphone around so you can open Wikipedia to resolve simple matters of fact.
5. Debate where both people agree on what's being debated and try to stick to the subject at hand. None of this "I'm going to vote Trump because I think Clinton is corrupt" followed by "Yeah, but Reagan was even worse and that just proves you Republicans are hypocrites" followed by "We're hypocrites? You Democrats claim to support women's rights but you love Muslims who make women wear headscarves!" Whether or not it's hypocritical to "support women's rights"

but “love Muslims”, it doesn’t seem like anyone is even *trying* to change each other’s mind about Clinton at this point.

These to me seem like the *bare minimum* conditions for a debate that could possibly be productive.

(and while I’m asking for a pony on a silver platter, how about both people have to read [How To Actually Change Your Mind](#) first?)

Meanwhile, in reality...

If you search “debating Trump supporters” without the “is”, your first result is [this video](#), where some people with a microphone corner some other people at what looks like a rally. I can’t really follow the conversation because they’re all shouting at the same time, but I can make out somebody saying ‘Republicans give more to charity!’ and someone else responding ‘That’s cause they don’t do anything at their jobs!’”. Okay.

The second link is [this podcast](#) where a guy talks about debating Trump supporters. After the usual preface about how stupid they were, he describes a typical exchange – “It’s kind of amazing how they want to go back to the good old days... Well, when I start asking them ‘You mean the good old days when 30% of the population were in unions’... they never seem to like to hear that!... so all this unfettered free market capitalism has got to go bye-bye. They don’t find comfort in that idea either. It’s amazing. I can say I now know what cognitive dissonance feels like on someone’s face.” I’m glad time travel seems to be impossible, because otherwise I would be

tempted to warp back and change my vote to Trump just to spite this person.

The third link is Vanity Fair's ["Foolproof Guide To Arguing With Trump Supporters"](#), which suggests "using their patriotism against them" by telling them that wanting to "curtail the rights and privileges of certain of our citizens" is un-American.

I worry that people do this kind of thing every so often. Then, when it fails, they conclude "Trump supporters are immune to logic". This is much like observing that Republicans go out in the rain without melting, and concluding "Trump supporters are immortal".

Am I saying that if you met with a conservative friend for an hour in a quiet cafe to talk over your disagreements, they'd come away convinced? No. I've changed my mind on various things during my life, and it was never a single moment that did it. It was more of a series of different things, each taking me a fraction of the way. As the old saying goes, "First they ignore you, then they laugh at you, then they fight you, then they fight you half-heartedly, then they're neutral, then they then they grudgingly say you might have a point even though you're annoying, then they say on balance you're mostly right although you ignore some of the most important facets of the issue, then you win."

There might be a parallel here with the one place I see something like Purely Logical Debate on a routine basis: cognitive psychotherapy. I know this comparison sounds crazy, because psychotherapy is supposed to be the opposite of a debate, and trying to argue

someone out of their delusions or depression inevitably fails. The rookieest of all rookie therapist mistakes is to say “FACT CHECK: The patient says she is a loser who everybody hates. PsychiaFact rates this claim: PANTS ON FIRE.”

But in other ways it’s a lot like the five points above. You have two people who disagree – the patient thinks she’s a worthless loser who everyone hates, and the therapist thinks maybe not. They meet together in a spirit of voluntary mutual inquiry, guaranteed safe from personal attacks like “You’re crazy!”. Both sides go over the evidence together, sometimes even agreeing on explicit experiments like “Ask your boyfriend tonight whether he hates you or not, predict beforehand what you think he’s going to say, and see if your prediction is accurate”. And both sides approach the whole process suspecting that they’re right but admitting the possibility that they’re wrong (very occasionally, after weeks of therapy, I realize that frick, everyone really *does* hate my patient. Then we switch strategies to helping her with social skills, or helping her find better friends).

And contrary to what you see in movies, this doesn’t usually give a single moment of blinding revelation. If you spent your entire life talking yourself into the belief that you’re a loser and everyone hates you, no single fact or person is going to talk you out of it. But after however many months of intensive therapy, sometimes someone who was *sure* that they were a loser is now *sort of questioning* whether they’re a loser, and has the mental toolbox to take things the rest of the way themselves.

This was also the response I got when I tried to make [an anti-Trump case](#) on this blog. I don't think there were any sudden conversions, but here were some of the positive comments I got from Trump supporters:

- “This is a compelling case, but I’m still torn.”
- “This contains the most convincing arguments for a Clinton presidency I have ever seen. But, perhaps also unsurprisingly, while it did manage to shift some of my views, it did not succeed in convincing me to change my bottom line.”
- “This article is perhaps the best argument I have seen yet for Hillary. I found myself nodding along with many of the arguments, after this morning swearing that there was nothing that could make me consider voting for Hillary... the problem in the end was that it wasn't enough.”
- “The first coherent article I've read justifying voting for Clinton. I don't agree with your analysis of the dollar “value” of a vote, but other than that, something to think about.”
- “Well I don't like Clinton at all, and I found this essay reasonable enough. The argument from continuity is probably the best one for voting Clinton if you don't particularly love any of her policies or her as a person. Trump is a wild card, I must admit.”
- As an orthodox Catholic, you would probably classify me as part of your conservative audience... I certainly concur with both the variance arguments and that he's not conservative

by policy, life, or temperament, and I will remain open to hearing what you have to say on the topic through November.

- “I’ve only come around to the ‘hold your nose and vote Trump’ camp the past month or so... I won’t say [you] didn’t make me squirm, but I’m holding fast to my decision.”

*These are the people you say are completely impervious to logic so don’t even try? It seems to me like this argument was one of not-so-many straws that might have broken some camels’ backs if they’d been allowed to accumulate. And the weird thing is, when I re-read the essay I notice a lot of flaws and things I wish I’d said differently. I don’t think it was an exceptionally good argument. I think it was... an argument. It was something more than saying “You think the old days were so great, but the old days had labor unions, CHECKMATE ATHEISTS”. This isn’t what you get when you do a splendid virtuoso performance. This is what you get *when you show up.**

(and lest I end up ‘objectifying’ Trump supporters as prizes to be won, I’ll add that in the comments some people made pro-Trump arguments, and two people who were previously leaning Clinton said that they were feeling uncomfortably close to being convinced)

Another SSC story. I keep trying to keep “culture war”-style political arguments from overrunning the blog and subreddit, and every time I add restrictions [a bunch of people complain](#) that this is the only place they can go for that. Think about this for a second. A

heavily polarized country of three hundred million people, split pretty evenly into two sides and obsessed with politics, blessed with the strongest free speech laws in the world, and people are complaining that I can't change my comment policy because this one small blog is *the only place they know where they can debate people from the other side*.

Given all of this, I reject the argument that Purely Logical Debate has been tried and found wanting. Like GK Chesterton, I think it has been found difficult and left untried.



Therapy might change minds, and so might friendly debate among equals, but neither of them scales very well. Is there anything that big fish in the media can do beyond the transmission they're already trying?

Let's go back to that Nyhan & Reifler study which found that fact-checking backfired. As I mentioned above, a replication attempt by Porter & Wood found the opposite. This could have been the setup for a nasty conflict, with both groups trying to convince academia and the public that they were right, or even accusing the other of scientific malpractice.

Instead, something great happened. All four researchers [decided to work together](#) on an "adversarial collaboration" – a bigger, better study where they all had input into the methodology and they all

checked the results independently. The collaboration found that fact-checking generally didn't backfire in most cases. All four of them used their scientific clout to publicize the new result and launch further investigations into the role of different contexts and situations.

Instead of treating disagreement as demonstrating a need to transmit their own opinion more effectively, they viewed it as demonstrating a need to collaborate to investigate the question together.

And yeah, part of it was that they were all decent scientists who respected each other. But they didn't *have* to be. If one team had been total morons, and the other team was secretly laughing at them the whole time, the collaboration still would have worked. All required was an assumption of good faith.

A while ago I blogged about a journalistic spat between German Lopez and Robert VerBruggen on gun control. Lopez wrote [a voxspainer](#) citing some statistics about guns. VerBruggen wrote [a piece at National Review](#) saying that some of the statistics were flawed. German fired back (pun not intended) [with an article](#) claiming that VerBruggen was ignoring better studies.

(Then I [yelled at both of them](#), as usual.)

Overall the exchange was in the top 1% of online social science journalism – by which I mean it included at least one statistic and at some point that statistic was superficially examined. But in the end, it was still just two people arguing with one another, each try-

ing to transmit his superior knowledge to each other and the reading public. As good as it was, it didn't meet my five standards above – and nobody expected it to.

But now I'm thinking – what would have happened if Lopez and VerBruggen had joined together in an adversarial collaboration? Agreed to work together to write an article on gun statistics, with nothing going into the article unless they both approved, and then they both published that article on their respective sites?

This seems like a mass media equivalent of shifting from Twitter spats to serious debate, from transmission mindset to collaborative truth-seeking mindset. The adversarial collaboration model is just the first one to come to mind right now. I've blogged about others before – for example, bets, prediction markets, and calibration training.

The media already spends a lot of effort *recommending* good behavior. What if they tried *modeling* it?

IV

The bigger question hanging over all of this: “Do we *have* to?”

Harford's solution – compelling narratives and documentaries – sounds easy and fun. Robinson's solution – rhetoric and emotional appeals – also sounds easy and fun. Even the solution Robinson

rejects – violence – is easy, and fun for a certain type of person. All three work on pretty much anybody.

Purely Logical Debate is difficult and annoying. It doesn't scale. It only works on the subset of people who are willing to talk to you in good faith and smart enough to understand the issues involved. And even then, it only works glacially slowly, and you win only partial victories. What's the point?

Logical debate has one advantage over narrative, rhetoric, and violence: it's an *asymmetric weapon*. That is, it's a weapon which is stronger in the hands of the good guys than in the hands of the bad guys. In ideal conditions (which may or may not ever happen in real life) – the kind of conditions where everyone is charitable and intelligent and wise – the good guys will be able to present stronger evidence, cite more experts, and invoke more compelling moral principles. The whole point of logic is that, when done right, it can only prove things that are true.

Violence is a *symmetric weapon*; the bad guys' punches hit just as hard as the good guys' do. It's true that hopefully the good guys will be more popular than the bad guys, and so able to gather more soldiers. But this doesn't mean violence itself is asymmetric – the good guys will only be more popular than the bad guys insofar as their ideas have previously spread through some means other than violence. Right now antifascists outnumber fascists and so could probably beat them in a fight, but antifascists didn't come to outnumber fascists by winning some kind of primordial fistfight between the two sides. They came to outnumber fascists because

people rejected fascism on the merits. These merits might not have been “logical” in the sense of Aristotle dispassionately proving lemmas at a chalkboard, but “fascists kill people, killing people is wrong, therefore fascism is wrong” is a sort of folk logical conclusion which is both correct and compelling. Even “a fascist killed my brother, so fuck them” is a placeholder for a powerful philosophical argument making a probabilistic generalization from indexical evidence to global utility. So insofar as violence is asymmetric, it’s because it parasitizes on logic which allows the good guys to be more convincing and so field a bigger army. Violence itself doesn’t enhance that asymmetry; if anything, it decreases it by giving an advantage to whoever is more ruthless and power-hungry.

The same is true of documentaries. As I said before, Harford can produce as many anti-Trump documentaries as he wants, but Trump can fund documentaries of his own. He has the best documentaries. Nobody has ever seen documentaries like this. They’ll be absolutely huge.

And the same is true of rhetoric. Martin Luther King was able to make persuasive emotional appeals for good things. But Hitler was able to make persuasive emotional appeals for bad things. I’ve [previously argued](#) that Mohammed counts as the most successful persuader of all time. These three people pushed three very different ideologies, and rhetoric worked for them all. Robinson writes as if “use rhetoric and emotional appeals” is a novel idea for Democrats, but it seems to me like they were doing little else throughout the election (pieces attacking Trump’s character, pieces talking about how inspirational Hillary was, pieces appealing to var-

ious American principles like equality, et cetera). It's just that they did a bad job, and Trump did a better one. The real takeaway here is "do rhetoric better than the other guy". But "succeed" is not a primitive action.

Unless you use asymmetric weapons, the best you can hope for is to win by coincidence.

That is, there's no reason to think that good guys are consistently better at rhetoric than bad guys. Some days the Left will have an Obama and win the rhetoric war. Other days the Right will have a Reagan and *they'll* win the rhetoric war. Overall you should average out to a 50% success rate. When you win, it'll be because you got lucky.

And there's no reason to think that good guys are consistently better at documentaries than bad guys. Some days the NIH will spin a compelling narrative and people will smoke less. Other days the tobacco companies will spin a compelling narrative and people will smoke more. Overall smoking will stay the same. And again, if you win, it's because you lucked out into having better videographers or something.

I'm not against winning by coincidence. If I stumbled across Stalin and I happened to have a gun, I would shoot him without worrying about how it's "only by coincidence" that he didn't have the gun instead of me. You should use your symmetric weapons if for no reason other than that the other side's going to use *theirs* and so

you'll have a disadvantage if you don't. But you shouldn't confuse it with a long-term solution.

Improving the quality of debate, shifting people's mindsets from transmission to collaborative truth-seeking, is a painful process. It has to be done one person at a time, it only works on people who are already *almost* ready for it, and you will pick up far fewer warm bodies per hour of work than with any of the other methods. But in an otherwise-random world, even a little purposeful action can make a difference. Convincing 2% of people would have flipped three of the last four US presidential elections. And this is a capacity to win-for-reasons-other-than-coincidence that you can't build any other way.

(and my hope is that the people most willing to engage in debate, and the ones most likely to recognize truth when they see it, are disproportionately influential – scientists, writers, and community leaders who have influence beyond their number and can help others see reason in turn)

I worry that I'm not communicating how beautiful and inevitable all of this is. We're surrounded by a vast confusion, "a darkling plain where ignorant armies clash by night", with one side or another making a temporary advance and then falling back in turn. And in the middle of all of it, there's this gradual capacity-building going on, where what starts off as a hopelessly weak signal gradually builds up strength, until one army starts winning a little more often than chance, then a lot more often, and finally takes the field entirely. Which seems strange, because surely you can't build any

complex signal-detection machinery in the middle of all the chaos, surely you'd be shot the moment you left the trenches, but – *your enemies are helping you do it*. Both sides are diverting their artillery from the relevant areas, pooling their resources, helping bring supplies to the engineers, because until the very end they think it's going to ensure *their* final victory and not yours.

You're doing it right under their noses. They might try to ban your documentaries, heckle your speeches, fight your violence Middlebury-student-for-Middlebury-student – but when it comes to the long-term solution to ensure your complete victory, they'll roll down their sleeves, get out their hammers, and build it alongside you.

A parable: Sally is a psychiatrist. Her patient has a strange delusion: that *Sally* is the patient and *he* is the psychiatrist. She would like to commit him and force medication on him, but he is an important politician and if push comes to shove he might be able to commit *her* instead. In desperation, she proposes a bargain: they will *both* take a certain medication. He agrees; from within his delusion, it's the best way for him-the-psychiatrist to cure her-the-patient. The two take their pills at the same time. The medication works, and the patient makes a full recovery.

(well, half the time. The other half, the medication works and *Sally* makes a full recovery.)

V

Harford's article says that facts and logic don't work on people. The various lefty articles say they merely don't work on Trump supporters, ie 50% of the population.

If you genuinely believe that facts and logic don't work on people, you shouldn't be writing articles with potential solutions. You should be jettisoning everything you believe and entering a state of pure Cartesian doubt, where you try to rederive everything from *cogito ergo sum*.

If you genuinely believe that facts and logic don't work on at least 50% of the population, again, you shouldn't be writing articles with potential solutions. You should be worrying whether you're in that 50%. After all, how did you figure out you aren't? By using facts and logic? *What did we just say?* Nobody is doing either of these things, so I conclude that they accept that facts can sometimes work. Asymmetric weapons are not a pipe dream. As Gandhi used to say, "If you think the world is all bad, remember that it contains people like you."

You are not completely immune to facts and logic. But you have been wrong about things before. You may be a bit smarter than the people on the other side. You may even be a *lot* smarter. But fundamentally their problems are your problems, and the same kind of logic that convinced you can convince them. It's just going to be a long slog. You didn't develop *your* opinions after a five-minute shouting match. You developed them after years of education and acculturation and engaging with hundreds of books and hundreds of people. Why should they be any different?

You end up believing that the problem is deeper than insufficient documentary production. The problem is that Truth is a weak signal. You're trying to perceive Truth. You would like to hope that the other side is trying to perceive Truth too. But at least one of you is doing it wrong. It seems like perceiving Truth accurately is harder than you thought.

You believe your mind is a truth-sensing instrument that does at least a little bit better than chance. You *have* to believe that, or else what's the point? But it's like one of those physics experiments set up to detect gravitational waves or something, where it has to be in a cavern five hundred feet underground in a lead-shielded chamber atop a gyroscopically stable platform cooled to one degree above absolute zero, trying to detect fluctuations of a millionth of a centimeter. Except you don't have the cavern or the lead or the gyroscope or the coolants. You're on top of an erupting volcano being pelted by meteorites in the middle of a hurricane.

If you study psychology for ten years, you can remove the volcano. If you spend another ten years obsessively checking your performance in various *metis*-intensive domains, you can remove the meteorites. You can never remove the hurricane and you shouldn't try. But if there are a thousand trustworthy people at a thousand different parts of the hurricane, then the stray gusts of wind will cancel out and they can average their readings to get something approaching a signal.

All of this is too slow and uncertain for a world that needs more wisdom *now*. It would be nice to force the matter, to pelt people

with speeches and documentaries until they come around. This will work in the short term. In the long term, it will leave you back where you started.

If you want people to be right more often than chance, you have to teach them ways to distinguish truth from falsehood. If this is in the face of enemy action, you will have to teach them so well that they cannot be fooled. You will have to do it person by person until the signal is strong and clear. You will have to [raise the sanity wa-
terline](#). There is no shortcut.