

Rationally Speaking #156: David McRaney on “Why it’s so hard to change someone’s mind”

Julia: Welcome to Rationally Speaking, the podcast where we explore the borderlands between reason and nonsense. I'm your host, Julia Galef, and with me is today's guest, David McRaney.

David is the bestselling author of the books *You Are Not So Smart* and its followup *You Are Now Less Dumb*, two books with a lighthearted approach to the study of biases, fallacies, and the psychology behind them. He also runs the blog and podcast *You Are Not So Smart* and he's written for many publications such as *The Atlantic* and *Salon* and *Politico*.

Today, he's joining us to chat about a new book he has in the works with a topic very near and dear to my heart, how people change their minds. David, welcome to the show.

David: Oh, hey, thank you so much. What an awesome intro. I never believe any of that stuff when I actually hear it said out loud like that.

Julia: David, what got you interested in the topic of people changing their minds? It's inherently interesting to me.

David: I guess a million different things. I think this was the natural course of where I was headed with the things that I'm making, with *You Are Not So Smart* and *You Are Now Less Dumb* and the podcast and all the other stuff that I do, which is about biases and fallacies and heuristics and critical thinking and the same sort of stuff that you're interested in. I feel like the next step is always “why can't I get the person across from me to give up their irrational belief,” or “why can't I get the person across from me to accept this very obviously true evidence,” or “why is this person selectively believing one group of facts or figures or ideologies and not this other group,” especially with things like climate change.

I was on a panel once and we were talking about climate change and climate change denial and conspiracy theories and stuff. Someone had brought up how the same people who won't believe the facts and figures of climate change, even though there's so many of them on the side of the person trying to get that across, will accept facts and figures related to volcanoes, or geology, or where birds go when they migrate. So other scientific facts are easily digestible. Why isn't this set of facts?

All of those things were on my mind because, especially if I gave a lecture, what kept happening over and over again was in that question and answer section, people would say, "Okay, that's great. Now I understand what confirmation bias is. I got it. I will use that in the future, but how can I convince my dad that Barack Obama is not a secret Kenyan, Muslim, Illuminati terrorist robot..."

Julia: Lizard person.

David: Right, yeah. " This is my father. This is a person I love and respect and I can't get across

to this person."

If it wasn't that kind of appeal, it would be just being a citizen of the internet, talking to people on Facebook or Twitter or especially science communicators who are people who are in the hard sciences ... I'm going to be slaughtered by my social science friends, but people who are in the hard sciences often come up against this when they're actually dealing with human beings and they try to say, "Look, this is my life. This is what I do for a living. This is what I've done for the last 30 years. I've been to Antarctica. I've got core samples. I have the facts. I have them. I have the mountain of them and they're all on my side. Why won't you listen to me?"

All of that was in my mind and that's what led me to think there's probably something going on. It was when same-sex marriage, when attitudes in the United States and across the world concerning same-sex marriage seemed to flip very, very quickly, that's when I realized: I think if I could understand that, I could understand a lot of things about how people change their minds. That's what led me to begin this investigation and this really weird adventure I've been on, talking to people who have changed their mind in dramatic ways. I've been calling it an "about-face", people who were looking in one way ideologically and then turned looking in the other.

I've spoken to a lot of those people and then I've also spoken to groups who are, I would consider them professional mind changers, people who actually understand the process of either moving an individual or a group of people out of one belief structure into another, and the best way to do that, and what you shouldn't be doing. That's where I'm at.

You're catching me in the very middle of this. This is not a book that's finished, but I've done most of the investigative work. The best books are the books where you go in thinking you are just going to prove what you already believe and find the scientists who will validate what you already think, and then you get going and you're like okay, that's not how that works at all. I've been doing this wrong for a very long time, and so that's where I'm at.

Julia: There's been some mind changing on your part about mind changing, is that what you're saying?

David: Oh, totally, because my opinion from the beginning was that you can't. That's what I actually would tell people when they asked that question. I would say, "I'm sorry, you can't change that person's mind." All of these things that we talk about -- Dunning Kruger and confirmation bias and availability heuristic, like this is just how the brain works. And we have to deal with the brain that we're given, and some people's minds just can't be changed. We should work on people who are open to being changed or deal with what they call in political science "generational turn", just the idea that when the old people die, that's when things ...

Julia: The ideas die with them. It's a morbid view of civilizational evolution.

David: All of that's true, but none of that is the only course, and so there are ways to get across to people. And that's been the really interesting part of this whole thing.

Julia: What have you learned so far about how to close that gap?

David: I think that the way the book is going to be presented is in 3 concentric circles. One is how we develop our ideologies and beliefs and norms and folkways and all the things that constitute the immaterial culturally-influenced and biologically, the biopsychosocial framework of reality that we each carry around, so there's that part of it. Then how people come to believe that that model of reality is not sufficient and they are "wrong". Then what happens next, how people trade one set of models for another.

The way I'm doing that is with individuals and then in groups. It's interesting because individuals and groups change their minds a little bit differently. It doesn't scale up. A group mind change isn't necessarily a lot of individuals changing their mind. It has a different dynamic to it.

At the individual level – so, I'll tell you a couple stories because this is the best part of the book. One of the people I most recently spoke to is Charles Veitch, Charlie Veitch. I met him in Manchester at about 2 hours by train north of London. Some of your listeners may be familiar with this person. I was not familiar with this story until I started investigating people.

I really wanted to find people who had really, really changed their minds. I was really interested in trying to find people who had been swayed by the evidence because what you find, the first thing that I was wrong about, was that you can change people's minds with facts.

Julia: That you thought you couldn't?

David: I thought that you could.

Julia: You thought you could, oh.

David: I know that I shouldn't think that because it never works, but I thought that if you just could construct a really good argument with solid facts that were backed up by lots and lots of vetted, respected sources, that the weight of the evidence would cause the person to just crack and say, "Okay, I believe you." I thought that I was going to write a book about how to construct great arguments, how to be better at communicating the things that we currently understand, our current understanding of reality and the natural world, how to be better at communicating that. The first thing that everyone who researches this or is involved in the process of persuasion will tell you is that that is not ever going to work, that facts don't work on people and there's a lot of different reasons why.

Julia: Are there exceptions to this rule?

David: Yeah, that's what I was hoping for, is that what could I learn from a case in which somebody did do that. The first thing I did is I went to a Trump rally, so I went to a Trump ...

Julia: Really dove in to the deep end.

David: Right, so I went to the Trump rally in Macon, Georgia and my intention there was that I knew that Donald Trump had been lying in his speeches. This was at the time when he was talking about how that there were people jumping up and celebrating right after 9/11. He was saying they were dancing in the streets and stuff like that and that he'd seen the videos of it.

Julia: That's a nice topic to start with because it's a relatively simple factual question -- as opposed to an entire huge ideology about are the Democrats or Republicans better. It's actually pretty hard to zoom in and find a question you could actually settle.

David: Right, yeah, that's what I was thinking. Yeah, that's what I thought. I thought I just want to take something that's recent. It's so plainly right there, this did not happen. Hopefully, it's fresh on these people's minds and I can just walk right up to them and say, "What do you think about that?"

Anyhow, I'm setting this up so that obviously, I want them to resist me because I think it will be interesting to try to make sense of that on the back end by talking to experts who can explain it to me, but I was hoping that maybe some people would go, "Oh, okay, wow. What should I think about this?"

Here's what happened. I went there. We sat through the whole rally and I spent time with the protesters afterward. I spent time with the supporters beforehand. I spent time with the former mayor who was there with a group of really, really active protesters. It was a really amazing experience to witness this active, very raw conflict of ideology. I walked up to people and asked them lots of questions about why they supported Trump and what they were getting out of being there and everything.

Then I would hit them with this evidence. I would say, "So you are aware that Donald Trump was saying this about people dancing in the streets and I'm sure at this point you've seen that that didn't happen. Not even Fox News is supporting him on this. It just did not actually happen and he's just straight up lying about it. How does that make you feel?"

I would say it clustered in 3 different responses. One response was people would say, "Well, all politicians lie, so if he's going to lie, at least it's for a greater good." I would say there were relatively few people who made that argument, but it was a good way to get out of feeling icky and to avoid the cognitive dissonance of supporting a liar. I'm sure that many people actually do think that about their chosen candidate.

Then the next group of people I would try to put them in this situation and they would say that, "Well, I think it really did happen. I think there's a cover up. I think that what

Donald Trump is uncovering here is that the media lies to its audience," and all this kind of thing, so they had already entered into a conspiratorial thinking about why this evidence wasn't available.

Julia: Yeah, you never actually have to change your mind. You can always adjust other nodes in your network of interconnected beliefs, right?

David: Yeah, totally.

One of the big things that comes out of this is we develop models of reality ... This is a whole thing V. S. Ramachandran explained to me. Ramachandran, it's such a great analogy, the idea that the brain is trapped in this black box and can't see the world. It can't experience the world directly and so the way he made it make sense to me was to imagine you have a general looking at one of those war maps. You know how on Game of Thrones he's got the wooden map that he pushes the pieces around on or a Napoleonic War type map thing or if you've ever seen those people play ...

Julia: You're moving little tiny men around a table.

David: Right. He said to think of the brain as interacting with that, that the brain generates a model of reality that it then interacts with. That model of reality is obviously coarse, incomplete, and not even close to a one-to-one representation of what's actually happening out there in the world.

Julia: Right, necessarily so.

David: Yeah, it has to be, right, so how does the general make executive decisions? Advisers and scouts come into the room from doorways and they say, "Hey, this happened. Hey this happened." Then you move the pieces around on the map and it changes and now you're interacting with that version of the map. Our senses deliver to us, through coded communications, data that we then interpret as being this, that, and the other and that becomes an updated frame-by-frame, updated version of our model of reality. It's always incomplete and it's always insufficient, but it's good enough to get by.

If you're asking someone to change their mind, however you want to define that, if you're thinking of it as a norm or an attitude or an ideology or a belief or whatever, you're asking the person to change that model they have in the war room and say, "Look, you thought all those pieces were here, but they're actually here," or, "Look, I'm sorry, but there's actually a giant castle here in the corner that you forgot to put in there and that changes everything." There's all sorts of ways you can make it make sense if you're trying to picture it as an analogy.

What you can't do is just tell the person to wholesale throw away the entire model and put it in a new one. You can't copy paste. You can't hand them something completely new and say, "This is it. What you had is not it." You can't knock the leg out of the table. You have to quickly swoop in and replace that leg with another leg before the table falls over.

That's a big part of when you get into those discussions with people that you're trying to get them to change their mind on something. We often try to copy paste what we think onto the person and we think that'll work, but we use that model of reality to put things into context and make sense of them, but also to predict, to predict what's going to happen next, in the next few minutes, next few months, the next few years. It's a predictive tool and it's very useful and even if it's not great, even if it might be flawed, you can't ask this organism to completely destroy its predictive tool and replace it with another because it's so important. Anyway, I'm getting off ...

Julia: I'll just add one comment to this and then I want to take us back to the Trump rally, which we left in the middle of your explanation. We got all the way from the Trump rally to the war room. The comment I just wanted to make is that I think this excellent analogy you set up applies to the way science changes its mind as well. And I think pretty normatively so – like, the way that science changes its mind when it's working correctly, not when it's failing.

When data are discovered that contradict one of the reigning paradigms or reigning theories in a scientific field, like the astronomical observations that contradicted the model that the sun revolved the Earth, the geocentric model isn't thrown out immediately. Because anomalies arise all the time and usually they don't mean the model is wrong.

Over time, they build up, they accumulate, and so there starts to be some doubt cast on the original model, but you still don't fully abandon it until you have an idea of what could be better. It just doesn't get you anywhere to say, "Well, this is wrong," so you just work with the best explanation you have available to you at any given moment, even if it's probably not 100% true and then you move to a better one when you can find it. I think that's correct. And that's what the philosopher science Kuhn called a paradigm shift --

David: Totally, totally, yes, yes, yes. What's great is that all these people I've spoken to, whether they're mind-changers or mind-changees, they communicate that in some way or another, even if they're not familiar with Kuhn's work or with the idea of paradigm shift and change. The one thing you can't do is just say, "Well, let's just throw it all out and start over." That just never, ever happens. However the brain actually works, that's not an option. It's not going to happen.

Julia: I think people assume that you are supposed to do that. And that your options, when someone gives you a piece of evidence or an argument that contradicts your theory, that your options are either to agree that that is evidence against your theory and then therefore, you have to abandon your entire model, your entire theory... or to find a reason to dismiss the argument or evidence.

I think correctly people think that it would be overkill, or way disproportionate, to abandon their entire model in response to this piece of evidence. And since that seems like overkill, they think their only other option is to reject it.

But in fact, you have this third way, which is to say, "Huh, yeah, that is some evidence against my theory, possibly. I'll hold that in the back of my mind. I'll hold it in abeyance. If more stuff accumulates, maybe someday I'll change my mind about this, but I don't have to do it now." Having that third way I think actually does make mind changing much more feasible.

David: Yes. It's very rarely do people have this epiphany, completely changing everything in one second. It would be catastrophic to the organism. It would be catastrophic to any human mind to do something like that. In fact, the people that I've interviewed, I've interviewed some people who are former members of the Westboro Baptist Church. I've interviewed former cult members. I've interviewed a variety of people who have experienced that 100%, press the reset button, delete everything and start over and it was completely catastrophic. Their lives were ruined, and they're still scratching on the edges of a well, trying to get back to the surface because that is ... Whether it's intuitive or it's even biologically baked in, if there's any resistance to that it is justified because people that I've met who've done that have suffered tremendously for abandoning their belief structure wholesale. They all have extreme trust issues. How do you even begin to rebuild the nodes that create the network that help you make sense of the world if you've completely abandoned all nodes. It's very difficult to start back over again.

Julia: Although just to clarify, the point I was trying to make was that I think it is *epistemically* justified not to change your mind all at once based on a single argument or evidence most of the time. Not just that it can be *practically* justified because you don't want to overturn your life. But I also think that that's true.

David: Yeah, you're totally right. You hit on the same thing I hit on because I reread *The Structure of Scientific Revolutions* right after I actually went to Houston and met a woman who she was a very anti-LGBT activist. She infiltrated a transgender rights group in Houston because Houston is, as many places in America right now are going through, they're trying to figure out what is the best way to regulate bathrooms and stuff like that. In Houston, it was one of the first battlegrounds and they chose the path that probably won't be the path we go with. A lot of people were hurt and a lot of people suffered as a result of the political climate there.

She was actually a member of the people who were opposed to creating more rights for transgender individuals and so she infiltrated one of those groups. She actually changed her position and now she's an activist for the other side.

It was on that trip I was like, her explanation of what happened felt so like what Kuhn talks about that I went back and read the book. It's amazing the parallels between the way science changes its mind and the way if an individual is going to change his or her mind, it follows a very similar path, which is the whole thing doesn't go at once. Some anomaly here or there starts to make it so that your current model of reality isn't making as good of predictions as it should be making. It isn't leading to behaviors and interpretations that are giving you the kind of results that the model was giving you in a previous sociological environment. It necessitates that you update it and change it in some way so that you can continue to make good predictions and you can continue to

put things into proper context and it's very similar.

Julia: So, I'm going to give you a choice right now. There are two paths I'm interested in going down. One is to return to the Trump rally and find out what is the third category of people of response to your pointing out that this celebrating in the streets didn't happen? Or, I'm also curious about how this woman ... What were the anomalies that cropped up and what was the eventual shift, what caused the eventual shift? You can choose. Which story do you want to tell me?

David: Oh, okay. I'll navigate us a little bit here. The Trump rally, very quickly, the third type of person I would tell them about the people dancing in the streets and they would say, "What? That didn't happen." Then I would say, "No, your candidate, the person you're here to see, said that happened." They would say, "Oh, okay. If he said it, it's probably true."

Julia: Oh, no.

David: The third group of people I was telling them for the first time about this thing and they were incredulous, but then when I told them who said it, they switched immediately to supporting it and obviously ...

Julia: You just did some damage there. You took people who didn't already believe this false thing, went in to try to change their minds, and ended up convincing them it was real.

David: Yeah, totally, yeah. That falls in line with all the research we know about. If you watch a debate, whether it's for president or for a topic that you support, people always will go away thinking the person that they supported going in or the idea that they supported going in is still true or is still the winner or whatever. All that stuff will be in the book in different ways and it all relates back to what we were talking about with how scientific revolutions take place and how mind change takes place and everything else.

This woman that we're talking about, her name is Rudd. But... let me explain this. We also were almost in Manchester talking about Veitch. Let me tell his story really quickly and then I'll tell you what I've learned about how you can ease somebody through a mind change.

Okay. Veitch's story is particularly interesting because he was swayed by the evidence. If you're not familiar with this person, he was a person who was really quickly rising in the ranks of conspiracy theorists. I don't know if the people who listen to this or who listen to my show or who are involved in this world are aware of the other side of the coin, which is the people like Alex Jones and the people who go on conspiracy sea cruises. There's a world of "professional" conspiracy theorists who usher their followers toward the really real truth of the world.

Julia: Right, our bizarre-world twins, podcast twins.

David: Yes. They make a lot of money doing this and they have lots of fans and they sell

products and T-shirts and dietary supplements and they have YouTube pages that get way more traffic than the most popular shows on network television.

Julia: Yeah, the word twins makes it sound symmetric when it's not.

David: I went to a conspiracy theory conference as part of this book project and met people who do this. I sat through like a 3-1/2 hour presentation on the secret Nazi space program. I was just like... there were so many people there and they paid a lot of money to be there. The people who put those presentations out, they're celebrities, and there were lines of people taking selfies with them. There's so much of that out there.

That same conference, I went there to listen to Andrew Wakefield talk because he was there with the anti-vaccer groups were there too. Veitch was part of that world. He was a rising star. He's a good-looking guy. He's really tall. He's got a good voice, makes good videos, and he's the kind of guy who will just go up to the American embassy and just start yelling at them, "Tell us the truth about what really happened at 9/11." He was that kind of ballsy, just destined to be one of these Alex Jones-type people.

He became friends with Alex Jones. They were grooming him to be the successor for their group. He was getting involved with the Raelian people, all of it, but he was a truther, he was a big-time truther and he was making videos that were getting lots and lots of views. He was a thought-leader in that community.

The BBC made this really excellent program. I recommend everyone watch this program. It is so cool. It's called Conspiracy Theory Road Trip. I think they only made 4 episodes. You'll have to find it somehow on the internet. I don't know if it's available for purchase.

The first episode, they got I think it was 5, maybe 4, conspiracy theorists who believe that 9/11 was either faked or an inside job or something like that. They took them on a road trip to meet the people who designed the building, the demolition experts. They taught them how to fly an airplane the way the terrorists learned how to fly that airplane. They met with the head of the FAA and all these other people who are experts on what happened. They went to the Pentagon. They went and met people who were there that day who sifted through the wreckage. They met the mother of a person who called from the airplane and called his mom and said, basically, goodbye to her. They met that mother. It was a really interesting idea on their part because they just wanted to see ... It was an interesting idea for a reality show. You just try to see what happens, right?

Charlie went on this thing and he went to be the representative of the truther movement, to show "you're not going to trick me. We're right."

What happened is: one of his big sticking points was he didn't think that steel beams melt at that temperature or whatever, but he meets this engineer who actually uses LEGOs and stuff and shows him they don't have to melt. They just have to bend a little bitty bit and then the weight of everything above that bent point will come crashing

down. Charlie looks at that and he thinks, oh, that makes sense. I just didn't understand it. Now I understand it.

Charlie's telling me all this stuff and he's really animated about it, because it was a big moment in his life. Because he talks about how to do a controlled demolition, how difficult it would be to go to each beam and drill. You'd have to use this giant machine that's like the size of a car to drill into these columns and that takes a long time and it makes a lot of noise and it takes a lot of people and it would take months and months and months and months, if not years of work to do all this. You have to get to the beams, you have to actually go through an existing wall where people are working at their computers.

He sees all that and he's like, oh, I just didn't know that. Now I know that's true and that seems like that would've been impossible to set up. He learns about how easy it is to fly that airplane if you're not interested in landing it. It's just a couple buttons and just set the coordinates. The World Trade Center is a very big target to fly this thing into and then he ...

Julia: He had felt like it was implausible that the hijackers could actually fly --

David: Yes. Yeah, right. All these things that come up in the arguments of truthers, he goes through them basically line by line and meets the true experts on that topic and he listens to them. They tell him how it works and he's like, "Oh, okay."

I think the thing that really contributed most to him changing his mind was that he was with a group of fellow conspiracy theorists who weren't in his tribe, necessarily. They were in different denier groups than the truther movement. When the evidence seemed plausible to him, he listened to them hedge the way those Trump supporters did and it made him feel weird, so he was able to compare his gut reaction to their gut reaction and then watch them work themselves out of it. That made him feel really strange because he felt that no, we're here to learn and I'm actually actively trying to pursue whether or not I'm wrong about this.

The straw that broke the camel's back was that when they met the mother of a person who actually died in this tragedy and they had listened to the audio already of his last words to his mother, they all believed that it was faked in some way, either they did it with a computer and tricked her or that she, herself, was an actress or something. They spoke to an expert who said, "Yeah, maybe you could do this, but it would take a lot of work to make a computer version of this person's voice and maybe, I don't know, possibly."

They go to her and she is absolutely a real, honest, true human being living on a farm and she's horribly distraught and when she's telling the story of losing her son and hearing his last words right before he dies and living through the fame of that moment and the ... It's not just losing your child, but you're reliving that entire experience every anniversary of this event with the rest of the nation. She's crying and Charlie's crying, but he looks at the other people who are with him and they seem to be like huh,

whatever. They're eye rolling about it. He said to me, he's like, "I just thought they were animals. And I realized that I was in a cult. I was in a cult that -- for you to deny it at this point seems cult-like." Not only was he swayed by the evidence, but he had the benefit that many of us don't have when we're isolated at our computers, of actually being right next to people who are not being swayed by the evidence that you are being swayed by.

The finale of his story is that he went on YouTube before he was even finished filming that show and said, "You know what? I think I've changed my mind." The response was people all throughout the internet are still trying to ruin his life. They went so far as to find his sister's Facebook page, find pictures of his nieces and nephews. Someone, some people Photoshopped their actual real faces onto child pornography and then sent that to his mother by email. His mother, not being a technologically savvy person, thought it was true and real. This is how far people went just because he said, "I think I've changed my mind."

Again, if people have an intuition that if you do an about-face, if you're part of a pretty tight-knit community that has a very strong, dogmatic ideological perspective, if you feel there's going to be some fallout, there is, even in something like this that is just like people talking about stuff on the internet. It's so bad that at this point, to be able to have a job, he's had to change his name. He's gone dark on the internet for more than a year now and he's had to just completely change his entire life because he changed his mind about this one concept.

That's an example of the kind of stories that I'm trying to tell in the book. I've got a number of individuals who've gone through a dramatic mind change and sometimes it was epiphanous. Sometimes it accreted slowly over time. Sometimes it took a strong outside force to slap them and say, "Look, here's what's happening." Each one is a little bit different, but none of them are, except for Charlie, involve straight up the evidence changed their mind. It's a crazy story.

Julia: It really is. It's a little bittersweet. It's bittersweet for a number of reasons, partly because of the blowback that he got, but also because it feels like it gives me a bit of false hope.

I heard this story recently about a fan of some singer who wrote him all these adoring letters and posted about him online, just like millions of fans do. He actually ended up reaching out to her and dating her. This story is a 1 in a billion, basically, but this gives false hope to all of the many teenyboppers writing fan letters hoping that, "It happened to her --He could write me back and want to date me, too!" I feel that way a bit about the Charlie story, that his reactions were exactly what we always dream the reaction is going to be when we show someone the evidence.

David: What I hope to illustrate with Charlie's story is that if you want for the facts to work on people, just the plain facts, that's how far you would have to go. You would have to actually take them and put them on an airplane and take them to a ... An internet link to a thing that you found on Google, it's not -- it has to be so powerful. The person must come in contact directly with the evidence if they're a strong naysayer. That's how far

you had to go.

Julia: Although even that, I think, would not work on most. I think Charlie is still an exception.

David: Right. Out of 5 people that went, he was the only one that it worked on. Of course, the truther community thinks that he was a secret agent the whole time now or that he was an infiltrator or that he was put in room 101 and they electrocuted his genitals and made him change his mind or some weird stuff like that.

I know we've talked about so much stuff. I'll tell you really quickly what I know that does work.

I've talked to a number of professional mind changers, or people who are simply just academics, who study this side of how people think. I think the most compelling group that I've spent time with is the Leadership Lab in Los Angeles. The Leadership Lab is division of the Los Angeles LGBT Center.

Here's basically what happens. You go to the front door and you say, "Hello. My name is David McRaney. I'm here with the Leadership Lab and today we're talking to registered voters in your neighborhood about a law that we might be voting on in the future and that law is whether or not people of the same gender can get married, same-sex marriage," something like that. Then they ask the individual to rate how they feel about that issue, for or against, on a scale of 1 to 10. This is for research purposes in that it quantifies everything, but it also has a much more important purpose, which is that the magic of asking someone this is in the follow-up question.

I could ask you this about anything. I could ask you do you think the new Star Wars movie is a good movie and if so, how strongly do you feel about that, 0 to 10 or whatever. I could ask you this about any issue whatsoever that you've ever had an opinion about in your entire life. But let's say you're asking somebody about same-sex marriage and they say, "You know what? I'm a 3. I don't think it's the worst thing in the world, but I don't think it should be legal." Then a follow-up question is: why is that the right number for you?

That is strangely an incredibly powerful statement and question to ask someone because all the research into attitude and attitude change says that we almost never, ever do this. We carry around what you would almost consider a meta belief. We have a belief about our belief, and that belief that we have about our belief is that we have acted like Gandalf and gone down into the bowels of whatever academic source and we've pored over the data and we've looked at all the original documents and we've written in our journal, a-ha, this is what I think about this. But we've never really actually done that for most things. Instead, we just had a belief that we've done that, and we have this emotionally charged opinion that is almost -- it seems the purpose for having this opinion is to not have to spend time thinking about it. It's heuristical.

When you ask a person, "Why is that the right number for you," this is probably the first time they've ever thought about this ever. And they have to actually try to put it into

words and try to dig in and go hmm, why do I think that. That starts a conversation. Their technique is 80% listening and 20% talking. They'll then present the counterargument or supporting argument. They'll show whatever the opposition is saying at the moment. It might be an advertisement. It might just be something somebody said. Then they'll take them through a number of other questions like, "What was the first time you ever heard about this issue," say, if it's same-sex marriage, like, "What was the first time you ever actually heard about homosexuality or same-sex marriage or anything related to this? What was your first contact with this idea?"

Usually the person will see that it's received wisdom, that it was something they were taught often as a child. Their opinion is not something that they completely own. It's something that maybe was handed to them from an outside source. Then they ask the person to try to think about experiences that they've had with that issue and if those experiences match their position or if they have some sort of dissonance there. Oftentimes, that's what you'll see. Very rarely you have people have actually had any negative experiences with the issue at hand.

A big part of this is that you're, at the same time, sharing very personal, intimate stories with the person and creating this atmosphere of vulnerability and honesty and there's no judgment whatsoever. The reason is that this is ... Hugo Mercier, in his research, he calls this an implicit attitude change. In that what you're trying to avoid here is an argument of any kind, and if you're only sharing stories with someone and they're only sharing stories with you and you're only talking about things from the perspective of real, lived experience, there's no way you can argue with that. Because you're just trading information back and forth. If no argument takes place, no conflict takes place and no threat takes place and there's no potential for the backfire effect to set in.

What they find is that really what you're doing is you're facilitating the person giving birth to their, for the first time, an actual opinion about this. They actually can own a real opinion that they have created and they do it in a way that saves face. It happens on their side of the equation, privately, in their head, without you having to see them feel, inside their mind, "oh, wait. I think I might be wrong about this," that it never has to come out and be displayed in the conversation.

If it's done in that way, privately, then what you've allowed that person to do is see that their model of reality is insufficient or it has pieces on the board that aren't actually there. They're not real. They can then update their model of reality privately and change their attitude without suffering any sort of social consequences or shame.

What they found with this method, at least, it works a lot. The actual percentage that is a moving target right now, but it's not like 80%. It's going to be on the low end. It's like in the 12%, 15% or whatever, but when people ...

Julia: Yeah, if you claimed 80%, I'd start looking for fraudulent research methods.

David: It's a low percentage, but as the political scientists who study this tell me, anything above 0% would be pretty amazing because people don't typically change their minds at

the front door in a short conversation especially about a wedge issue. The movement will often go, especially in the videos that I've watched, it'll go from a 3 or a 4 all the way up to a 7 or an 8. It's pretty astonishing.

This has lots of implications and I know we've talked about this for more than an hour and I could go on forever, but this technique, many people come and visit that lab and then go out into the real world in their own ways to try to apply it. Right now, actually, this coming month, there's a group of researchers who are going to be using this exact same technique to talk to people who are climate change deniers and see if you can move somebody through that topic in a way that avoids confrontation and argumentation, sticks with real, lived experience, and gives the person an opportunity to form an opinion that they may not have ever actually legitimately had in the first place.

That's one of 3 or 4 things that I point out in the book that I think really does work and there's a way to apply it to other things that are more empirical and less purely ideological or politically-based. That mixed with a lot of things that I've learned from the scientists who study things like the backfire effect and the authors of The Debunking Handbook and all these other independent actors who are studying the exact same concepts, they all seem to be coming to the same conclusions. I'll have them as a easy-to-follow guide in the book mixed with these interesting stories of people's lives who've changed their minds.

Julia: There are still more Trump rallies happening. You could go out and start putting this into practice tomorrow for the sake of your country and the entire world.

David: Yeah, I want to go to a Trump rally and one-on-one, each individual person, take them through.

Julia: That's all fascinating and pretty exciting, but to be honest, the thing that was going through my head as you were describing it was "Oh, I can't wait to try this on myself." I want to go out and find opinions that I have that I have not actually examined.

David: This is the biggest epiphany for me is that if you talk to a political scientist, they're like yeah. This is their 101 stuff, but if you're not familiar with political science, you wouldn't know about it. Most people don't have any idea why they think what they think or most people carry around a lot of opinions that they've never contemplated. They think they have, but they haven't. That's the biggest hurdle for trying to create a grassroots campaign or trying to get somebody to support a candidate or whatever you're doing in the political world, one of the biggest hurdles is to just simply get people to realize that they don't have informed opinions about stuff, but they have a meta belief that they do. I would imagine that's true for just about everything.

Julia: All right. I'm going to have to put my foot down and wrap up this section of the podcast because we've gone on pretty long, but it's been a great ride. On that note, let's move on to the Rationally Speaking pick.

[interlude]

Julia: Welcome back. Every episode, we invite our Rationally Speaking guest to introduce the pick of the episode. That's a book or website or something else that influenced their thinking in an interesting way, so David, what's your pick for today's episode?

David: My pick is: You Are Not So Smart as a whole project began ... I had a minor in psychology, a major in journalism, and obviously had a great interest in psychology and just talking about it with people at parties and road trips and stuff. I remember very clearly watching Derren Brown do a person swap experiment. This was a long time ago at this point, more than 10 years ago, around 10 years ago when he did the person swap experiment, and I saw it probably in like 2008 or somewhere around there, so I saw it on YouTube.

It's from one of his specials where he goes up to people on the street and asks them to give him directions to a landmark in the city. As they're giving him directions, he has two people walk between them carrying a giant portrait. Actually, it's a portrait of Derren Brown. One of the people holding the portrait switches places with him. Sometimes it's a different gender. Sometimes the person has a different skin color. Sometimes they're very tall, very short. It's just a different person the person was just giving directions to. In the special, they never notice. They just keep giving directions.

I remember watching that and just thinking there's no way that's true. There's no way that's true. That's totally bonkers. I went and thought "let me find out what this is based on," and I found the work of Daniel Simons, Christopher Chabris. They're the guys behind The Invisible Gorilla. Their research, they actually did the person swap experiment for real as part of their research. It's not a large percentage of people, 20% to 30% of people don't notice that the person has changed that they're giving directions to. I think in their research, actually, they had to turn in a piece of paperwork. It was set up to be in a college classroom environment, but still, I was like that's not true. It really opened my mind up to this whole wing of social science that investigates how our intuition about our perceptions doesn't match our perceptions, so how they actually work.

The whole idea having all this confidence in how we make sense of reality and make sense of ourselves that doesn't actually match what we do in the real world, it led me to the work of Daniel Kahneman right before he put out Thinking Fast and Slow. It led me to Daniel Simons, Christopher Chabris' work right before they put out The Invisible Gorilla. It led me to Dan Ariely's work right as he was putting out Predictably Irrational and so that one YouTube video was the door that led to that entire wing of psychology.

I would say that for me, even though I've contributed to that in a very small way just by communicating what scientists have said, the book that I feel like is the best book about all that came out very recently and it's called The Unpersuadables. I would push everyone listening to this to read that book because I think it's the best book about that world that's been written. It also was a huge inspiration for what I'm working on now because Will Store wrote a book about people who seem to be impervious to evidence,

impervious to persuasion. He just makes this great tour of the world of people who can't be persuaded. He goes deep into the same research that I was just talking about, but puts it into a completely new light. I really think that's a very cool ... I think I gave you five things to think about, but those are all things that ...

Julia: We'll link to the picks that you mentioned.

David: I would say in that world, I didn't know this, but far before the current surge in books about that topic, there was a great book that was called How We Know What Isn't So. Carol Tavris has a great book called Mistakes Were Made (But Not by Me). Both of those are predecessors to the current wave of books about this topic that I suggest people take a look at.

Julia: Excellent. David, thank you so much. It's been a pleasure having you on the show.

David: Ah, so much fun. Thank you.

Julia: This concludes another episode of Rationally Speaking. Join us next time for more explorations on the borderlands between reason and nonsense.