

# **Opinion Science Podcast**

Hosted by Andy Luttrell

How Minds Change with David McRaney March 14<sup>th</sup>, 2022

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# Adam Mastroianni:

I think like probably many projects in science, this started out of spite that, for some reason, I've just always been bothered when people are like, oh, yeah, things are so different now than they used to be. And I'm always like, well how do you know? So for me, this is essentially vanquishing in debate all the people who ever said, it used to be this way and now it's this way. And now I just will email them the paper.

# Andy Luttrell:

That's Adam Mastroianni. He's a postdoctoral scholar at Columbia Business School. And in some of his recent research he's been looking at how much public opinion in the United States has changed over time.

# Adam Mastroianni:

The first thing I did was take advantage of a bunch of work that other people did over decades. So like, Pew, and Gallup, and the American National Election Studies, the General Social Survey, have truly been doing God's work in asking the same questions year after year. Like this, I think, is precious, precious data. Because once the past is the past, like we can't go back and ask the questions anymore.

# Andy Luttrell:

So he compiled a big set of data on actual public opinion on dozens of issues like climate change, racism, gender roles, abortion, smoking... And for each of those issues, you can plot out the changes over time in the average opinions of actual American people. But that's only the beginning. Because what he's really interested in is not necessarily how opinions have changed...but in how much everyday Americans think public opinion has changed.

# Adam Mastroianni:

And then we got a big nationally representative sample of people and showed them verbatim the questions that have been asked over the years.

# Andy Luttrell:

Like for example, since 1978, polls have been asking people whether they would vote for a woman as president of the United States. And so Adam would show people this exact question and ask:

What do you think was the typical opinion back in 1978? And what do you think the typical opinion was by 2010? So he can get a snapshot of how public opinion has actually changed over time when it comes to more than 50 issues...and how much people think opinion has changed. And when the data were in, it was clear...

# Adam Mastroianni:

People really don't know how public opinion has changed in roughly the past 50 years. And that's not just to say that people are inaccurate, meaning that, you know, their guesses are all over the place, but they're also biased. So even if you average everybody's guesses, that average converges onto an answer that is the incorrect answer.

# Andy Luttrell:

So to our example, people thought that in 1978, only 32% of Americans would say they'd vote for a female president and that by 2010 that figure would have increased to around 70%. But in reality, 74% of Americans said they'd vote for a woman in 1978, and 96% of people in 2010 said they would. People just had no idea that this is what opinions looked like between the past and the present. And like Adam just said, some of people's guesses are just pure error—just randomly throwing darts and missing the bullseye. When it comes to people's beliefs about how much opinions have changed over time, they're off--

# Adam Mastroianni:

... by about 22 points on a 100-point scale, which I think is quite a bit but obviously, it's up to you whether you think that's a lot or not.

# Andy Luttrell:

But as the trends show, there's also something systematic about how wrong people are.

# Adam Mastroianni:

On a majority of attitudes, people overestimate the amount of change. They get the direction right, but they think there's been more change in there really has.

# Andy Luttrell:

So yes, acceptance for a female presidential candidate has increased over time, but it's nothing like the story of massive change that people are imagining. And there are other issues where there actually has been a lot of change but people don't quite realize it. Like same-sex marriage—there has been a monumental shift in acceptance between 1988 and 2018, but people underestimate how big a shift it's been. And then there are issues where...

# Adam Mastroianni:

...people got the direction of change entirely wrong.

# Andy Luttrell:

Like gun control. On average, people think that support for gun control has increased over the last 30 years when in reality, support has been going down. And there seems to be some logic behind all this, which is that it seems as though people's view of the world is that opinions have been getting more liberal—more open to racial and gender diversity, more supportive of gun control.

But this march from a super conservative past to a more progressive present doesn't quite map the reality. And it's not that people overshoot how progressive the country has gotten...

# Adam Mastroianni:

...it's that they don't appreciate how liberal the past already was. People have a stereotype that the past is more conservative than it actually was. And so they underestimate how liberal the past was by a lot. They underestimate how liberal the present is by a little bit. And if you put those things together, people overestimate how much of a liberal shift there's been.

I think this matters a lot because our beliefs about how opinions have changed over time, I think form part of our stories that make sense of why things are the way they are and how they could be different or how they should be different. And so for instance, one of the attitudes that really surprised me was on these feeling thermometers, the question is, how warm Do you feel toward black Americans? And answers to that question have not meaningfully changed since 1964. And knowing that, I think it really complicates your story of like, well, how did racism play out over the last generation in the US? If you if you think the story was white people hated black people, and now they don't anymore, that's not borne out by the data. But obviously, there is some difference, right? We don't live in 1964 anymore. The material conditions are different. So why did that happen if it didn't happen by some change in antipathy? I mean, psychologists, I think, have known this for a long time that obviously racism isn't just antipathy that there's all kinds of other attitudes in there. But I think for regular people thinking about the story of our country, I think that story changes when you see these attitudes change over time.

# Andy Luttrell:

You're listening to Opinion Science, the show about our opinions, where they come from, and how they change. I'm Andy Luttrell. And as Adam Mastroianni's work shows, we are largely ignorant about how much and whether minds really change. Sometimes we think minds have changed more than they have, sometimes we don't realize that minds have changed as much as they have. One person who was shocked to find out how public opinion has changed is our guest today, David McRaney.

# **David McRaney:**

I saw a Pew poll where they showed the lines of support and oppose over time flip. And they—it flipped so fast. And I—all this stuff at the same time in my mind, I was like, "How could all these people change their minds about this issue so quickly?" ... I thought if the majority of the country could get into a time machine and go back just 5 - 10 years, and if they met themselves, they would disagree with themselves so vehemently that they'd probably argue with themselves and get angry.

# Andy Luttrell:

So he decided to write a book. Since everyday people are so out of loop on which opinions change and which ones don't, maybe a deep dive into the psychology of opinion and persuasion alongside the stories of people like former cult members who've gone through huge transformations in their beliefs can be revealing. The book is called How Minds Change: The Surprising Science of Belief, Opinion, and Persuasion, and it comes out in June. David is probably best known for his previous books, blog, and podcast, all under the name "You Are Not So Smart." He does a really great job covering psychology and neuroscience through all these forms of media and reaching a huge audience around the world. It's definitely worth checking out his stuff. But I was excited to meet up with David to pick his brain about how he got wrapped up in the world of social science, what prompted this new book on persuasion, and what he's learned about how minds change...

# Andy Luttrell:

The Dave McRaney origin story seems compelling to me in that it seems like it was not like a, "Hey, I've always wanted to host a podcast about psychology," so what was the thing? Actually, just to back up a second, when I talked to Rich Petty, who you talked to for your podcast, and I was like, "Hey, do you remember talking to this guy? And did you know he's writing this book about persuasion, and it sounds very cool?" And he was like, "Oh, I do remember talking to him and my main impression was I was really surprised at how much he seemed to know about persuasion psychology." And so, how did you get here?

# **David McRaney:**

That feels good.

# Andy Luttrell:

How did you get to the point where you could hold your own against people who are sort of living and breathing that stuff as a career?

# **David McRaney:**

Oh, wow. I need to go take my cup of coffee and look at the horizon for a minute after that. That's the best compliment ever. I mean, I'm an autodidact dilettante. Like the best of the internet citizens have been since the beginning. I started out; I went to school to be a psychologist. I was interested in therapy and stuff like that, but also I got really into the humanist psychology domain while I was going through that program, and then the real start, my real origin story is that there was a poster, like just some printed out thing that the school newspaper had put up all over campus, and it just said in big, bold type, "Opinionated?" With a question mark. And it said you should write for the school newspaper.

And I was like, "I'm opinionated. I would like to do that." So, I wrote some very sophomoric, cringey thing about how Starbucks had taken over the school's coffee shop. They were turning it from the school's coffee shop to a Starbucks and I made some sort of corporations are destroying the world kind of thing. But I made it funny, or tried to make it funny, and they liked it a lot, and then they said, "You should write more." And I was taking these psychology classes and there was this... We had just recently learned that when people, and I don't know if this has failed replication since then, but there was this study that had come out where people had... When your football team loses, your sperm count goes down. And our football team had lost every one of its games so far, and so I thought I could write this funny piece about how... It would... Almost like an Onion article, where I'd say, "According to science, the sperm counts on campus are at their all-time low," and then I would explain in a funny way about this is based off this research paper. And in my... My Latin professor said, "Have you seen this?" He told the class, "Have you seen this article?" And he thought it was really funny. And he didn't know that I had written it and I got this

enormous rush of dopamine, right? I was like, "Ah! This is super validating." I was like, "I really would like to do more stuff like that."

So, I was already learning so much about psychology in the way that it was busting up a lot of my misconceptions about how we actually work. Not just the stuff you're used to doing in a psych 101 or early psych stuff, like Asch, and stuff like that, but it was deep, weird things that most people have never heard of, and I was just obnoxiously telling my friends, "Actually," it was a lot of that in car rides. So, that was kind of on hold, and then I decided I wanted to write for the school newspaper, and I did, and then I quickly... The news editor position came open. I went for that. I became the news editor. And then the year after that, the executive editor, like the person who runs the whole newspaper. That position came up, and I went for that, and I became the executive editor, and I really just went fully into journalism.

And I took an internship at a really small newspaper over the summer when I was still a psych major, and when I went to go work for them, their main reporter had just quit, and they said, "You know, I know you wanted to be an intern, but would you like to just be hired as a reporter?" And I was like, "Okay." And they said, "Okay. Well, here's your desk, here's a camera, and here's your notebook. Could you go to the city council meeting tonight?" And I just immediately was working at a small newspaper, and I loved it.

And I just fell in love with a sort of style of journalism that they allowed for there. It was literary journalism, where you really try to tell a story. You try to humanize the people in the story. It's not just facts, and figures, and inverted pyramid. And when I came back to school I was like, "I just want to reinvent our school newspaper to do that kind of stuff." And so, that was my life for a little while, and I graduated, and I went to work for a big newspaper, and then from there I went on to work for a television station.

This is where part two really comes in. At the television station, the position that was open was for someone to teach broadcast journalists how to write for the web, because that was a thing at the time, and so I was sort of reteaching everything I had learned in journalism school to people who had taken a different track, and-

# Andy Luttrell:

When roughly in time was this? Like when-

# **David McRaney:**

2007, 2008, and then they were like, "Hey, social media is a thing. Could you run all of our social media?" Well, that became weird because they wanted me to curate their Facebook page, which is like today, that would be done in a very... That would be a totally different kind of thing. But they were like... You know, I was in the Deep South. I was in Mississippi. And things like same-sex marriage and all sorts of race-related issues, and politics, and they were all there, and people would get very aggressively, awfully trolly on an early internet that nobody understood at that institution. And so, I really started to see people, the up closeness of people arguing with one another, and being crazy to each other, and being difficult to maintain, and I even had people try to... I had death threats to me personally for curating... There was a discussion about climate change, and I

expressed what the meteorologist working at the station had to say about it, and that led someone to come to the station, and we had to get the police to like-

# Andy Luttrell:

Physically arrived at the station.

# **David McRaney:**

Yeah. Because their comment had been removed. And this was like early internet stuff, right? So, they came, and so I was just sort of in the trenches of all that, and all of this encouraged me to start a blog that went back to the psychology that I loved, but I wasn't doing anything like that anymore, and I also wasn't writing anymore. So, I started a blog that combined the two things that I didn't get to do anymore, psychology and writing about stuff. I was watching a lot of The Daily Show, and Jon Stewart had this phrase that he would like to do as a punchline. He's like, "Not so much," basically, and it was like there was this whole surge of blogs about one very tiny thing at the time. Stuff White People Like, Look at This Fucking Hipster, Shit My Dad Says, Awkward Family Photos, and I thought it would be cool to have a blog that was about one very tiny, specific sliver of psychology, which would be cognitive biases.

And lucky enough for me, nobody had done this yet, and so I started... I said it would be cool to call it You Are Not So Smart, and at first it was just sharing YouTube videos. The very first one was the Derren Brown Person Swap experiment, which is a sort of theatrical version of change blindness, and I was just like... For me, that was like a super illustrative thing to show people because if anyone's never seen this, it's somebody asks for directions on a college campus and then two people pass between them with a large object, like a door, or like a big painting or something, and one of the people holding the object switches places with the person who was asking for directions. So, now it's a completely different human being standing in front of you asking for directions, and they measure whether or not people notice, and they debrief them and ask them, and in the theatrical version of it they just sort of film it and make people look silly.

So, my takeaway from that was like if you don't notice that, you probably don't notice a whole lot of what's going on around you. You probably have a very broad, good enough view of reality that you live off of, and the change blindness is a gateway to a whole other world of psychology. So, that was the idea. The way it became a thing, the way this became my entire life, was I got into an argument with some of my friends about whether the PlayStation 3 or the Xbox 360 was the better system, and we got so angry that we got mad and we just got furious with one another, and it made me feel like why would people get mad about something like that? Why would we get mad about this box of wires?

And it made me wonder, I'm sure there's some psychological literature about this, so I looked up stuff about identity. This is way back. This is like 2008. And it was identity, and branding, and at the time it was very popular on the internet, they call it fanboyism, and it's still a thing. People still argue this way. Now it can be Marvel versus DC, it can be anything. Apple versus PC. Whatever it is, your Android versus iPhone. And so, I read an article about that, and it talked a lot about Apple, because the ads were going around at the time which was, "I'm a Mac, I'm a PC," and the blog Gizmodo had just stolen the iPhone prototype that was out of the time at a bar and it was a big news story because Steve Jobs wrote them an email and said, "Give me back my iPhone,"

which they then turned into another story for the clicks, and they asked if they could republish my blog post, which is crazy. I had like 3,000 people who were following this thing.

I said, "Sure, go ahead," because it was about a 1,500 article about why people get so angry about brand loyalty. I assume they just had like a Google alert for Apple stuff and that was there, and they tossed that into the mix, and then the next day I had like 300,000 people on the website, and I was like, "Oh, shit. I should write some more stuff." So, I wrote something about learned helplessness and I put a bunch of new content up, and it was enormous the number of people that were reading it, and sharing it, and it was going everywhere, and I just made it my afternoons after work every day was to put out more and more content there, and I started developing a style of writing which was down to earth, funny, translated in a way... Not too much inside baseball stuff. And I found myself reading research papers all day, every day, and so I was basically like working on a master's degree in a weird way. I was just reading research papers about everything related to reasoning, decision making, judgment, and putting out tons of content.

And it was not too long after that I started getting emails from book publishers or agents who were like, "This could be... There's a lot of blogs being turned into books." All the blogs I had mentioned a minute ago had become books and they were like, "You should be in this game." I was like, "Sure." And they gave me a few months to write it, and I put it out. That book became just wildly successful. It's like in almost 20 languages now and it's crazy, and it was just the right place at the right time.

And the end of this origin story for how we got here is I was... They were like, "The book did so well, write a second one." And my agent said sequels to books like this don't usually do very well, but do it, but you need to promote this one heavily, and so I thought, "I don't know how to promote this except for podcasts have become a cool thing. What if I started a podcast that promoted the book, the second book?" And I just named it You Are Not So Smart because the title of the first book and the blog were all the same, and I thought that what I would do is I would interview the people that had been mentioned in all these essays, and blog posts, and everything, and that started it. The first episode was with the researchers behind... It was Dan Simons, and it was the change blindness, and I was like, "Let's get into it. What are we talking about here?"

And I found that this was like everything that I had built up, my journalistic stuff, and my psychology stuff, and understanding how the internet worked, and how to publish stuff to that kind of audience all came together really well in podcast form. So, what I had for myself was I was reading research papers all the time, then I was inviting the actual scientists on to get deep dives, and they would tell me you should look at this, you should read this, and it just became a whole world where it became my beat. And so, for more than 10 years now I've just... That's my professional life, is reading the science, translating the science, and then hanging out with the scientists themselves, and that's how it all happened.

And so, I continued to... From this point forward, I'm like, "I want to make new stuff." So, You Are Not So Smart will continue to be a thing, but I'm doing these side projects now that are coming into their own right, like the genius documentary, and this new book that is sort of outside the domain of just hardcore let's talk about biases, and fallacies, and heuristics, and that kind of thing.

# Andy Luttrell:

So, to go back to two of the things that stand out, one, I was gonna say, so I've heard you mention the Derren Brown aspect of the origin, that sort of entry point.

### **David McRaney:**

Yeah. And he blurbed my first book. I just blurbed one of his recent books, which is a really wild come-full-circle thing, right?

### Andy Luttrell:

That's so cool. I'm an enormous fan of him and have been for a long time. And in some ways, he's also part of my psychology origin story too, which is some of this Simpatico, which is that... So, I was a magic, and yeah...

#### **David McRaney:**

Oh, yeah.

#### Andy Luttrell:

That was like my whole thing growing up, and working at magic shops, and going to restaurants, doing magic there, doing shows.

#### **David McRaney:**

That's so cool.

### Andy Luttrell:

And I sort of discovered Derren Brown's work, and I was like, "Oh, okay. This is very interesting." I sort of went full into that sort of offshoot of the magical arts, so to speak, and it was really sort of this decoding of like what if this... He keeps calling this psychology, but how much of it is and how much of that is the deception, and how much of it is the story? And as a writer, and as a speaker, and as a performer, he's just amazing. And in some part inspired by that, several years ago I wrote a book for mentalists about psychology.

#### **David McRaney:**

That's awesome.

# Andy Luttrell:

To be like, "You guys keep talking about psychology like you know what you're talking about, but you kind of don't. You're kind of making it all up. So, like if you want to know, this is what it is."

#### **David McRaney:**

That's awesome.

#### Andy Luttrell:

And so, yeah, so very, very cool to see that be sort of a... Because I also think he's been a champion of legit social science, as well.

# **David McRaney:**

Yeah. A lot of Derren's shows are actually like him... He collaborates with Wiseman on the backend and then he figures out a way to theatrically present some of this stuff, and same with me. I didn't expect for so many magic and mentalist people to be in my life, but I just recently spent a weekend at Brian Brushwood's place, and he's become a good friend. At that period of time when my stuff first came out, there's a skeptics movement which has become kind of... has evolved since then. But a lot of the magic people were in there. People like Penn & Teller, definitely Brian Brushwood and his crew, and Matt Dilahunty also, like a lot of them are in Texas of all things, and since I'm not too far from Texas, I've been able to go out there, and they're deep into all this. They're huge consumers of the kind of content we make. And then they also are always thinking how can they create better shows.

And then I think there's been an interesting merging of that over time. Plus there's a... Magicians love con artists and con artists are a really great way to explore how we do and do not make sense of things, and how easy it is to trick people by letting them trick themselves, by letting people assume they understand what's happening in front of them and they go with that narrative, and not interrupting it. So, I feel you, man. That's awesome. I love that you did that.

# Andy Luttrell:

And part of how I got interested in the kind of psychology I do was sort of that skeptic-psychic crossover, which is like how are people forming confidently held beliefs about the facts of the world based on stuff that everybody else can see is just a phony show, right? And so, that's sort of why I was interested in belief confidence, and certainty, and those sorts of things. Anyhow, so I just wanted to mention that.

# **David McRaney:**

No, that's awesome. I love all this. This is my favorite stuff. And I remember Penn & Teller's Bullshit was a really... was out around the same time I was starting You Are Not So Smart, so there was something in the air. There was that wave and then Predictably Irrational came out, Thinking Fast and Slow came out. That was good for me, too. Thinking Fast and Slow was like the, "Hm, yes," but people read the first three chapters and not the rest. And then mine was the coffee table book you would get along with that, that you would... It was really helpful for me.

But I'd always wanted to, like I want to be able to write books like that. I want to get up in there. So, it's been great to sort of... I was just in the right place at the right time several times. A lot of luck.

# Andy Luttrell:

Well, that moment in 2008, 2009, felt like a blogging heyday to me.

# **David McRaney:**

Yeah. Yeah.

# Andy Luttrell:

I remember I had my little Google reader setup that I'd open up every morning.

# **David McRaney:**

Oh, yeah. I miss that so much. I miss that so much.

# Andy Luttrell:

Catch up on my blogs. Yeah.

### **David McRaney:**

Everything's been turned into a shopping mall, but Medium is a close second to all that, but I feel you completely. I agree. I was there when blogs just hit, and caught that bubble before it burst, and then I was there when podcasting just hit, and I don't feel like this bubble... It's not about to burst, but it is about to be corporatized hard. There's lots of companies who are making... The independent producer has to make a choice here and feel how are you going to compete with Pushkin, and Gimlet, and how you are going to compete with Joe Rogan, and that kind of thing. So, I just keep making my things. I am a big believer in just I make the show that I want to listen to, and I make the show that if I start getting on it... I've become really recently very fascinated with math. I didn't necessarily struggle with math, but I certainly didn't enjoy it. And I realized it's a huge area of ignorance for me, and so I've just been inviting mathematicians on the show to explore that. It's been great.

It's a show that started out only about biases. Now we're exploring like what can we understand about how minds make sense of anything by understanding how did we discover this, and create this language, and what does it do for us, and all that. So, it's been great. I will always have You Are Not So Smart as the centerpiece, as sort of the galactic core of all the other stuff that's gonna orbit it from now on I think. I hope.

# Andy Luttrell:

And you have a book coming out.

# **David McRaney:**

Oh my God.

# Andy Luttrell:

Pretty soon. And it's called How Minds Change, and my first hard-hitting question for you about this book is why call it How Minds Change and not How to Change Minds? Because it seems like that is a very subtle difference that really changes the scope of what that book is about and how you'd approach it.

# **David McRaney:**

I am so happy you're asking that question.

# Andy Luttrell:

So, yeah, why How Minds Change?

#### **David McRaney:**

There's a short answer, and then as I am wont to do, a very long one. So, the short answer is I started the book wanting to understand how minds change, not how to change minds. And that was

because I, like I said earlier, I had been so involved in curating social media for a big media company, and also I lived in the Deep South, and I saw the reactions around me to a lot of issues that were changing in the world. And one of those things was same-sex marriage, and my very first job before any of this as a teenager was delivering flowers for my uncle, who is a gay man, who was very closeted at the time, and he had to be because he lived in a very small Southern town and his being out was dangerous.

And his landlord actually bullied him over the fact that he was gay, and my father defended him in a very let's say roughhousing kind of way. And I saw that as a young man and I had LGBT friends, and I had a lot of people in my life who were being affected by that issue in the Deep South, where at this period of time, if you lived in say New York, or Los Angeles, or San Francisco, or something like that, you were much farther along the arc of social change than I was in, but I was a person who lived on the internet and I was seeing both worlds simultaneously. So, this was just something that had fascinated me and when I first started in 2015, 2014, there was all this talk about... There was all this arguing online about same-sex marriage and I saw a Pew poll where they showed the lines of support and oppose over time flip, and it flipped so fast, and all the stuff at the same time in my mind, I was like, "How can all these people change their minds about this issue so quickly?"

And I had this strange thought experiment that came into my mind about it was 68% of America was opposed and then 68% of America was in favor, and that happened over the course of 12 years, but most of it happened over the course of 2 years. And I just was like, "What do you mean?" These people were so adamantly arguing against this and now they're like, "Oh, I'm sorry. I was wrong about that." And then I thought if they all got into a time machine, the majority of the country could get into a time machine and go back just five to 10 years, and if they met themselves they would disagree with themselves so vehemently they would probably argue and get angry, and I realized I had never seen anything in the scientific literature, even though I had been talking about all this for ages, about what happens in the brain, and then by extension what happens in the mind when somebody changes their beliefs or attitudes?

And I just wanted to know everything there was about that, and I envisioned a book that would just talk about social change in that regard, because when I looked into the... I asked some political scientists about the same-sex marriage thing, and they said that yeah, that's the fastest recorded change for a social issue public opinion, but most of them are like that. They said that when it came to support for Vietnam, or for cigarettes, or suffrage, or civil rights, or a million other issues, usually what happens is there's a status quo and then it flips very quickly in about 12 years, and it took the same shape as punctuated equilibrium in evolution. Long periods of stability punctuated by extreme and quick changes.

And the same thing was happening, was that the environment changes so much that people have to adapt psychologically to the changes in the environment. And then I'm like, "Oh, God. Well, what changes that?" And it seemed like this infinitely nested thing. I was like, "That should be a cool book." But then as I started writing the book, the internet started to mature, and we had everything from Donald Trump, to Brexit, to post-truth entering the dictionary, the cover of Time Magazine saying, "Is Truth Dead?" and when I would tell people about this book idea I had and that I was working on it, they would often ask like, "Well, surely some of those people that you're talking about had somebody change their minds. What did that?" And so, I realized that people in the public were also interested in persuasion, and persuasion could come from anything. It can come from experience, it can come from activism, it can come from propaganda, and marketing, and PR, and advertising, or it can come from just interpersonal communication, deliberation, argumentation, and that's my overarching idea was that of like explaining psychologically and neurologically how brains update, and change, and admit their wrongness however you define the word wrong.

I felt there was also a strong component of like explaining how you would encourage that change, why people resist it when we argue with them. And what really led to that being a bigger idea within the book is that right as I was getting started, this article came across the wires from the New York Times about this group of people in Los Angeles, called the LGBT Center of Los Angeles, had this group called the Leadership LAB. LAB stands for Learn, Act, Build. And they had developed this interpersonal persuasion technique, this conversational model where they would go knocking on people's doors and in about 20 minutes or so on average they could flip somebody's opinion about something, about wedge issues, but what I remember most was that the articles that were being written about this were like... It turns out you really can change people's minds. There was surprise, right? There was this shock in the public sphere. "Wait, you can change people's minds? I thought people were unchangeable, unmovable, that it was ridiculous to even attempt it."

And so, I was like first thing I need to do is fly out there and talk to these people, so that was how I went out there and I spent all this time learning their techniques, and watching them do it, and it started to become clear to me that to understand how minds change, one of the great ways to do it is just actually watch people change their minds, and then take that back to scientists and say, "What did I see here?" And that became the sort of the framework of the book, which is odd. And believe me, it's been difficult to thread that needle for the reader, because I want to talk about how minds change. You want to talk about how to change minds. And I'm like, "Well, first you have to understand how minds change before we can even get into it, but I hear you. We'll do both." And that's sort of the tone of the book.

# Andy Luttrell:

Yeah, and you take a very expansive, more expansive than I maybe expected, so I just finished the chapter that sort of weaves epistemology, and like, "What is knowledge?" You go, "Whoa, whoa. Are we starting there? What is knowledge?" But you have to, right? If we're gonna figure out the grand picture of how this stuff unfolds, those are the kind of fundamental questions that are at the heart of it.

So, was this... I always pose this question and I always know it's not... It's just so strawman-y, right? Like was it a linear progression from my idea, I learned this, I learned that, I wrote a book, versus what was the path that it took to sort of figure out like, "Oh, this is what persuasion looks like on the ground, but here are the questions I have to ask." But those questions raise these new questions. Can you kind of chart out like what the form of the book, how it changed from that first idea to what it is now?

# **David McRaney:**

Oh, my God. It changed so much. This is nothing like the book that I started out... There's this old poem I remember about... I wish I could remember the name of it, but the poet says they wanted to write a poem about oranges and they ended up writing a poem about revolution, and war, and disease, and losing your parents, and then at the end of it they're like they didn't even mention oranges, but they titled the poem Oranges, and I thought that was really... Yeah, no it was not linear. There are moments within, and I put them in the book, where there are some linear progression moments, but no, I was going forward and backwards because what I did not know is that I didn't know.

I didn't realize how wrong I was about this topic, and there were a few things that stuck out in that regard. One was I was doing that thing when I would argue with people about what I thought were fact-based issues, I thought that I was arguing the facts. But really, what I was missing was that we were talking about this person's attitude toward this issue, and I was... When I went back and read all the research into the early days of persuasion research, back all the way to the World War II anti-propaganda stuff with-

# Andy Luttrell:

Hovland?

# **David McRaney:**

Yeah. Hovland and the Yale Attitude Change project, like that's what... I was like, "Holy shit, they also did the same thing." In the early days of research into persuasion, they believed everything was about learning. It was the information deficit model and they thought that you just teach people the facts and they'll change their minds because they'll naturally come to the same conclusions I have come to after looking at this stuff because they are compelled by the same things I'm compelled by, and their reasoning will match mine, and naturally so, they'll see the same things I see.

And words like belief, and attitude, and value, and opinion, were used interchangeably as if they were talking about the same mental construct, and I found that in the lay public and in myself, I was doing the same thing. If I was trying to convince someone that a certain politician was not a good person, I thought that I was arguing the facts of the matter. But really, I'm arguing I feel this way about this person and I'm cherry picking the facts to support my argument, and my argument is built off the fact that I feel very strongly about this, and I can go deeper than that. I feel strongly about this because of my identity, and my blah, blah, blah, blah, my values.

That was behind the veil of ignorance for me in the beginning and I had to discover all those things from myself and then move to the science of it. Another big thing was in the beginning, I thought I would just go to scientists first, like I remember talking to one researcher who I was like... He studies belief, and I was like, "So, tell me, could you define belief for me? Pretend I'm five years old." This old journalistic trick. Pretend I'm five years old and explain what a belief is to me.

And he said, "Oh, that's a big question." And I was like, "How long you been studying this?" He's like, "About 40 years." And you can't define the thing you study? He's like, "That's why I can't define it. Because it's way more complicated than that." And that's what led me to think the better

way to write the book is to go out and see things in person, and then bring what I've seen back to scientists and say, "What are you looking at here?" So, that was one element that went back and forth.

Another big element that went back and forth was when I did meet people who were activists in different regards, I would notice that the ones who did A-B testing over the course of years would settle on a sort of a step one, step two, step three type presentation, and their steps were the same, but they had never met each other. They had not studied the science behind it. And their steps were very similar to things like motivational interviewing, and cognitive behavioral therapy, and then deeper than that, they were very similar to some of the ideas in elaboration likelihood and so on. And I was like, "Oh, all of these people are seeing the same patterns and adapting to the patterns in much the same way that if you're gonna try to build the very first airplane, no matter where you are on Earth it's gonna kind of like the same because physics is the same everywhere on Earth. Or if you're trying to build the first buildings, often cultures tend to build pyramid-like structures at first because that's a thing that you can build very big and won't fall over.

It's not that aliens came and told them how to build things. It's that that's how you build things when you don't know how to build things yet. And I started seeing these persuasive techniques were similar in that regard because brains work the same way. Then I was like, "Well, why would that be?" And that's what led me into people like Mercier and Sperber, who have this grand theory of interaction, or the interactionist model of how argumentation evolved in the human brain to deal with group level reasoning and group level problem solving. And then when I was spending time with conspiracy theorists and former cult members and things, I was seeing patterns there about identity, and that led me to the research where you put people in MRI and challenge their identity and you get a really different response than if you're just telling them something they didn't know about the Great Wall of China or something.

So, all these things were happening parallel and there wasn't a linear path through it to me. It was just so much stuff and I couldn't find a starting point, and the book went all over the place, until I went to NYU. Something came along the wires which was there were people who had figured out why people saw the dress differently. And then I had the... As we were talking about earlier, I was like, "This is a really, really common thing that we all got to experience, which is really, to me, illustrative of what I'm really trying to get at here."

# Andy Luttrell:

The dress being this photo of a-

# **David McRaney:**

The dress. The dress. I'm sure people remember this. I haven't met anyone who hasn't remembered this. It's so universal. It's like global. It's like species-wide, we all experienced this thing. So, dress that some people see as black and blue, and some people see as yellow and white or gold and white. And if you see it that way, you don't see it the other way. And if you never talked to another human being, you would not know that you could see it another way. But when you do meet someone who sees it the other way, you go, "Excuse me? What's wrong with you?" And then they're like, "No, what's wrong with you?" And now you're having that kind of argument that I feel like we often have, where we're seeing two different... Our brains are constructing two

different realities from the exact same inputs. And I wanted to understand that, and sure enough when I went to NYU and spoke to the researchers who studied that, Michael Karlovich and Pascal Wallisch, they had developed a model out of that called SURFPAD, and in moments of... When you encounter novel information that is ambiguous, the brain will disambiguate that information based off your prior experiences, both sensory modalities and beyond. Basically, saying your experiences in a moment of ambiguity may lead to a different conclusion than it will for me, and when we meet each other, we will disagree, and then that paired perfectly with the work of Mercier and Sperber saying what do we do in moments of disagreement? There's an actual sort of evolved response to disagreement in which we can properly sort out how we're going to build a world view based off the fact that you have a different perspective than I do, and we have nothing... There's nothing we can do about it.

I feel this way, you feel this way. It's happening to me. Then the work of Robert Burton into certainty felt like very similar to that, because it's like certainty is something that happens to you. It's sort of an emotional state or a sub-emotional state where certainty is not something you can control. Either I feel... The certainty I feel happens to me more than it... I'm not actively choosing to be certain. And it all came together. I felt like there was an arc there and this was a pipeline to getting to how we do and do not change our minds, and then I could finally get into something that is sort of a grand, overarching concept, which is assimilation and accommodation, which is how we step-wise update our priors, and that became like I felt like if I could explain that in the first half, then you'll understand why a persuasive technique works the way it does because it has to play well with all of these psychological mechanisms that unfold when we're trying to make sense of things around us and build a more robust model of reality and update that model of reality in cases where you feel like we might be wrong, and wrong can be factually incorrect, perhaps morally or ethically incorrect, perhaps our attitudes should be adjusted, or perhaps we can't help but not like chocolate ice cream, but if somebody else does like chocolate ice cream, we won't feel compelled to say, "You're wrong." We can actually have cognitive empathy for the fact that maybe my brain works differently than you do, or my experiences led me to be this way.

So, that's how it all came together. It was not linear. Building this book was all over the place. It's why it took so long. And it took so long because I didn't want to start with my... I didn't want to do the thing of I have a catch phrase, or I have a folk psychology viewpoint, or I have a hypothesis and I'm gonna defend it. I wanted to actually try to understand it for myself and then translate that over to you.

# Andy Luttrell:

Oddly enough, it sounds like you were on your own assimilation accommodation journey in writing the book, right?

# **David McRaney:**

For sure. For sure. Because by the end of it, I'd really changed my mind about all of it. The book ends... I didn't send this over to you, but the book ends with after having learned all this and then learning a bunch of different persuasive techniques, there was this... I got a chance to go to this sort of unconference thing at a getaway in the far reaches of frozen Canada, and it was a group of people who all had... It was 40 people and all 40 people had to give a 10-minute presentation and we all had to give our presentations back-to-back. It was a sort of a stunt fun event thing, really

cool. Most of the people there were in tech. Most of the people there were in Silicon Valley type stuff. And I presented what I knew at the time. I talked a little about the Bruner experiment with the playing cards. I talked a little about assimilation accommodation, a little bit about the effective tipping point. All things that are in the first half of the book.

And I had just come back from Sweden, where I had spoken to Mark Sargent. He's a spokesperson for Flat Earth, and the organizers of this conference, they had me come on stage and sort of like in a friendly way challenge his beliefs on that matter. And I felt good about that conversation, even though I think I didn't do as good a job as I would do today, but I felt pretty good about the fact that he had, by the end of our conversation, said he could be wrong about it. And then, you know, we became real friendly afterward and I felt there was something nice in that.

At that conference, though, afterward, just as people were like, "Show us the technique. Show us these techniques. Show us the persuasion technique." And so, we had this lunch, or this dinner. We had this dinner, and it's in like a log cabin type thing, and everybody was there, and this one person, his name is Jathan, he wanted... He was like, "I'll do the technique with you. I'll be the person on the other side." And I said, "Well, you know, let's pick something that you feel very strongly about. Something that sort of guides your behavior, your actions, your life, and we'll investigate whether or not what you believe in this regard is the truth of it or how strongly held it is. You could possibly change your mind about it."

And he said, "Yeah, I believe in God. Let's talk about that." I'm like, "Man, that's the only... That's the one thing I don't want to do." Because, you know, this combines everything. When someone says they believe in God, are they talking about a fact-based belief? Are they talking about an attitude? Are they talking about a value? Are they talking about a norm? Are they talking about their identity? Are they talking about their motivations? I mean, when you're asking what do you mean when somebody changes their mind, what is it that is changing when you say before and after, in this case it's a confluence of all these concepts. And so, it's difficult to just sit down and try to persuade somebody, because I don't know exactly what it is I'm working on.

But I felt like everybody wanted to do this, and so we sat down to do it, and I started out asking him on a scale from 1 to 10 how... Actually, I did a scale from 0 to 100 of like how strongly do you believe this, and he said he was a 70. Some days higher, some days lower. And then as I had been taught, I said, "Well, was it ever not 70?" And he said, "Yeah, it used to be 0." And I said, "Well, what brought it up to 70?" And then he told me this incredible story about how he went to the holy land to become an atheist. He wanted to go there to destroy his beliefs that he had been raised with. And in so doing, he ended up embroiled in all sorts of weird stuff, like mercenary groups, and all sorts of things, and he had a lot of adventures, and he ended up going to the Holy Sepulcher, and the people there... There were a lot of sort of con-artisty-type people in that environment that he felt confirmed his suspicions, and he felt like he had done a pretty good job, and he was gonna leave having eradicated the holy beliefs that he had inherited from his family.

But then there was an alcove outside this holy building, and he heard someone weeping and crying from the alcove, and he walked over to see what was going on. It was a young woman who was lying in her vomit, and filth, and blood, and he would later learn had swallowed a lot of pills to kill herself, and she had a suicide note, and he later showed me the suicide note, which is covered

in blood. He had a very rough understanding of the language, but he scooped her up, and he ran through cobblestone streets as the sun was just descending over the horizon, and just panicked. He had no idea what to do. And he hailed a taxi, and he took her to a hospital, and they pumped her stomach, and they saved her life, and he eventually learned that she had... Her parents wouldn't allow her to marry somebody who was in an opposing religion to hers and she would have died if he hadn't done that.

And the information from her parents were in a little book she had with her, and he got them to come, and he eventually had dinner with them at their house, and she went on to become a nurse, and get married, and has children, and he still has contact with, and he tells me all this story. He's like, "I went there to destroy my faith, but I found a new faith in so doing this, because whether or not God exists, whether or not there is an entity beyond, a supernatural entity, whatever it represents was represented by that moment. And for me, I discovered what I personally believe is God in this." And when he told me that, I just... I was like I knew there's five more steps, and I can clearly, and anyone listening to this knows all sorts of ways we could pick that apart, and I felt there was zero value in that, because he had given me something in that story that... It was more powerful than anything I could ever try to take away. And I can interpret that story in ways that are really valuable to me whether or not I invoke anything supernatural.

And so, I told him I feel pretty confident that I could take you down from 70% with a couple more questions but let me phrase it to you like this. If I were to put a button under glass in front of you right now, and you could open up the glass and press the button, you go from 70 back down to 0, would you press the button? And he took a very long pause. It was a very pregnant pause. And everyone was... By the way, there's a whole group of people in an intimate surrounding watching us. And they had really leaned in for this moment and you could just feel the pressure of this decision he was about to make. And he looked up very soberly, and looked me in the eyes, and said, "No."

And I just closed up all my materials and said, "Then I think the conversation is done." And he stood up and hugged me, and I hugged him, and I can feel the tears in me right now. We wept. And then the crowd collapsed around us and also wept. And it was... I felt at that point in the journey of writing the book that this was the point of the book, that given there was a question I should be asking myself, but also anyone I would hand this book to, they should be asking this question first.

If you want to change someone's mind, why? And in that situation, I was sort of thrust into doing something I didn't want to do, but I was forced at the end to ask myself why would I keep doing this? And I found, I brought that to a negotiation expert that's a friend of mine, Misha Glouberman, and he said, "Yeah, that should be the first question every time. Why are you doing this?" Why do you want to change that person's mind? And because inside of that will be another why, and another why, and you'll get down to quarks and neurons eventually if you keep asking it, but he's like, "You should do that."

Because if you're not asking why, then you are sort of assuming that you should change that person's mind because you're right and they're wrong. And it made me think about the dress because with the dress, the truth of the dress is that it's not black and brown and it's not white or

gold. It's neither and both. Because it's a subjective reality being constructed by your previous experiences with light. It's overexposed, and the brain when it sees something overexposed will do as they say in neuroscience, subtract the luminant, and when it subtracts the luminant you get a downstream subjective experience of color. And if you've spent more time in sunlight, you will subtract blue as the luminant. If you spent more time indoors, you will subtract yellow as the luminant, and the result is one of these two things.

So, if I got into an argument with you about the dress trying to convince you that it's the way I see it, and you're trying to convince me it's the way you see it, if either one of us wins, we both lose. Because neither one of us will get to the deeper truth of the neuroscience as to why we're seeing it differently in the first place. And it felt like this was happening all across the conversations that I feel like people are frustrated with when it comes to... and why they even want to buy a book like this, because if I'm out to prove that I'm right and you're wrong in this conversation, then we will both lose out on solving the greater mystery of why are we disagreeing and what is it in the mind that leads to disagreement? And is there a deeper truth that we're losing out on because we're so connected to whatever motivation it is to show that my interpretation is the only interpretation?

And it came out of that, that became a sort of a step zero. Why am I doing this? And I deeply changed my mind about all this. As a science communicator, I don't... I do believe the Earth is round. I do believe we landed on the moon. I do think vaccines are a great invention and are safe. These things are important to me, and the truth is important to me in that regard, but I don't think I'm always in pursuit of the truth when I'm arguing with people about those issues. I was gonna be honest with myself. I'm out for something else. And oftentimes when I am a traitor to science as an institution, that's when it happens is when I'm arguing for something for reasons beyond the evidence, beyond the scientific practice.

I think oftentimes when we get into certain discussions, especially about values, and attitudes, and political issues, we will lean on the facts of the matter as that's why I'm arguing with you. And I don't think it is. Oftentimes, I think that is not. And that will prevent us from reaching the deeper truth or the deeper way of collaborating and deliberating so that we can pursue a better future for humanity and get off this planet and explore the stars.

# Andy Luttrell:

Well, that is a wonderful and inspirational way to wrap up, so David, thank you so much for taking the time to share your work, and the new book, and I'll look forward to seeing it come out.

# **David McRaney:**

Thank you so much for the opportunity, man.