

**Working With The Voice Transcript**  
**WWTV Episode 003**  
**Self Delusion with David McRaney**  
**June 20, 2018**

**Juliet Mee:** Hey listeners, I'm glad you're back! Working With The Voice is a course to learn to converse with the Holy Spirit and the material in each episode is intended to be background material for the following episodes, so it's best to listen in order. In the first episode, I told my story and how I came to this material, and in last week's episode, I discussed some of the studies behind this practice with Stanford researcher T.M. Luhrmann. To build on that information, this episode we will look at what we believe, how belief forms, how we commonly are wrong in many of those beliefs, and what it really means to change our minds. Our guest is David McRaney from the You Are Not So Smart podcast. Don't forget to go to [workingwiththevoice.com](http://workingwiththevoice.com) and sign up for the weekly email and instructions on the Daily Practice as well as many other great resources!

It was my first time to walk to the market three blocks up the street. My brother Jeremiah had just been born, so I was about five. My older sister Jennifer was seven and she didn't like me at all. That day she argued that she shouldn't have to take me with her because I didn't know how to cross the busy street that ran in front of the store. I really wanted to go and I probably got my way because with two of us girls gone, there would only be two toddlers and one infant left in the house with my mother. She had five kids under seven years old, four girls and one boy, all of their names starting with "J". Reducing the number of kids in the house to three probably looked like heaven.

Jennifer walked in front of me the whole way. I knew when we got to the busy street it was the most important moment of the whole trip. She looked back for me, waited, then took my hand and said, "Look both ways." I quickly looked left and right about ten times before Jennifer rolled her eyes and said, "Look left then right then left." I was used to her telling me what to do but couldn't help but ask why. She said simply, "The car coming on the left can hit you first." She then waited til there were no cars in sight, squeezed my hand tightly and we both ran across the street. We had to do it again to return home. I didn't even care that afterwards she dropped my hand and walked all the way home ahead of me. I was exhilarated by the new information. Look left then right then left. I knew that I could now cross the busy street by myself. When I got home, I went to my mother and asked, "How can I know which way is left?" My mother is a wonderful teacher and she explained the whole concept to me then took two pieces of paper from the big stack next to her typewriter, wrote a big "L" on one and a big "R" on the other, and taped them to the desk in our foyer. She told me that if I could memorize the way the desk looked, I could always know my directions.

In my mind, all of it occurred exactly as I said. I remember it as an important series of events that happened for real, in that order and I should know. That memory is my memory. Except, other than the facts of the names, it's probably all wrong. Memory is the faculty of the mind by which information is encoded, stored, and retrieved. The science of memories is clear. Just because you remember something vividly doesn't mean it's true. Of course, some information that we have stored as memories is accurate to the event, and some of us have better memory retrieval than others." Truth" can be elusive simply because there's not much evidence for our internal experience, however even something as personal as the concept of our memories can be studied. Studies show that as time passes, the accuracy of a specific memory decreases substantially. Although we know this reasonably, having our memories by others challenged can be upsetting. Our memories shape what we think we have

experienced and what we believe we are capable of in the future. So if we call our memories into question, we are forced to call into question the very foundation of who we think we are. Personally, I am glad to know that my memory may not be correct because it makes me write down important things and I can easily admit that I might be wrong without those notes. In fact, the science on memory leaves me wondering if my memory without notes is ever accurate. In addition, I am more than a bit uncomfortable around people who think their memory is always right.

How we learn and form opinions, attitudes, and beliefs is complex. Metacognition is thinking about thinking and specifically includes a critical awareness of our own thinking and learning and of ourselves as a human being who thinks and learns. Metacognition involves higher order thinking skills such as critical thinking for problem solving. Being a critical thinker implies that a person not only knows how to do something, but that they are someone who actually does it.

In *Working With The Voice*, I am asking you to listen and read material that is intended to encourage you to develop new practices that will inevitably change the way you think and therefore change the way you interact with the physical world. I'm asking you to change your mind. Under no circumstances am I asking you to stop asking questions or to stop critical thinking. In fact, it's just the opposite. I am looking for an audience who wants to do big things in the world through the help of the Holy Spirit. This requires that no matter your knowledge level on the subject of metacognition, you must increase your critical thinking skills and then put them into action. Becoming more specific will create differences in what you call "truth" and as you learn more, many times it seems like "truth" is a moving target. But just because digging deeper into these concepts is difficult on many levels that isn't an excuse for sloppy thinking. It's possible to become "less wrong" even if we can't be sure we are 100% correct. As a student, you need to first learn how to think, not what to think.

I know no better instructor on this subject than today's guest, David McRaney.

***David McRaney:*** *My name is David McRaney and I'm a journalist and author. I have a podcast called You Are Not So Smart which originally began as promotion for a book called You Are Now Less Dumb which was a sequel to my first book. You Are Not So Smart. It all started as a blog and the blog became a book and then the book became a podcast and I now have a third book on its way this year about how people change their minds. But most of what I do is about I call it a celebration of self-delusion because we talk about biases and fallacies and heuristics and social science and judgment and behavior and reasoning and all that stuff.*

***Juliet Mee:*** *I've been a fan of David's for a long time. And in all fairness to him, although he doesn't speak about religion much if ever on his podcast, I doubt that he's a fan of the subject. Religion seems to make the mind ripe for self-delusion. And that is exactly why I wanted David as my guest, not to argue with him but to impress upon everyone that if you want to do big things, and you want to employ the methods I propose, you must not look the other way when confronted with questions of the accuracy of your experiences. And heads up, you will probably consistently question whether you are hearing the Holy Spirit or not, and there should be no vilification of questions about this from yourself or from skeptical unbelievers.*

I believe that every intelligent person should develop and consistently use strategies to evaluate their thinking. It's the only way to formulate healthy beliefs. One of the strategies to check yourself that I would highly suggest is to listen to all of David's podcast episodes. On *You Are Not So Smart* David and

his guests cover lots of concepts in metacognition and they can give you a better and more thorough education in this subject than I ever could.

I first ran across David's blog when I was looking for an answer to a question that was baffling me. How can people elevate a very small amount of information in a subject to the point that they think they know as much as experts in the field? I was a school director and I personally interviewed every student who wanted to go into our massage therapy training program. Some potential students were really annoyed that they had to go to school for massage at all, because they were so good at it, all they needed was the certificate. That's what they would tell me with absolute confidence. And I would know in that moment that this student would be one of the hardest students to teach because their skills would be really bad and they wouldn't allow themselves to be corrected. Usually they would then tell me that they were really bad at taking tests. They would always know the material but tests just weren't their thing. Their ability to assess their skill level in comparison to the education we offered or to my mastery of bodywork was so low that many of them told me they thought they could probably help the teachers out. David's blog post on the Dunning Krueger effect changed the way I perceived not only the student, but myself. The missing skill for these folks was metacognition and that leads to the Dunning Krueger effect.

***David McRaney:*** *The Dunning Krueger effect is often mis-categorized as people who are incompetent or are so incompetent that they can't know that they're incompetent, like the incompetence is global so therefore it also spreads over into your estimations of how good or bad you are at anything, but that the true nature of the Dunning Krueger effect is that human beings are very bad at estimating their own intelligence and they're very bad at estimating their own skill and they are very very bad at estimating their on expertise in comparison to others. That runs in both directions. If you're a genius it's very difficult for you to accurately estimate how smart you are in comparison others and if you're a doofus it's very difficult for you to accurately estimate how smart you are in comparison to others. It's just that we're bad at estimating it in every direction. They saw a bank robber in the news who had covered his face in lemon juice and tried to rob a bank with his face covered in lemon juice. They caught him of course because they saw his face on the camera and as he was being handcuffed he was screaming to everyone, "But I used the juice! I used the juice!" and he had somehow got it in his head that if you put lemon juice on your face cameras can't capture your image and it might have been some somehow he had gotten confused over how disappearing ink works, or something because you use lemon juice with that. And supposedly he had done a test run in which he put lemon juice on his face and taken a photograph of himself with a Polaroid camera and the picture didn't turn out, and it was just a fluke and he, which of course is another cognitive bias that's confirmation bias... we could talk about it later. So he had assumed with great confidence that this that this technique would work. And so Dunning and Krueger thought, you know maybe this is a really great example of someone who proceeds with extreme confidence in a situation in which they are completely wrong and should have not done that. So they did a lot of research into this and he likes to compare it to something like America's Got Talent American Idol or something like that. And we've all seen of course they manipulate it oftentimes for the benefit of entertainment but oftentimes someone on one of those shows is so obviously not ready for prime time they're so obviously not a great singer and somehow over months and months of back and forth with the producers of the show, and getting ready and practicing, and doing stuff in front of their family and friends, and watching the same shows that we're watching, seeing the same singers we're seeing, listening to the same albums we're listening to, they still get in front of millions of people and perform horribly and poorly and they do not have the ability to sing at the level that they think they have. So the Dunning Krueger effect is when you you believe that you are more intelligent than you are and you believe are more skilled than you are because you're very bad at estimating your capabilities in comparison to*

others. And one of the reasons this happens there's I think there are two main reasons this happens. One of the reasons this happens is because if you've ever practiced anything like let's say you're trying to learn how to play guitar to go from having no idea how a guitar works to being able to play a song or a simple version of a song that's a pretty fast process within three or four days you can be singing you'd be playing a song that you thought would just be impossible and be magical to be able to play that. So the distance between novice and amateur feels like it should be about the same distance between amateur and master. At least for a lot of people. So you think if it only took me three months to be able to play most of the songs that I like, it probably will only take me three or four more months to be able to you know play crazy Jimi Hendrix solos, but that's not true. Mastery in most fields takes 20 or 30 years and so the distance between each level of ability is almost the distance of the entire endeavor leading up to that point again. And so that's so counter-intuitive for many people that they overestimate where they are on the spectrum from novice to master. The other reason this happens is because we have enablers in our lives, people who want the best for us and people who love us and people who don't want to cause social dysfunction and strife and so you can imagine that in many of the people that go on America's Got Talent no matter how skilled they are they have these cheerleaders all throughout their lives that are not giving them an accurate mirror of their own abilities. So the more skilled you are, the more practice you've put in, the more experience you have, the better you become at being able to compare yourself to others and as you strive to improve, you will better understand where you need to work and so the weird thing about the Dunning Kruger effect is that people who are actually masters have a good grasp of their own ability and because they've had so much experience comparing themselves to others whereas people who are amateurs typically have no idea how good they are in comparison to masters and so it's you can see how this translates to just about every aspect of our lives and I guess the nut of it is, it is true. People who are incompetent are often unable to accurately judge how incompetent they are and they will presumably proceed with an immense confidence especially in a western society like ours especially in American society. In American society and in Western society in general, individualism is a very central value and confidence is something that we both encourage and reward, whether or not there's anything behind it. There have been many examples throughout history of letting people get into positions of power just because they seem to be confident that they can perform that task. Confidence is its own reward in Western society. But when the stakes are high that's probably not a good way to pick your leaders.

**Juliet Mee:** Cognitive bias is at the root of a lot of the misconceptions in our thinking. These biases have been studied extensively in psychology and behavioral economics. These biases are specific and really quite fascinating because we all are prone to them. A cognitive bias is a mistake in reasoning that our brains make and they are systematic and predictable. They deal with our misperception of the information we receive. Have you ever taken a multiple choice test and chosen one of the wrong answers after being sure you calculated the problem correctly? This occurs because the test maker can predict what errors are common for people to make when evaluating that specific question. They then craft a question that at first seems to have an easy common sense answer. But the easy answer is wrong and to get it right you have to know how to think about the question. There is no way to eliminate all bias from our thinking, and the current Wikipedia page on Cognitive biases lists close to 200 different types of bias. An example of a cognitive bias is the "Omission Bias". This bias is the tendency to judge harmful actions as worse than inactions that are just as harmful because actions are more obvious than inactions. This bias is at the root of the vaccination issue that is raging now. The statistical probability of negative consequences because a parent chose not to vaccinate their child and the child got the disease is much higher than the statistical probability of harm due to side effects from vaccinating their child. But for some parents, to engage in the actual action of vaccination seems to be more wrong than to engage in the inaction of non-vaccination. Another example is that we tend to place greater blame on a

person who gets in an accident because they were driving drunk, an action, than on the person's friends who allowed them to drive drunk, which is an inaction. Omission bias is the mistake in reasoning that allows good people to feel justified in the moment they decide to not intervene in a potentially harmful situation. That's all pretty heavy, so I'll throw this in. Another common bias that is much lighter in tone is the "Ikea Effect" which is the tendency for people to place a disproportionately high value on objects that they partially assembled themselves, such as furniture from [IKEA](#), regardless of the quality of the end result.

**David McRaney:** *A cognitive bias is a predictable pattern of thought that we unconsciously fall back on in the best of situations to help us navigate a complicated or nuanced decision or a conclusion usually by trying to make the answers or the possible routes of behavior seem very simple and intuitive even though they usually aren't. Bias, you know, the root of the word just simply means to be tilted in one direction or another. Do we just by the nature of having the brains that we have just as a as we have built the world around having two legs being visual creatures or using language the brain works in a very specific way, the same way, in all human brains with lots of nuance lots of nuance cross cultures and lots of nuance across personal experience but on the broader view of things where you tend to be just because of the way that our brains are are set up to be biased to think in certain ways and not in others and many of those biases have been categorized and quantified by psychology over the last 70 or so years. By knowing how they work, we can both predict our own behavior and the behaviors of others. We also can create institutions or situations that are more likely to achieve the goals we'd like to achieve than we would if we were to create those institutions and situations based around how we would like ourselves to behave. It's always been important for me to get across to my audience that we get into a lot of trouble when we assume that we are not biased, when we assume that we will behave in the way we'd prefer ourselves to behave. The science says most of the time no. We're going to behave in a way that is cognitively biased in one situation or another.*

**Juliet Mee:** Brains have evolved to make the best use of resources. In Social science they say our brains are "cognitive misers". When we can get away with running on auto pilot, we will. An understanding of the concept of heuristics is an important concept that can be applied to understanding how we think.

**David McRaney:** *OK so a heuristic is this is a mental shortcut. So this is these are rules of thumb that we use to solve common problems. A heuristic can be something that you have learned over time through experience or through some sort of cultural input, or a heuristic could be something that seems to be common to all human brains. They make big complex daunting tasks seem tiny and easier to manage and we use them to trade accuracy for speed. So you basically solve a difficult problem by solving a simpler problem. And when you solve that simpler problem you often think you've solved the more difficult problem and really you've only made it easy yourself to think about it.*

**Juliet Mee:** The tendency to rely on an expert's opinion instead of thinking for ourselves is a heuristic and its especially easy to be influenced by a person who dresses the part and speaks using terms of a profession that are unfamiliar to us. That's not to discount the importance of professionalism, it's to acknowledge that its best to understand that we can be swayed by a person's appearance and patterns of speech as much as the content of the information if we aren't careful. In some ways, the Daily Practice process that I have designed and is available on my website is a heuristic. It is a short cut and many people aren't going to like that. My goals are not to turn you into a good church going Christian who understands the entire bible from Genesis to Revelations. My goal is to give you the direct information and practices that lead you to be able to hear the voice of the Holy Spirit. Although we will go through the life of Jesus from the records in Matthew, Mark, Luke, and John, I am not going to go

through the entire bible. I think that understanding the entire bible is very helpful to fully develop you spiritually, and if you need it, the Holy Spirit will direct you to do that. So the Daily Practice with its sequence of skills is a heuristic. It is a practical method to learn these skills but it is not guaranteed to be perfect or optimal, however it is sufficient to reach the immediate goal of hearing the input from the Holy Spirit. Mastering the Daily Practice does not mean that you have mastered the more difficult process of being spiritually mature.

Processing new information is hard for our brains. Certain types of thinking are much easier than others and because we tend to be a bit lazy, we easily develop blind spots. These blind spots are somewhat necessary to keep from being bombarded by all the stimulus and information being pushed at us. But knowing which system of thought that you are using is of great value. David explains a bit about a theory called "Dual Process Theory". Daniel Kahneman, who happens to be a Nobel prize winner, wrote a book called "Thinking Fast and Slow" about this concept. I have put a link on my website to a great video from Veritasium that explains this better than anything else I have seen.

***David McRaney:*** *Psychology and in economics and in a couple of other social sciences there's this dual process theory that is very popular right now. People in science are the first people to see this but it's now been quantified and studied in a way that verifies our assumptions. So in dual process theory there's System 1 and System 2 thinking and you may have heard of this. Daniel Kahneman's book about thinking fast or slow was all about this. He's the person who won the Nobel Prize in Economics for doing all the research into it, mostly into heuristics. System 1 is automatic, System 1 is what happens when we are running mostly on emotions. System 1 is intuition. System 1 reaches its conclusions very quickly but it's a very blunt tool. System 2 comes online when we need to think effortfully. So that's when we're solving a math problem or trying to like install a toilet or something like that where you can't run on autopilot until you've done it so often that maybe you're a plumber and you can use System 1 thinking almost completely to install a toilet and only someone who's naive even that will have to use System 2 thinking. So lazy thinking is sort of the funny thing about it is that our default mode. We use System 1 until we have to use System 2, because it saves energy and the brain gobbles up almost all the calories that we eat. The price of having such a gigantic brain that can do such amazing things is that we mostly leave it on autopilot until we need not to.*

***Juliet Mee:*** Usually, when humans first encounter something new we need to concentrate in order to learn what it means, what needs to be done to execute and succeed at it. This is very much System 2. However, through repetition and practice, the brain begins to reinforce the patterns of how it worked before, until it is stored in memory and can be done without concentration, almost on auto-pilot, which is System 1 thinking. The problems arise when the brain tries to solve problems which it hasn't encountered before using System 1, because they appear similar to something it knows or seems obvious and gives us a gut reaction. In these situations the brain is tricked into using a shortcut, a heuristic, and just feeling like the answer we came up with should be correct. This is also why people can resist new ideas and innovations when they first hear about them. It is uncomfortable to have to use energy to think through something new and different. It requires concentration and resources which the brain would rather not use up. And so the easiest thing to do when faced with these new ideas is for the brain to become defensive and say "I'd rather not bother processing that". If we do not understand this process, we can become unintentionally defensive or respond by saying, "I know". Many times the advice given to instructors about relaying complex information is to make the information as simple as possible so that people are not uncomfortable. To me, this thinking smacks of the enablers in the Dunning Krueger effect that were part of the reason that their friends went on American Idol and

embarrassed themselves. It's a hard trade off when you really want to help someone learn something new, to help them change their mind.

As a student, I do want the information to be clear. The material should be organized and relevant. If a visual can give insight to a concept better than an explanation, use the visual. But I also think that as a student, if I don't understand something, and the information has been clearly laid out for me, I might just have to put out the effort to listen to it twice, or do the practice even if it takes me a long time to do it at first. The best things to learn are usually going to require extensive System 2 thinking. So get used to it!

In western society we put a lot of value on coming to decisions quickly and being able to say, "I know!" whether we really do or not. Lessons in humility and metacognition from an early age would be helpful, but since we haven't had that, what can we do to diminish the effect of cognitive bias?

**David McRaney:** *While it's true that humans are capable of reason and rationality and skepticism and measured responses to complex problems we often fall short of those ideals and when we do fall short we fail to notice and proceed with a sort of undeserved confidence in our past performances. All the cognitive biases and heuristics and logical fallacies even are adaptive. So that's to say that over our long evolutionary history, these approaches to navigating reality have served us well. When you take a long view across millions of years it's better to be biased in these ways than not. It's in specific situations and environments that we've created recently that those biases are not as useful as a more rational approach. Now, even then though these biases are not necessarily the worst thing in the world. Our ancestors, we can speculate it was very dangerous for them to linger in doubt and the stakes were high. Today we live in mental environments that's much different than our distant relatives and so these default approaches get into trouble when our brains find themselves in unfamiliar and uncertain circumstances. So unaware of these biases we can make easily avoided mistakes. And so the real thing that I'm always trying to diminish and puncture and mess with and mitigate is the undeserved confidence. It is that bias blind spot. It's that assumption that we aren't biased that gets us into trouble. As you know the old quote, "It's not that what we don't know that gets us in trouble, it's what we know for sure that just ain't so. That's the problem."*

**Juliet Mee:** So how do people help change the minds of the people around them so that problems are solved more rationally?

**David McRaney:** *This gets to the very center of my new book is about. So you're absolutely correct. Like we oftentimes we say want to change somebody's mind. That's all well and good but what we really want to do is eventually change that person's behavior. If we think that person's a bigot, we want that person to behave in a way that's not bigoted. Be one of that. If you think that person is wrong about whether or not the earth is flat, we want that person, we don't necessarily need that person to change their their mind about that, we need them to change the behavior that flows from their concept of reality so that you know they vote in a way that is more likely to improve society so or create the society that we think is the better version.*

**Juliet Mee:** When we say we want to change people's minds, what we really want is to change their behavior. If someone is doing something detrimental to themselves or others, do we really need to know about the mental processes behind the change? Don't we just want the detrimental behavior to stop? Complainers, stop complaining. Messy people, clean the house. Overweight? Eat less and move more! It seems like people think they are a psychologically finished product, and although they might agree that they have some behaviors to attend to like overeating or smoking, it's a rare person who says

proactively, "I need to become more mature. I need to learn more about how I might be wrong and correct my beliefs. I need to update my priors and grow up!" Instead, they assess their situation and work to change specific behaviors without consciously changing their thinking. And this is efficient because it turns out that changing your behaviors is the best way to change your mind. It's easier to act yourself into a new way of thinking than to think yourself into a new way of acting. We do change our thoughts and beliefs, but these changes are invisible to us until we have already changed.

**David McRaney:** *Now the reason that this is invisible to us is actually a term for this in psychology is called The End of History illusion and in the end of history illusion the ideas that you've always become the final version of yourself that right now today you finally have figured it all out. And what you currently believe is what you'll always believe. You might have been wrong before but now you're finally right. Research into the end of history illusion shows that you can take people at any age 18 28 38 48 78 and ask them if their current favorite food, current favorite music, current best friends, current political attitudes are the right ones and they'll say, "Of course, yes". And do you predict that you would ever change your mind about those things. "Absolutely not". But the same people no matter what age if they just look back 10 20 or 30 years they completely disagree with the person they used to be. And so every decade at least we're changing our beliefs so much so that if we were going into a time machine and go back and hang out with that person we'd totally disagree with them. We'd totally get into an argument that person. We're constantly changing our minds, we're constantly realizing that we're wrong, we're constantly becoming wrong. Always a version that can look back on who we used to be and shake our heads about how naive that person was. You find it very difficult to imagine that in 10 years that there will be a person who looks back upon the person we are now and feels the exact same way. So we're in a state of perpetual wrongness. We're always updating. But to proceed as we were talking earlier with optimism bias we almost necessarily have to persist in this end of history illusion where our history has ended for us and that we're not going to change our minds and we only do once the bucket of abeyance fills up. And you know there are some things in life that will fill it up instantly. An anti-vaxers could talk to someone to talk to hundreds of people on the Internet and slowly fill their bucket up with all these counterfactuals to what they believe but if their child gets the measles, it might fill that bucket up in one shot and that's often how we change our minds.*

**Juliet Mee:** Do people have to experience a life changing event or do really hard mental labor to come to better solutions? There's some evidence that this will all take more conscious work than most people are willing to put in because one of the most common biases is confirmation bias. In confirmation bias, we tend to interpret new evidence as confirmation of our own existing beliefs or theories. We see this easily in other people when we are trying to shift a conversation. You can be lamenting the fact that the police in your town are stopping far more people of color for crimes than whites in your town and the racist at the table will say, "That's because they commit all the crimes!" We need to be aware of confirmation bias in ourselves and do our best to be balanced in our observations. It's common knowledge that the Google algorithms feed confirmation bias by giving us one top answer to our question, and if you use a virtual assistant like Alexa, that might be the only answer you are exposed to. If you want to know the date of Easter this year, no problem. But if you want to know what authorities the president has, you might not want your answer to come from the algorithm's first answer which is provided based upon your previous internet searches. Those searches identify your belief system more than you know and will provide you the result that matches what you already think.



A specific type of confirmation bias is something that David has been instrumental in popularizing. The Backfire Effect. The Backfire Effect is a finding that sometimes facts tend to make people “more wrong” in their beliefs, not “less wrong”. It seems that being given information that contradicts our beliefs has the tendency to make us double down on our own wrong answer. How can this be?

**David McRaney:** *These two new these two scientists Thomas Wood, Ethan Porter. They took the original backfire research. If for people who are unfamiliar with that what they did it was during the Iraq war and they took people aside who believed that weapons of mass destruction had been found in Iraq and they showed them the reports that weapons of mass destruction had never been found in Iraq. And they reported they believed even more strongly that there were weapons of mass destruction. They also took people who believe that vaccines cause autism and they showed them the facts surrounding vaccines and those people. This is where we get into the weeds of what really is happening here. When they corrected those people who believe that vaccines cause autism with counter factuals and counter arguments and information that showed that that's not true. They found in their research that they those people did correct their beliefs. They did move in the direction, they did soften their incorrect factual accounts and strengthen their correct factual accounts. But they also reported they were even less likely to vaccinate their children than they were before receiving the corrections. And that is actually our entry point into what the backfire effect truly is. When Wood and Porter took aside ten thousand one hundred people and had them listen to corrections across 36 different topics from everything from fracking to universal health care, gun control, every wedge issue you could think of the people who believe incorrect information were shown correct information and in every single case those people corrected their beliefs. There was no backfire effect whatsoever as it was originally defined. What they did find and what the what we now see as happening is that people were correcting... people were updating their beliefs just fine but they weren't updating their attitudes. Their attitudes were strengthening. And this is where I think a lot of our confusion about how minds change and about post truth, post fact, fake news and all the stuff that we are worried about right now, I think is where a lot of this comes from I think is where this hysteria comes from. I think it's where a lot of this confusion comes from. Because when I was writing my latest book I asked dozens of psychologists and neuroscientists what exactly is changing when we say someone has changed their mind. And you can you'll get all sorts of different answers from, "I don't know" to things that have to do with neurons, to things that have to do with values, and identity, and tribal psychology, and belief, and facts, and priors, and Bayesian reasoning. There's so many things that go into this. There's no one answer. And I think, our intuition is, when we want to change someone's mind, we think that we're we're we're trying to do is change what they believe. We're hoping that we can give them facts and those facts will update that person's priors and what they used to believe will change, and what they now believe will be different, and what will naturally happen is that they will now agree with us. Their opinions will follow. But what we're trying to change someone's mind, it turns out beliefs are almost inconsequential because beliefs are simply there to support the attitude and people will change what they believe easily. But the foundations underneath will be unshaken. So if your attitude is that vaccines are terrible and foreign invaders shouldn't go into my child and the state shouldn't be controlling my health and all these things that are attitudinal, updating your beliefs about what vaccines do and do not do has no effect on the underlying psychology that's driving your desire to look for justification of that attitude. So it turns out that the backfire effect is an attitudinal backfire not a belief backfire. And I think one of the one of the challenges we have right now in both modern conversation, modern society, and modern media is that we haven't really divided the idea of the attitude away from belief. In psychology and in other social sciences these have very clear definitions and they're not used interchangeably but in modern parlance these terms are often used interchangeably; opinion, belief, attitude. Those are not the same things to a social scientist as they are to a layperson. And when you're wanting to change someone's mind, beliefs almost don't matter at all*

*because beliefs are almost often mostly used as load bearing structures. Beliefs are almost the armour that we put on to protect something that's more fundamental underneath. If you want to change someone's behavior or their opinions you'll likely need to change their attitudes, their concept of their own personal identity, or change the tribe or group to which they feel they are most included. And that takes more work than just changing someone's belief about whether or not X is true or Y is true. So that's a long winded answer, but that's where that's the that's sort of the nut of the backfire effect today, is that if you if you go in, and it's like a hydra you know if you go in and cut off you go in and cut off one head of this psychological construct, another that will form in its place and maybe two will form in its place. So the beliefs are almost like a protective corona around a core psychological construct that those beliefs are meant only to justify, to protect.*

**Juliet Mee:** When I first heard David say this, I thought I understood the concept, and that belief came from my System 1 thinking. I intentionally applied System 2 thinking and said, "Slow down. Do I really understand?" What I locked onto after re-listening was that I could not define each of these common words: opinion, belief and attitude. So I looked their definitions up, which is a distinct part of the systematic way to change your thinking and avoid bias. Opinion is our view of a subject, which may or may not be based on facts. A belief is what we believe is true, no matter how we got there or if we prefer the belief. And an attitude is different, and probably more important. An attitude is defined as a settled way of thinking or feeling about someone or something, typically one that is reflected in a person's behavior. The backfire effect shows that although we can change people's beliefs with facts, it's much harder to change their attitudes. Their attitudes control their behavior, and attitudes seem to become more extreme and polarized by counter arguments. If the backfire effect holds out, correcting someone's misinformation might be worse than useless. It might reinforce their misinformation.

So why am I talking with you about metacognition in one of the first episodes of Working With The Voice? It's because you will be learning new things and it is best to first have strategies to evaluate your new knowledge as well as the meaning of your experiences. In the future we will build upon the concepts from today's episode and develop specific practices that help us be "less wrong" so we avoid easily avoided mistakes. We will look up words up for their correct usage, search out common cognitive biases in thinking, consistently question the common sense simple answers, and try to always remember that most everything seems simple unless you actually understand it. If you want to do anything big, it's going to take effort and a new way of thinking and acting. Hearing the input from the Holy Spirit is the best way to leverage your efforts for the biggest results. Believing in this without working to better understand, perceive, or discriminate what you are experiencing and learning is just blind faith. That's not what I am going for. There are characteristics that are called for from the pattern Jesus gave us that require that you not be lazy thinkers, to be diligent and put out effort to process new information and become aware of your own particular cognitive biases, to not just know, but to do what you know to do, and to not assume that your memories are correct or that you already know what someone has to say. There's another thing...think more than twice if you want to change somebody else's mind.

Big thanks to David McRaney. Again, I highly suggest that everyone listens to every one of his podcasts at **[You Are Not So Smart](#)** to learn a bit more about self delusion.

I hope you've subscribed to this podcast and gone to the [workingwiththevoice.com](http://workingwiththevoice.com) website to sign up for the weekly emails. Tune in next week when we begin to delve into the purpose and application of the Working With The Voice Daily practice. We will talk about the different ways that the Holy Spirit speak to us and what those experiences as like. Thanks for listening!