

RS 146: Jesse Richardson on, "The pros and cons of making fallacies famous"

Julia: Welcome to Rationally Speaking, the podcast where we explore the borderlands between reason and nonsense. I'm your host, Julia Galef, and with me today is our guest, Jesse Richardson. Jesse is an award-winning creative director from Australia. He is the man behind several very successful campaigns about skeptical thinking and rationality, that have gone viral. Basically, the way he describes his life quest now is that he wants to use his advertising powers for good instead of evil.

Jesse is the man behind what is probably, although, correct me if I'm wrong Jesse, his most well-known and widely-shared campaign, called, Your Logical Fallacy Is, which is a catchy and attractively-presented catalog of different logical fallacies that's been shared and liked by hundreds of thousands of people on Facebook.

Today, we are going to talk about logical fallacies in general, and the role that they play in discourse and how we, as skeptics, should be talking about logical fallacies. And also more broadly, this question of how to spread principals of skepticism widely, and what are some techniques for doing that. Without further ado, welcome to the podcast, Jesse. It's great to have you.

Jesse: Thank you, Julia. Lovely to be here.

Julia: Maybe to start off, you could just talk about what motivated you ... The focus on Your Logical Fallacy Is, for the moment. What motivated you to start that project?

Jesse: Essentially, I wanted to use my design and communication skills for good instead of evil, as you mentioned, and to popularize critical thinking and make it more accessible. I focused on fallacies as a proof of concept for that line of thinking, specifically because there's something that I think everyone intuitively gets, even if they're not academic. Kids kind of get that idea that something's not right about the logic of something, but they don't necessarily have a name to put on it. To be able to present a clear and coherent example, and idea, of what that gap in logic is can be quite empowering to somebody, and that light bulb moment happens, and that's a kind of intellectual gateway drug into other forms of critical thinking.

Julia: How have you seen people using Your Logical Fallacy Is so far?

Jesse: In myriad different ways. I suppose it can be used ... The website itself, obviously, the URL was such that you can direct someone to the website if [you see them use] the Strawman Fallacy, you can direct them to [yourlogicalfallacyis.com/strawman](http://yourlogicalfallacyis.com/strawman) as a exposition of the incoherence of their argument, supposedly, allegedly.

It's used in a lot of social media contexts, obviously, on Facebook and so forth, and Twitter, and other forums to be able to, hopefully, somewhat quickly and succinctly, apprise someone of the faults in their logic, and enlighten them as to how they might better construct their arguments.

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Julia: Do you want to back up and just lay out the definition of a logical fallacy? As you've said, I think people do have an intuitive grasp of it, but can be helpful to pin down exactly what counts.

Jesse: Yeah, absolutely. Essentially, a fallacy is a flaw in reasoning, so there's an error in logic somewhere. Fallacies fall into a number of different categories, and there's not a whole lot of consensus on what exactly all those categories are.

The two biggest buckets are formal and informal fallacies. Formal fallacies, essentially, are when there is a flaw in the logical structure of an argument itself, whereas informal fallacies are fallacious due to flawed premises or misleading justification structures. The best way and the easiest way to think about is that formal fallacies are like a mathematical mistake in logic, whereas informal fallacies are more like a rhetorical mistake, or an argumentative mistake, in logic.

Julia: Do you have any easy-to-remember examples offhand, of formal and informal?

Jesse: Sure. A formal fallacy that's quite common is the Gambler's Fallacy. The Gambler's Fallacy is when people presume, often times playing roulette or other games of chance, that if there's been a run of, say, three reds in a row, that it's likely black will come up the next time. Of course, the last roulette wheel spin has no physical bearing on what the ball's doing the next time, so it has just as much statistical chance of coming up as it did previously. That's a good example of a formal fallacy, because statistically, mathematically, the deductive reasoning there is just incorrect. Whereas an informal fallacy might be something like a Strawman argument, where you misrepresent somebody's argument as a rhetorical trick, to make it seem like they're saying something that they're not.

Julia: Oh, interesting. I actually would have classified the Gambler's Fallacy as informal, and I would've thought of formal as something like P implies Q, not Q, therefore not P.

Jesse: Exactly. That's affirming the consequence. Yeah. Exactly. That's another example of that, and this is actually a good example of ... There is some disagreement as to whether the Gambler's fallacy is a formal or informal fallacy. This, I would class it myself as a formal fallacy, because it's a mistake that's deductive, rather than inductive, but you could also argue that there's induction in terms of presuming probability. To my mind, there's a clear statistical reality there aside from any inference, so it's a good example of just why there's disagreement without philosophical circles, as to what counts as different categories of fallacies.

Julia: Yeah. My personality is such that I tend to love these projects of categorization and making taxonomies of things, to-

Jesse: Absolutely.

Julia: I'm going to try to explain why I like it, but I'm not sure ... These reasons aren't going to be my real motivation. It's just my post-hoc attempt to explain what's motivating me,

but I think what's happening is something like categorizing things, it both makes the concept stickier. It makes them easier to remember and use. It also helps me understand the relationships between the things. Having these buckets of formal and informal fallacies, or of inductive and deductive fallacies, or, I don't know ... probabilistic. I don't know. What other categories of fallacies would you --

Jesse: There's kind of sub-categories as well within the informal and formal. So there is, for example, fallacies of relevance, such as Red Herrings and so forth, and causal reasoning fallacies, such as False Cause and Full Moon Consequent.

Julia: Right.

Jesse: There's generalization fallacies, such as Composition / Division, Hasty Generalization, and then there's Ambiguity. There's actually a really fantastic resource at [fallacyfiles.org](http://fallacyfiles.org). They've got ... You've seen that before? Yeah.

Julia: I think it might've been one of my very, very first rationally picks, years ago now.

Jesse: Yeah. Right. Yeah, cool. They've got this taxonomy of all the different fallacies, and have nested them into various groups underneath each other. It can be really ... Seeing them in a visual context is quite satisfying and clarifying, I think, into understanding the relationships between different fallacy groups.

Julia: Yeah. What I was going to say is, even though I think that as you were saying, there's some ambiguity in how to classify the various fallacies -- I think, just the act of classifying them, and naming them the way you do on the poster at [Your Logical Fallacy Is](http://Your Logical Fallacy Is), is quite helpful in making the concept sticky and understandable, which is, I would hypothesize, a big factor behind the success of that campaign.

Jesse: Yeah. Sure. Yeah, it's interesting, insofar as that I think when we're talking about things like fallacies, and that can get quite complicated, and can seem quite heavy, but as I was saying before, there's a strange kind of dissonance there, because it also feels so tangible... that there's something wrong. I think if we can distill those messages to something as clear as possible, that that can be quite helpful, in terms of not only getting clarity, but also promoting better thinking, more generally.

Julia: Jesse, do you have any favorite fallacies -- or least favorite, I suppose, depending on how you look at it?

Jesse: Yeah. I suppose, probably the Fallacy Fallacy is one of my favorite fallacies to mention, only because it exposes the fact that, a common mistake a lot of people make with regard to fallacies is presuming that if someone has committed a fallacy, that their argument is therefore wrong, and their point is wrong, and everything they've ever said is probably wrong as well.

Julia: In the extreme version of the Fallacy Fallacy.

Jesse: Exactly, right.

Julia: Their parents are wrong, and their sister's wrong.

Jesse: Yeah... fractally wrong.

What that does is it exposes the fact that logical coherence doesn't have any bearing on truth value. You can argue with something that is entirely true, using fallacious reasoning and terrible arguments, which is painful to watch, if you haven't already, with a person that's arguing. On the flip side, you can be arguing with perfect logical coherency, for something that is an entirely false conclusion. The coherence of an argument itself is what the fallacies deal with. The truth value is an entirely different proposition that goes into argumentation, more generally.

Julia: Yeah, and it's really striking to see the conflation of the soundness of a logical argument, with the truth of its conclusion. It's so natural, and there's such a natural cognitive urge to pronounce something sound if the conclusion is actually true in real life.

Jesse: Absolutely, and vice versa as well. If you see someone's arguing for something fallaciously, it's very natural, I suppose, and insured for us to then presume that probably their argument is going to be on the sound, and that everything else that follows from that. I think there's the heuristic there that's a play, is that there probably is some amount of correlation between the fact that people who are arguing for just factually incorrect arguments, such as antivacs, or climate-deniers, or these kinds of areas where the employment of fallacies is ever so much more readily brought out like machine gun fire. We deduce intuitively that there's going to be not just correlation, but perhaps causation there, when that may or may not be the case.

Julia: That's right. Yeah. In fact, this ability to distinguish the logical soundness, or validity, of an argument from the truth is one of the things that psychologists use as a metric to test people's abstract thinking abilities. If someone can look at the argument ... Wow, this is going to be a bad example, because I just made it up. If Doctor Bob is always right, and Doctor Bob claims that climate change is a hoax, then climate change is a hoax, or something like that.

Jesse: Sure. Yeah.

Julia: Or more formally would be: If Doctor Bob says something, that implies that it's definitely correct, and Doctor Bob says climate change is a hoax, then climate change is a hoax is definitely correct. That is logically sound. However, the premises are not actually true, and therefore the conclusion's not true.

Jesse: Exactly.

Julia: It does take a certain level of abstract thinking ability to be able to say that, and not just say, "Well, you know. That argument is flawed."

Jesse: You're right. Yeah. Our intuition, I think, is to presume that that coherence is correlated to the reality. It's certainly, I think, it's something that we learn through practice, especially as people become more versed in critical thinking, that abstract reasoning ability becomes more natural, in terms of questioning that kind of granular level of detail to logic.

Julia: We've already started to touch on one of the main things that I wanted to discuss with you, which is ... I've developed this hesitation about pointing out logical fallacies, ever since I started getting involved with the Skeptic movement.

I think there are a number of dimensions to that. One of them is related to what you said about the Fallacy Fallacy, that ... Pointing out that someone committed a fallacy does not invalidate the rest of their argument, or does not invalidate other arguments that they make, and sometimes people act as if that's the case.

There's a great quote that I found in a book which was another one of my rationally-speaking picks, called *Historians' Fallacies*. I think he's a historian by trade, named David Hackett Fischer, says, "All great historical and philosophical arguments are probably fallacious in some respect. If the argument were a single chain, then if one link failed, the chain would fail. Actually most historians' arguments are not single chains. They're rather, like a kind of chain mail, which can fail in some part, in some place, but still retain its shape and function, for the most part."

I think it's a nice, vivid way to picture why a single fallacy doesn't mean you get to, therefore, dismiss everything someone says.

Jesse: Absolutely. Yeah.

Julia: There was this other way that I think pointing out fallacies can be not very helpful, which is that I think often, the things that people call fallacies aren't, in fact, fallacies. I think there's a number of ways that this can happen, but often, I think this takes the form of people saying ... When they point out a fallacy, they're saying something of the form, "Well, X doesn't prove Y." So, pointing out the appeal to authority, "Well, just because this expert said it doesn't make it true." Pointing out an Ad Hominem fallacy, "Well, just because this person is a crook, doesn't mean they're wrong about this." Et cetera, et cetera.

Jesse: Yeah. Sure.

Julia: The thing is, if the world worked on pure logical principles, then yes, it would be very useful to point out that X doesn't prove Y, but in reality, we're almost never looking for logical proof, because that's sort of impossible, in the real world. What we're looking for is evidence that's at least moderately strong, for Y.

Often, it is the case that if someone has relevant expertise, and they claim something strongly, than that's pretty good evidence for what they're claiming. If someone has done a bunch of things in the past that indicate that they're not that big on sticking to

the truth, then that is pretty good evidence that we should not trust what they say, depending on what they're saying.

Jesse: Absolutely. Yeah.

Julia: You know what I mean?

Jesse: I totally get what you mean, and I think that to my mind, if you're attempting to have a constructive conversation with somebody, it's a very different situation to if you're arguing with a rabid ideologue, who is attempting to propagate and peddle misinformation, and perhaps even peddle quite dangerous misinformation about perhaps not listening to doctors' advice and taking natural remedies. These sorts of things. Advertising political or media-related things that use fallacies in a way to distort, manipulate, and misconstrue things in order to affect an outcome for their particular agenda. I think in that instance, pointing out fallacious reasoning and the trickery involved there, is particularly helpful and relevant, and should be called out.

However, when you're attempting to understand somebody else's point of view and perhaps come to a reasoned conclusion, just shooting off to them, "You made this fallacy, therefore, you're wrong" isn't going to necessarily help further the conversation. I think it's a matter of being discerning about when and where to apply that. To my mind, one of the most important things about learning the fallacies is that you start to see it when you are looking at media, when you are looking at other people's arguments. Through identifying in other people's behavior that, in turn, helps you identify the fallacious reasoning that we're all subject to within our own minds, and to stop trusting our brains quite so much, which is, I think, a very important thing for everyone to learn.

I totally get what you're saying about the misuse and overuse of pointing out fallacies. I was saying that in some contexts, it can be not as helpful as others, but in some other contexts, I think it can be vitally important that we all out dodgy logic, especially when it can cause harm.

Julia: Yeah. I agree with everything you said, basically, but I just want to be specific that the thing that I'm complaining about now ... I'm not complaining about you, but the practice that I've seen happen that I'm complaining about is not about pointing out genuine fallacies, when that's not the most constructive thing to do. It's pointing out fallacies that aren't actually genuine fallacies.

I suppose a more subtle variant of this that happens a fair amount is failin g to give a charitable interpretation of what people are saying.

Jesse: Yes.

Julia: Often, if you take people literally -- which I think for whatever reason, Skeptics and Rationalists are disproportionately inclined to do, to take things literally -- people are saying things that are fallacious. Often, people will phrase things as if they're saying that

X proves Y, that so-and-so is an expert, therefore he is correct about this. Actually, if you were to be charitable to them, what they almost certainly mean is that the person's expertise provides strong evidence for their view.

Jesse: Absolutely.

Julia: Speaking of enjoying taxonomies, I've been trying to create this taxonomy of ways to be charitable to people's arguments. Because you appreciate a nice, catchy handle for a phenomenon, and you might've already heard of this one, but one of my favorites is the Steel Man. Does that ring a bell?

Jesse: Please enlighten me as to exactly what it means.

Julia: Oh, good. I love getting to tell people about the Steel Man.

You know what a Strawman is. I think that's actually on your poster.

Jesse: I do.

Julia: For the benefit of our listeners, if they don't know, it's arguing against a weakened caricature of what someone is claiming, which is dumber than what they're actually claiming.

Jesse: Misrepresenting their argument. Yeah.

Julia: Yeah. Misrepresenting it in a way that's easier for you to knock down, the way a strawman is easy to knock down.

The Steel Man, by contrast, is the opposite of that. It's taking someone's argument, which may not be the most well-constructed argument, because humans aren't great arguers by nature, and fixing it for them. And saying, "Well, a stronger variant of this argument, or to make this argument stronger, we could add this assumption." Dealing with that stronger, and therefore more interesting, and more worth discussing version of the argument.

So I've been thinking about a taxonomy of ways to do that, and I think one of the ways is just to assume that people are inadvertently exaggerating the strength of the claim, like saying, "X, therefore Y," instead of just what they really mean, which is, "X gives some evidence for Y."

Jesse: Sure.

Julia: And another example that I see happen in these discussions is something like... Communication involves all of these unstated premises or assumptions, which is just inevitable, because we can never actually lay out all of the premises behind what we're saying.

If I tell you, "Oh, you should go to the store," The premises I'm not stating are things like, I'm assuming that you want milk for your cereal tomorrow, and I'm assuming that the store has milk, et cetera, et cetera.

Jesse: Yeah. Absolutely.

Julia: That's sort of just implicit. That's just understood in the way we communicate, so I don't have to say it all the time. Sometimes, I think that results in sloppy arguments, behind which are actually pretty decent arguments.

A recent example of this, which you might appreciate... I saw this quote from Gwyneth Paltrow, who ... I don't know if you've followed any of her activity in the last few years?

Jesse: I have.

Julia: Okay.

Jesse: The steaming, and ... Yup.

Julia: Yeah. Right. She was most famous for being an actress, and she's sort of this lifestyle-

Jesse: ...merchant. Yup.

Julia: Yeah. Lifestyle guru and merchant, or something. Merchandiser. She's really big into natural things, and spirituality. And she had this quote about people saying you should wear sunscreen. She expressed skepticism, and said, "I don't really see ... I don't see how the sun could be bad for you, because it's natural."

Jesse: Yeah.

Julia: People, understandably, jumped all over this, or science popularizers and Skeptics jumped all over this.

The thing is, I think she's wrong, but I didn't like the way that people claimed she was wrong. The arguments tended to be things like, "Well, here, have some arsenic. That's natural too."

Jesse: Yeah. Sure.

Julia: "Since you think that nothing natural can be bad for you."

And the literal form of the argument she made, which is, 'If it's natural, it must not be bad for you,' is fallacious.

Jesse: Yes.



Julia: But I think there was this unstated assumption behind what she said, which is -- she didn't really mean everything natural is good for you. She meant, things that are natural that humans have historically all been exposed to, and we as a species are still around, and still basically healthy -- it's harder to see how those things can be bad for you. I don't think she would have argued with the arsenic example.

Jesse: Interestingly enough, it's a Strawman of sorts, right? It's fallacy on top of fallacy, in a way. I completely agree with the approach of trying to take a charitable sort of understanding to your opponent's ... Maybe it's not to your opponent's. It's just the human being.

Julia: Yeah, I find myself using the phrase, "Your opponent's" as well, even though I don't like to think that way. But it is the natural way to characterize how we tend to see people we're arguing with.

Jesse: Yeah, but within our system of thought, it is an adversarial context, especially when we're talking about debates and so forth.

To go back to your example ... I think that the Appeal to Nature fallacy is a good example of that. A lot of the time, people don't intend to commit fallacies, and this is that adversarial kind of nature and, in itself, presumes that there's intentional manipulation there. There certainly is intentional manipulation, committing fallacies often from the media, and from politicians, and from advertisers, and from people who perhaps have a financial agenda.

When you're talking with somebody who's earnestly expressing an opinion, a lot of the time, the fallacious logic that they're employing is inadvertent, and it often is a heuristic of something that has some amount of validity and truth value.

... Of course, a lot of things that we have evolved alongside of are very adapted and relevant to our ecosystem in which we find ourselves, and so there is this amount of relevance there, and truth there, to why someone might conflate those things.

Obviously, I get what you're saying -- the logically coherent form to presume that "because something is natural, therefore, it's good," is obviously wrong. If we're to be charitable to someone's point of view and say, "Okay, well I see what you're saying, but this is in evolved context, in which we find ourselves, and how do we understand that?"

Julia: Just to be clear, I think she was still ... Even in the charitable version of her argument, the Steel Manned version, I think she's still wrong. But for a more subtle, less obvious reason, right? A simple way to say it would be just that, the way in which the sun is unhealthy for us, in that it gives us skin cancer, that's not a thing that tends to reduce our genetic fitness by very much. By the time the sun has had the opportunity to give us skin cancer, we've basically reproduced almost as much as we're going to, or as much as we're going to.

Jesse: Quite right.

Julia: It's not going to be that much of a selection effect on how much humans can propagate their genes.

Jesse: In terms of procreation, the other thing to bear in mind as well as the obvious, that people with white skin have evolved to white skin because they were in an area that had a lot less sunlight, and other people were living around the Equator.

Julia: Oh, right.

Jesse: There's a lot of complicating factors there, and people with white skin aren't as adapted to be in as much sun as someone ... I've lived in Brisbane, Australia, and I burn pretty readily, because I'm half Dutch and half Irish.

Julia: Right. That's a subtler mistake.

Jesse: Totally.

Julia: I want people to criticize her for the actual mistake, and not for the dumb, Strawmanned mistake.

Jesse: Yeah. You get into the situation where it's a back and forth of attempting to take things down, instead of actually focusing on what's the point at issue.

I think it's like anything, right? It's how you use it that's important, and calling out dodgy logic when it's potentially harmful is, I think, really important, and trying to get to the core of what's actually at issue is obviously something to be aware of as well. I totally get what you're saying, in terms of, I think it's more constructive and effective to, a lot of the time, try and understand someone's point of view, and to listen to the intent of what they're saying, rather than to try and smack them down immediately with telling them they're wrong because there's fallacious logic involved. Pointing it out obviously can be helpful, and depending on the context, and depending on the objective you have, I suppose, determines what that approach should be, in terms of efficacy.

Julia: You had mentioned something to me before the podcast, about how, over the course of this project, your focus had started to shift, from the structure of the fallacies themselves to the psychology that motivates the fallacies. Is this what you were talking about, or were you thinking of something else?

Jesse: Yeah. No, that's kind of relevant. I suppose that's, to me, what is one of the most interesting aspects of the fallacies, and why I think it's really important for us to become aware of, generally, what's going on there, in terms of the exposition of our own psychology as to why we commit these fallacies seemingly quite intuitively, you might say. Because I think there is ... Underneath most of the fallacies that we can find, there's a mechanism whereby we're not metacognitive. We're not thinking about our own thinking. We are not aware of the mechanisms of our subconscious mind attempting to justify a prior that we have, a belief that we have, that we don't want to let go of.

To me, it's a really fundamental shift in thinking, when you start to become aware of your own thinking, and you start to become aware that your own brain lies to you, that you maybe shouldn't trust your brain, and that maybe sometimes you should approach your own thinking with a matter of doubt, and actually analyze and take a step back from yourself to go, "Hang on. Why am I shifting goalposts now that someone's exposed a flaw in my thinking, and changing the premises of my argument? Is it because I'm holding on to a belief, or is it because there's actually some value to this...?"

It could be either of those things, but when we become aware of fallacious reasoning, both in our own thinking, and in others, it can be quite elucidating, in terms of being able to expose that psychology that underlies things subconscious. As I said before, I think a lot of people commit fallacies without any malicious intent to manipulate anybody. It's more of a defensive reaction from their own psychology, to protect the beliefs that they have.

Julia: I genuinely wonder, though, whether being given these lists of fallacies, or of cognitive biases, does help people on that, recognize the flaws from their own thinking.

I can certainly see a plausible story for how it would. And I have examples, in fact, of noticing ... For example, I think that having names for fallacies, as I was talking before about having categories and handles for concepts, makes them stickier. I've seen that benefit in myself. So having these catchy phrases and images, like Cherry Picking, or No Truth Scotsman. I really feel like I notice myself committing these things more because I have names for them, so that is quite helpful.

Jesse: Absolutely.

Julia: On the other hand, I've seen many concrete examples of people who ... For example, I'm thinking of one friend who learned all about Cognitive Biases, and now, it's hard to have a disagreement with her, because anything that you say that disagrees with her, she will say, "Oh. Well, but you're just biased, because ..." and then she has some reason for why you can't have an objective position on this issue, because it goes against your interest for whatever reason. It's really just become this "get out of evidence free" card, that she gets to wield whenever. And this is not a unique example.

Jesse: Yeah, no, totally. I think that it's, to a man with a hammer, everything in the world looks like a nail.

Julia: Yeah.

Jesse: It's that kind of thing going on there. There's a continuum, I think, of how instructive, how helpful, how elucidating learning biases, fallacies, critical thinking, argumentation, more generally is to people, both in terms of different people, but also over time as well.

I think that an introduction to critical thinking is obviously not the endpoint for a lot of people, and perhaps being enamored with fallacies, or cognitive biases, and having your

mind be kind of fixated on that ... Over time, that's probably going to taper off, but the inculcation of that into one's own mind, and then being aware of a metalevel of cognition in oneself, and externally as well, is a powerful analytical tool. The subtle ways in which becoming cognizant of these sorts of things effects various other aspects of our lives, everything from diet to healthcare to who we vote for, all of these sorts of things.

From an individual level to societal level, it's obviously extremely complex. My position on that would be that there is, I think ... There's certainly potential negatives to having that one knee jerk reaction, especially with fallacies of, "That's a fallacy. I'm not engaging with that anymore." I think being charitable to whom you're talking, and trying to understand their point of view, is important.

With various other forms of cognitive bias, bias lists and whatnot, there can be an initial flush of interest, but that initial flush of interest for say, maybe a fourteen-year-old who's grown up in a context where they've had dogma given to them for their entire lives, can be quite a pivotal moment. Whereas for someone who, perhaps, is less inclined to have their mind altered in such a way, perhaps it's less of a significant shift, but the net aspect, I think, is a positive one, in terms of understanding and furthering a more progressive and enlightened world.

Julia: Hopefully.

Jesse: Yeah.

Julia: I'm not totally convinced that that's true, but it could be true.

Jesse: Yes.

Julia: I hope it's true.

Jesse: I assign probably, about maybe 70% upwards probability, to that.

Julia: Along these lines, there have been some criticisms of the "Your Fallacy Is" poster, among the largely positive reception. The criticisms tend to be around the issues that we have been discussing. That, like, "Well, it oversimplifies what actually counts as a fallacy" or "It encourages people to wield these things as weapons, to attack arguments for things they don't like," et cetera.

Jesse: Yes.

Julia: In our remaining ... How long do we have? Five, ten minutes. I wanted to talk about this tradeoff here, because I think ... This tradeoff between getting really, really accurate in your communication, and in making something that goes viral. Because I do think there's a tradeoff there.

Jesse: There is, and that's the mea culpa there. And I've ruminated on this quite a bit, because

Julia: Did you say there was a mea culpa?

Jesse: Yeah.

Julia: Yeah, go on.

Jesse: Just in terms of there is a ... Inherent to the website, it is kind of adversarial. Your Logical Fallacy Is.

Julia: Yeah.

Jesse: I've seen it used in places, going, "Ah, that wasn't the intent. It was meant to be more tongue-in-cheek. You're meant to be using this as a one thing that should be part of a broader thing, but ... "

By the same token, what was attractive about doing it this way to me, is I saw, "Okay. This is a way that this can be social media attraction, and can popularize critical thinking more broadly." Now that it has gone quite viral, and it's had over 5 million unique views. It's up on thousands of schools all around the world, because the poster's Creative Commons.

It's also doing a lot of good, in terms of getting critical thinking messages out there. On balance, I think it's worthwhile. It's not that there's no negatives, and I think those are valid criticisms in a way.

Also, where they're employed as well. Just a throwaway thing to try and smack down someone's argument, that was earnestly and genuinely attempting to engage, is a very different thing to if someone's trying to say, "Don't take chemotherapy. Take this very special water, because it's natural." Calling that out as an Appeal to Nature Fallacy is... I have no problem with someone being quite blunt about it, if you know that that's fallacious logic.

There's a continuum there, right? To that point, I think that we as a Skeptic community tend to make things quite complicated, and it's an echo-chamber effect, when what we should really be doing, what I think is the most important project that we should be undertaking, is spreading rationality and critical thought to the broader community, popularizing it amongst people who don't already identify as Skeptics.

To do that, there is some tradeoff between the simplification and the communication modes that we might employ to do that. What we are trained in, in advertising, is, how do we distill things to a really simple and engaging message, that has relevance to the target market, in the case of marketing, but that applies more broadly to human psychology. That equation to me, from a Consequentialist point of view, is a very clear reason to sacrifice some amount of nuance, for the sake of spreading critical thinking, rationality, and Skepticism to a broader community.

Julia: Yeah. Someone critiquing the critics of your poster made a good point, which is that the people criticizing are, in fact, committing a kind of fallacy, in a way -- which is the Nirvana fallacy. Have you heard of this one?

Jesse: Yes, I have.

Julia: Right. For our listeners, the Nirvana fallacy is basically arguing as if some endeavor is bad, or shouldn't have been done, because it's not perfect. When the actual question is, "What other things could have been done with those resources?" I imagine there are other reasonable questions you could ask. But saying it's not perfect, therefore it should not have been done, is not really a great argument.

Jesse: Yeah.

Julia: Just to further elucidate the fallacy, this bothers me every time people make an argument against gun control, that takes the form, "Well, come on. If someone really wants to get a gun, they still can." I'm sure that's true, but that doesn't actually address the question of whether gun control would reduce deaths from gun violence.

Jesse: It demonstrably does, because Australia was a very clear example of more stringent gun control had a very unequivocal effect on shootings. Yeah. I totally take your point though, that it can be quite frustrating when those kinds of conflation occur. Yeah.

Julia: I'm realizing what a dumb move it was for me to introduce the topic of evidence about gun control at a time when I don't have time to go into the full arguments about it, so I'm going to regretfully leave that thread unfollowed. Yeah.

Along these lines, maybe the last question I want to ask you is, what you've learned about making rationality and Skepticism-related memes go viral, aside from the general advice to keep things simple? You've done more campaigns than Your Logical Fallacy Is. Is there anything you've learned across those campaigns?

Jesse: Yeah. Beyond just rationality as well. Some of the principles of marketing communication and effective communication more generally, which is employed by advertising industries and so forth. There's some quite relevant learning there, I think, for anyone that wants to communicate, and there's a lot of money that's been sunk into market research, to sell us crap that we don't need, that can be actually used for more noble and worthwhile purposes.

I could bang on about that for hours, but as a takeaway, the Holy Trinity of marketing communications is simplicity, engagement, and relevance. Trying to distill messages to the simplest form. Trying to make your messages engaging, in terms of, is there actually a hook there, in terms of what you are putting [out]. Is it a self-indulgent, waffling about something that you're interested in, that someone else might not be?

Intrinsic to that is being aware of your audience, and being aware of how receptive they're going to be, why they might be receptive to what you're talking about, and

adapting to suit that context, which is an interesting thing, more generally, in terms of critical thought. Being less insular in our thinking, and actually considering things more broadly, and going, "Okay, well what's the efficacy that I'm looking for here? What's the outcome I'm looking for here? Who's the audience that I'm talking to?" Considering strategically what we're trying to do, in terms of the outcome, rather than just being on the autopilot of, "People should listen to me because I'm right" or whatever other mechanisms are going on.

Julia: We're just about out of time, but I will close with a nice illustration of the difference between pure critical thinking and what I might be tempted to call rationality. This comes from my colleague and friend Kenzi. I can't take credit for it.

I never had a great answer for that question, "What's the difference between rationality and critical thinking?" Then I saw someone ask her, and she came up with this on the spot. She said, "Well, imagine that you have two people who are trying to decide where to go for dinner, and so they research all the restaurants in the area, and they read reviews of the different restaurants, and they weigh the potential bias of the reviewers, and they come up with pro-con lists, and et cetera, et cetera. By the time they've narrowed it down to the finalists, it's midnight, and all the restaurants are closed. These people are exercising critical thinking, in looking for biases and evidence, et cetera -- but they're not exercising rationality, because they're not actually accomplishing anything that they want to get done."

Jesse: That is fantastic.

Julia: I think that's, yeah, probably relevant-

Jesse: It reminds me of that thing of, that you know. "Knowledge is knowing that tomato is a fruit, and wisdom is not putting it in your milkshake."

Julia: Right.

Jesse: Yeah.

Julia: All right. We are just about out of time. This seems like a good place to wrap up, so we'll move on now to the Rationally Speaking Pick.

[musical interlude]

Welcome back. Every episode, we invite our guest to introduce the Rationally Speaking Pick of the Episode. I ask our guest to choose a book, or other work, or even organization, that has influenced their thinking substantially, over the course of their career, changed their mind, or shifted their focus in some way. With that, Jesse, what's your pick for the episode?

Jesse: Actually, I'm going to pick a countryman of mine, Tim Minchin, who has been quite, not only influential, but entertaining and just is a wonderful human being, more generally.

What I thought might be an interesting experiment is if we attempted to use the army of rational Skeptics listening to Rationally Speaking, to help popularize rationality by trying to help a particular work of his go more viral than it already has.

One of my favorite things in the whole world is a YouTube clip called "Storm" by Tim Minchin, that I'm sure you're aware of, Julia. I was thinking that if we all shared that on our social media simultaneously as we can. With a podcast, everyone listens to it probably over a bell curve of a week or so. That might help to start some waves of rationality that would be perhaps quite effective, in terms of spreading critical thinking and Skepticism to a broader community.

I think that using humor and well-constructed pieces of animation and so forth is a really, really effective way of getting the message out beyond our own community. The ask is, I suppose, that everyone to go to YouTube, type in "Tim Minchin Storm" and share that video on your social media, and see what effect we can have in terms of upping the view count of that over the coming weeks.

Julia: This is actually, maybe not fully intentionally, an appropriate pick for this episode. Because Storm was somewhat influential in my arch as a Skeptic as well, but in an interesting way. I did share it. I came across it and I was like, "Oh, this is so great." And I shared it.

And I got some push back from some very smart, educated friends of mine, who felt that it was a little snarky, a little obnoxious.

Jesse: Yeah, right.

Julia: It caused me to step back and examine the messaging, just as we've been talking about in this episode. I'm not sure that it was the wrong thing to do, to share it, because, as you say, it's a very catchy and funny clip that is totally viral-worthy. It has gone viral, and has the potential to go even more viral. I'm not at all sure that the net effect is bad of sharing "Storm."

It's like an encapsulation of my confusion around this tradeoff, between nuance and accuracy on the one hand, and virality on the other-

Jesse: Popularity.

Julia: Popularity. Yeah.

Jesse: Yeah.

Julia: Overall effect, on the other.

Jesse: Yeah. I suppose that it comes down to a virtue ethics versus Consequentialist point of view, doesn't it? To my mind, it's worthwhile, and it's a judgment call, obviously to some extent as well. I find a lot of things that Tim Minchin does in particular just so



endearingly human, and funny, and awesome, that the snarkiness in it, to me, is more playful than offensive.

Julia: Yeah. Certainly, that was my first reaction to it as well. I either didn't notice the snarkiness, or it felt playful or unimportant in the broad scheme of the point of the piece.