



Jake 00:59

Thank you so much, Julia, for taking the time and joining me on the show today. I really appreciate it and looking forward to this conversation for some time. And I've actually listened to your podcast a bunch in the past. Most recently. Yeah, your episode with metallic. So funny must be funny to be on the other side of the microphone. Yeah. But thank you for coming on, I think the best place to get started would be for those who don't know you to tell your story a little bit. And then we'll spend a lot of time talking about your book, which recently came out.

Julia Galef 01:29

Sounds good. Thanks, Jake. Yes, it's good to be on the show. My story. Basically, for the last 10 years, I've just been devoted to this question of how do we improve human reasoning and decision making? And really interest in this question, both from a theoretical level? Like how do we think about what would ideal reasoning look like? Just almost philosophically, and also, just from a practical level? Like, what are the kinds of mistakes that the human brain tends to make and what kinds of situations and getting really into a lot of the cognitive science literature and kind of experimenting on real people like trying out techniques and seeing how well they work and, you know, talking to people about their experiences, noticing their own biases and things like that. So I basically I majored in statistics in college and then started a Ph. D program dropped out spent a while just because it's kind of a freelance journalist and, and podcast hosts as of 2010. And then in 2012, co founded a nonprofit, kind of an educational, Think Tank, essentially out in Berkeley, California, called the Center for Applied rationality. And we ran kind of educational workshops for people who wanted help improving their reasoning and decision making in their lives and their careers. And especially healthy thinking about really kind of complex or challenging issues about how to best help the world or you know, how to make really how to navigate really tricky emotional decisions in their lives, things like that. And so, yeah, basically, I've been thinking about this question for a long time. And one thing that really started to bother me about the general, around the discourse about improving reasoning and decision making was, how much of it was focused on improving people's skill, like giving people better



cognitive tools, to reason to make decisions or more more knowledge. So like a typical, in my experience, a typical book or article about improving reasoning would involve, you know, teaching people about cognitive biases, or like teaching people about logical fallacies, things like that. And I'm not trying to say that's not helpful, because I think it is, but it's, um, it's insufficient on its own. And what came to me to seem like the real bottleneck, in thinking better, was not so much the knowledge but the motivation to, to apply that knowledge, or like, the, the, your how, in what direction, you're motivated to use that knowledge. So for example, you might be motivated to use that knowledge of cognitive biases and logical fallacies, to poke holes in other people's arguments. And this is, I'm sure, like, if you've spent time on the internet, you've seen this trope of, you know, the people online who come equipped with, you know, memorized lists of biases and fallacies, and they just use it to as like a cudgel to beat their, their opponents over the head with. So that's one way you could be motivated, a different way you could be motivated is to try to notice the, you know, mistakes that you're making, or try to notice the ways in which your own reasoning is biased. And, and that is much less discussed, how to cultivate that motivation, or how to even tell whether you're doing that or whether you're doing the first thing. And so I just started focusing more and more on this question of, you know, the motivation that guides our thinking and how to be more aware of that and how to Kind of cultivate, what I see is a better motivation.

Jake 05:04

Yeah, I'd like something that I'd read from you. And in preparing for this conversation, I think you wrote judgment. People, most people think judgment is limited by knowledge. But actually, it's by attitude, I think, right, like a nice synopsis, sort of a much more concise way to say what I just said in the last six months. It's nice to hear the full context first. And some examples like how people use it on social media for good and bad, I actually can't really go there in my head yet. So it's helpful to have the context. But then also, at the end, the synopsis is good to, to sort of have a hook to go back on. Yeah. Oh, good. Do you know, you know why? Initially, you start you sort of took up this interest in, in decision making and in reasoning, and then rationality, I'm not sure how that term like



relates to you. And maybe we can sort of define it in your mind. But rationality seems to be at the core of everything you've sort of done from the Center for Applied rationality, which you mentioned out in Berkeley, I think, to your podcast, the rationally speaking podcast. Yeah, so maybe a good question, you know, how did you get into this sort of stuff? If you can sort of remember, maybe it's just natural? And then secondarily, how do you think about rationality? Like, how do you almost define it?

Julia Galef 06:20

Yeah, I, so I have to admit, I have a really hard time answering questions like, you know, how did you or why did you become interested in a certain topic? Because to me, it just feels like, well, this is just an objectively fascinating topic, I don't understand why everyone would be fascinated by it. So I struggle a bit to articulate that. But, you know, I can tell you that I've just, I've always been fascinated by the question of, of how to think, and, and kind of interested in, you know, often it will seem to me, like someone is, is like thinking badly. But it's a struggle to articulate why, like, what, you know, how, how would I prove that they're thinking badly? Or like, what specifically is the mistake that I think they're making? And sometimes that person is me. But, yeah, I think this is, you know, it's a very general topic, it applies to, you know, anything from society level decisions about how should we allocate scarce resources? And how much should we value the future relative to the present down to little, you know, day to day decision making? Like, how much time is it worth spending, shopping for a new mattress or things like that? And so I guess it's, I tend to be fascinated by very kind of high level general things where it feels like if you could figure that out, it would have applications at all these different levels and all these different contexts. So I'm just trying to psychoanalyze myself, I'm not sure I have a definitive answer here. But that's kind of what it feels like. And, and I should also add, I think it's really non obvious, like, most of the time when someone says, you know, oh, so and so is, you know, clearly wrong, or so and so is obviously being irrational. I think my reaction is, I think it's more complicated than that, or I think your analysis is, is lacking. And so I guess I also tend to be attracted to things that are complicated and non intuitive, where there's a lot of depth you can get into. So yeah, so I



mentioned, I mentioned the word irrational. And you asked me to talk about how rational like what rationality is, and how it fits into all of this. And I, I actually didn't use the word rationality or rational very much in my book at all. So the book is called the scout mindset. I'm sure we'll get to that later in the conversation. But I've, you know, even though I use the center that I co founded Center for Applied rationality obviously has the word rationality, and its title. That was in 2012. And I've kind of I've kind of moved away from using that word in my public discussion, like communications since then, because I've, I've realized since 2012, how, what a fraught word it is. And people, people have a lot of preconceptions about what that means and what I must be about if I'm talking about rationality, that aren't actually accurate. And so I decided to kind of steer away from that. So I don't trigger a bunch of preconceptions. But I'll tell you what I meant by the word when I used it, you know, in CO founding CFR. So rationality, as it's defined in various academic fields, it means two specific things. Because there's two kinds of rationality, epistemic rationality is the study of how to form accurate beliefs. And then instrumental rationality is the study of how to make decisions more effectively. That is how to make decisions that more effectively achieve your goals or values, whatever those may be. And so when I talk about rationality, I just talked about like the practice of trying To improve the accuracy of your beliefs and the quality of your decisions. And and then, you know, the real argument comes down to like, well, what specifically do we think constitutes, you know, good heuristics for making accurate beliefs and effective decisions. And that's really where all the interesting questions lie. But the word rationality just describes that, that project. And what I've learned is that a lot of people hear, you know, rationality, and they think, Oh, this person must have a, they must have a set of beliefs that they think are the rational ones, and everyone who disagree with her must be irrational. That's probably what she's saying. And so I had to work really hard to try to unanchored people from that assumption, because most of the time, no, I don't actually think there's not like a certain set of beliefs that I think everyone should clearly obviously hold. Contract people's expectations of me. So that yeah, that's the backstory on what the word rationality means and why I don't use it so much anymore.



Jake 11:09

Yeah, it makes sense. It's, it's funny, I guess the way that you explain it, because it wasn't obvious to me how people were twisting the word and why you're stopped using it. But with your explanation, I'm seeing that like, it seems that maybe people who believe things really strongly which I think most people believe at least a few things pretty strongly, would look at the word rational and see it as like a, you know, a blanket excuse for everything that person says they say is right, because it's rational, or whatever, where I think the approach that you're taking, and we can get into this with your book later, but your perspective to me seems to be more along the lines of I actually tried to believe strongly in as little as possible and sort of take a rational approach, not for the sake of saying I'm right, but for the sake of sort of questioning. Everyone who's so strongly thinks they're right in so many different dimensions. So sounds like a sensible shift away from the word. One follow up question on the the two definitions that you gave. Yeah, epistemic and instrumental rationality. Yeah, exactly. So I think epistemic was the one where it sounded more like logic. And I would say like truth, or trying to, I would

Julia Galef 12:25

say, more more truth than logic. Because, yeah, because I'm, well, hopefully, I'm not pre-empting. Your question, but just to clarify why I said that. The process of forming truer, more accurate beliefs. It can involve kind of deliberate logical reasoning, but it can also just involve getting a better sense of which of your gut reactions, like when your gut reactions tend to be more trustworthy, because often our gut reactions are trustworthy, but not always. So part of the project of improving your epistemic rationality is learning when our when does my guts trustworthy? And so, you know, it's, it's a combination of conscious deliberate reasoning, and, and intuition.

Jake 13:11

Yeah, so I think the given that you sort of synthesize it into being about truth, that is epistemic rationality, the second one struck me as like a bit surprising instrumental rationality, it sounded more like, you know, utility optimization, to me sounds like more of like, along the lines of happiness. So it's like one is sort of seeming,



maybe that's just an incorrect assumption, but seems like one sort of driving towards truth, and one's driving towards happiness. Yeah, the umbrella of the same word is that, you know, I think that's confusing it all, or

Julia Galef 13:44

I do think it's confusing. I think a lot of a lot of the words that people use in this space, are in practice confusing. And, yeah, it's, there's this like, eternal struggle between, like, using the words that have the official meanings that you want to convey versus using words that other people will understand and not find confusing. And I kind of vacillate between those two goals. But anyway, yeah. The one nitpick I would make with your summary of instrumental rationality is that it doesn't have to be about happiness. Like I think most, well, at least many of our goals do cash out in terms of wanting to be happy. Like, we may describe our goals as making money or, or finding a partner or things like that, but, but the reason that we want those things is, is primarily because we think that's gonna make us happy. But but it's not happiness isn't the only thing that one might care about. You might care about, you know, helping the world. And the project of helping the world might actually be frustrating and difficult and, and upsetting a lot of the time, but you still value that for its own sake, even if it doesn't make you happier than you would have been. You know, living a life of hedonism. So we're getting kind of into the philosophical weeds here about what it makes sense to care about, but I just didn't want to. I didn't want to define it too narrowly as as only about being happy.

Jake 15:11

Yeah, totally. And happiness is obviously a pretty broad, loosely defined word or other. Yeah, think about as sort of equating utility with happiness, which again, you know, definitely not totally the case, but utility itself is sort of just what you care about. Yeah, yeah. So, anyway, but before we jump into the book, I have to ask about the podcast, because I started a little less than a year ago, and you've been doing it since 2010. So

Julia Galef 15:39



I'm a dinosaur. Yeah. A dinosaur is four times when I had to explain to people what a podcast was.

Jake 15:46

Exactly. I can't even imagine I don't even know if Joe Rogan was doing it back then. But Oh, God, I don't know, must have been one of the first. So I'm curious how you got into it in the first place. And then, you know, more impressively than then sort of figuring out that it would be a cool thing to do early. You've stuck with it for a decade now. So I'm curious. Yeah,

Julia Galef 16:03

with a few hiatuses along the way, but yeah, stuck with it for over a decade now. From January 2010. Wow.

Jake 16:10

I mean, if I scroll through, I just, I see that it goes a long way. And I don't notice the gap quite as much.

Julia Galef 16:16

Yeah, well, I've, over time I've learned I've kind of had to teach myself some, you know, audio editing and, and web stuff, because I was, you know, really didn't know anything about either of those things 10 years ago, but it helps when I started out that there were I kind of co founded the podcast with a guy who was then my co host, Massimo pigliucci, who's a philosopher of science in New York. And and then Benny Pollack, who's a, he was one of the leaders of a group called the New York City skeptics. And I met Benny and Massimo just because at the time, I was a freelance journalist, just trying to learn about, you know, what are what are the interesting subcultures and subfields out there who's doing interesting work talking about interesting things. And so I went to this conference, the Northeast conference on science and skepticism in New York in 2009, and met Massimo there and Benny and they had been wanting to start a podcast, basically about the same things that I was just getting really interested in at that point, reasoning, and, you know, the line between science and pseudoscience and you know, how to evaluate claims with a skeptical eye. And, and I had kind of an kind of like a fun tension between me and Massimo where he was very, like, Yay,



philosophy. And I was very yea science, ooh, philosophy. That's simplifying, but only a little. And so we figured we'd be good co hosts. And, and so I kind of was able to take advantage of the fact that Benny was already a pro at audio editing and, and then five years later, Massimo left to work on other things, and I kind of had to teach myself all the editing and producing stuff. But yeah, now I'm doing it solo. And I have been since 2015.

Jake 18:06

So I think like anyone who sticks with something for such a long time, I mean, on the one hand, it can just become a part of your life that you sort of stopped questioning and just keep doing the podcast. On the other hand, I think people often have like a pretty strong lie, to sort of enable them to keep going for that long. Do you have like a why for the podcast? Or has it evolved over time?

Julia Galef 18:28

Yeah, I guess I do. Well, I guess I have a couple different wise. I mean, one of them is just a selfish why that it's this great, this great excuse for me to have interesting conversations with interesting people about what they're working on. So, you know, that's kind of that's a huge benefit for me personally. And then the broader Why is like, I guess there, there are certain principles that I really value, and I think are not widely appreciated enough. And I'm trying to use my podcasts like, the way that I have conversations in the podcast, I'm trying to use those, that as a kind of, to showcase the principles that I think should be more, more widely held. So for example, I think there's a certain style of disagreements that I think is really good and too rare, where two people with different views, try to kind of collaboratively explore their their respective mental models and sort of work together to figure out like, what are the cruxes of disagreement here? What are the things where, you know, if I changed my mind about x, I would end up agreeing with you or if you change your mind about why you would agree with me, what are the things on which I just disagreement hinges? And so when you approach a disagreement like that, it becomes this kind of fun puzzle where you're trying to figure out why disagree. And that's it's a very different process than what most people do when they are in a disagreement with someone where either it's, it's, it gets really



combative, and you're just trying to win, or you know, a little bit better, but still not great. You're just trying to like really make your point and you you aren't really listening to or curious about what the other person believes and why you just like really want to say the things that you find convincing. And there's not a lot of attempts to kind of fit that into the other person's world model. So. So basically, I'm, I'm trying to showcase this kind of disagreement in my podcast in hopes that I can like, get a wider take hold in a wider way. So there are a few things like that where, yeah, that's, that's the kind of thing that I'm trying to, to spread with rationally speaking.

Jake 20:52

Yeah, that's great. And I think a lot of what I've sort of noticed in listening to your podcast is that you try and this is actually something that I try to do myself, and I totally relate to the first reason you gave to, which is just an excuse to, to have interesting conversations and write with interesting people. You know, we might not be on today, if I didn't have a podcast to invite you on. But, but I think that the point you made about sort of having these conversations with people and expressing a wide variety of perspectives, what I get from your podcast is that often, you sort of take pretty complex sounding things and just try to make them understandable in audio form, and like plain English that I can listen to while I'm on a run, or whatever. And that's something that that I certainly tried to do myself. So moving on to the book. First of all, congratulations, you know, I know this was a long term project of yours, and must be a big relief to finally get it out. Thank you, but it's called the scout mindset. And feel free to you know, you can give it any introduction that you'd like to but I'll jump in, right with the first question, which is, how do you differentiate a scout mindset from a soldier mindset?

Julia Galef 22:08

Great, yeah, that's a great place to start. So this is kind of the framing metaphor of the book. Soldier mindset is my term for basically, you know, a few a few minutes ago, in our conversation, I was talking about how the motivation that guides your thinking is so crucial and really underappreciated. And so the soldier motivation is



to defend your pre existing beliefs or to defend things that you want to believe any, against any evidence that might threaten them. And so the the reason that I picked that metaphor is, it was inspired by the language that we use to describe reasoning and beliefs and argument, it's very militaristic, if you start paying attention, it's kind of striking. So we'll talk about, you know, shooting down an idea or poking holes in someone's logic. We talk about well, defending beliefs or attacking ideas. And when we talk about, like, collecting evidence, for our beliefs, it's like, we're kind of like, building up our position to make it more airtight and impenetrable. So we talked about like buttressing our position, or, or supporting, like, supporting evidence, these are all the metaphor here is basically creating beliefs that are so like well defended, that no one will ever be able to, to undermine them or knock them down. So I call that soldier mindset. And that's my term for it. But I'm sure people are well familiar with this phenomenon under other names like rationalizing or wishful thinking or motivated reasoning is the term that cognitive scientists tend to use, self justification. These are all facets of what I call soldier mindset. And so scout mindset is an alternative to soldier mindset. Because the scouts role is not to attack or defend, it's to go out and see what's actually there and form as accurate a map as possible of, you know, a situation or an issue. And so, the book is all about how and why to become more of a scout in the way you think about things. And so basically, this is, it's a book about how to how to, you know, four more true beliefs about your life and how the world works and the decisions that you're making. And, yeah, it's got mindset, I guess I would summarize it by just saying, it's about trying to be more objective and intellectually curious and honest. And just curious about what's actually true.

Jake 24:44

Yeah, I think one sort of analogy that that made a lot of sense for me for understanding the terms was that a soldier almost sets you know that they have the belief before, they have the evidence, and then they go and collect whatever evidence they basically need to support Whatever the belief that they want to come to in the end might be, for whatever reasons, they're motivated to have that belief. Whereas the scout is just, you know, like you said, scouting out the land and, and trying to map out, you know what's true and what's not, and doesn't



necessarily care so much about the destination, and certainly tries as much as one can to be sort of unbiased towards, towards where they end up and what they end up finding.

Julia Galef 25:24

Yeah, and I should, I should clarify that. It's not like some people are pure soldiers. And some people are pure scouts, we're all a mix of soldier and scout. And we kind of fluctuate between the two, you know, in some situations, it might be, you know, really scout like, and then in other situations, like, I don't know, if I'm talking to a cousin who's you know, really combative, then I might get defensive and just want to defend my beliefs, and I might not be that interested in the truth. So, you know, we're a mix of both, but I think we can we can move towards the scout end of the spectrum.

Jake 25:57

Yeah, I said something somewhat related, I think the other day, maybe not, but open minded people, the hardest thing to be open minded about is the closed mindedness of closed minded people. And so even if you're open minded, and most things, you're closed minded towards that it's like, everyone's, everyone's got a little bit of part of both. I think that's true. So another, you know, going further on the soldier, mindset, and sort of why it is so prevalent, I think, you know, let me know, if you sort of disagree, but it seems to me that most people, you know, probably including myself, potentially, I'm not like saying some people are bad or whatever. But the soldier mindset seems to be like the more prevalent mindset around the world and the scout mindset, I think the reason you wrote about it is because you think it would be maybe better if more people just took this approach more often. So I guess the question is, why do you think the Scout, the soldier mindset, rather, is so prevalent? And I think in the book you talked about, like, what it is that they are protecting? Yeah, so maybe we could dive down into that a little bit?

Julia Galef 26:59

Yeah. So you know, there are some situations in which people are naturally in scout mindset, like, if you're trying to catch a train, you're probably going to be in scout mindset about, like, when do I need to leave the house to get to the train, to make it these kind of



very practical issues in our lives, where, you know, there's a clear direct benefit to us from having true beliefs about that topic, it's very easy to naturally be in scout mindset. The temptation to soldier mindset comes in when we have some competing motivation to defend a particular belief. And that might be just, you know, in an argument, we're motivated to, like, save face, or to feel righteous, or virtuous or smart, or whatever. But, you know, there's lots of other reasons why we might want to defend a particular belief, we might want to defend, or, you know, we might want to feel good about ourselves. So we often tell ourselves stories about how the world works, that makes her make ourselves feel better about our place in it. So like, you know, someone who doesn't have much money might be motivated to defend the belief that, you know, rich people are all unethical or the, yeah, the only way to get rich is to, is to lie, and cheat and steal, or rich, people aren't happy anyway. Or though, you know, those are beliefs that might feel good if you yourself are not rich, and you know, have no hope of becoming so. So there are things like that, there are beliefs that we try to defend, you know, even just to ourselves, like in the privacy of our own heads, because we think it'll motivate us like someone who's doing some really hard long term project, like starting a company might really be motivated to believe that they're going to succeed, if they just work hard, then the success is guaranteed. Because that's, you know, that's a very motivating belief moreso than well, everything's really random. And there's a lot of luck involved. And I might fail, even if I try really hard. So, yeah, soldier mindset tends to, to come into play when there's some way in which holding a false belief would be helpful to us, or at least just feel good in the moment. It's less clear whether those beliefs actually are helpful in the long run, but they certainly, like feel helpful in the moment.

Jake 29:14

Yeah, I think one one challenge that's like, that, I thought of before, when, when we were talking about the different types of rationality truth versus what I was calling, you know, for maybe maybe not totally accurate, but but happiness. Yeah, that's fine to shorthand. Yeah,

Julia Galef 29:32



I've added my little asterisk and my my philosophical caveat, but yeah,

Jake 29:35

no, and and you're right, so like, I I'm not gonna I mean, anyone could define happiness however they want and maybe, you know, debate things, but that's not what I'm interested in getting after right now. I think the thing that sort of rose to the forefront of my mind which comes up again, now is basically the question of like, you know, if you if you could choose to like, believe or not you But anyone could if you choose to believe things that are true, and you're or you know, believe things that are false, I think everyone would answer like, Oh, yeah, I want to believe things that are true, the tough part comes when the things that you believe, sort of appear suddenly that they, they may be false. And you thought they were true before and the idea of them being false, brings you like, extreme discomfort, and, you know, potentially like depression, and just like put your whole world like up in doubt. And if you ask, you know, that person that same question about, would you rather believe true things or false things, they might say true. But when push comes to shove, if it's a package deal between true, and like, generally happier, like, have a good sense of well being, versus, you know, believing in false things. Or let me rephrase that true and sort of miserable, versus believing in some false things really strongly. But being very happy and having a great sense of well being? And all of this, I think it's a much more difficult question. And so I guess, I'm wondering if you've ever sort of thought about this dilemma, and, you know, whether it's reasonable to, for people to actually hold on to these false beliefs, in some cases, if the alternative is sort of, you know, realizing that what they believe isn't true, and being like, totally miserable for a long period of time because of it.

Julia Galef 31:27

Right? Yes, I have thought a lot about this. And in fact, one of the, one of the main points of my book is that, that people think that that trade off exists, where you can either have true beliefs, or you can be, you know, happy and motivated and confident, and so on. And so they, you know, in practice, they tend to choose the ladder. But I don't actually think that trade off exists to anywhere near the extent



that people think it does. And so a lot of the book is about pointing out how you can kind of have your cake and eat it too, you can see the world realistically, and you know, as objectively as possible, even though you're never going to be you know, 100% right about everything. But still you can, you can make that genuine effort and see things more accurately, without sacrificing, you know, happiness and motivation, and so on. So I give a lot of examples like, on the motivation side of things, I talked about how some of the most famous and successful and ambitious entrepreneurs actually had a surprisingly realistic and kind of pessimistic picture of their odds of success starting out, they weren't doing the thing everyone thinks entrepreneurs have to do where they like, are delusionally over confident, because that's what motivates people. Instead, they started out by thinking, you know, I'm probably gonna fail, but it's worth trying. Anyway. So the most prominent examples of this are Jeff Bezos, when he was starting Amazon and Elon Musk when he was starting Tesla and SpaceX. Both of them put their odds of success at at 30% or below. But they were still really motivated. And like, obviously, were able to get themselves to work hard, and ultimately, have quite a bit of success. And so in the book, I talked about, you know, what it was that allowed them to do that, why they were able to be motivated without, you know, holding this false belief to, to fuel that.

Jake 33:20

So, you know, you mentioned Jeff Bezos and Elon Musk. And I think, sort of being aware and reasonable about the odds of success of your company, is one thing. So you know, Ilan, Musk saying I have a 10% chance or whatever it is to, to succeed with Tesla or SpaceX? Yep, that's one thing. The other thing that I think like, would be more difficult is, you know, he's under the impression that his work is accelerating transition to clean energy, sustainable energy, and with Tesla, and then with SpaceX, to you know, making humans and generally life multiplanetary. And the latter one, I won't like, I'm not arguing either of these necessarily, but there's sort of an implicit belief that, like, both of those things are good, right? Yeah. What if you found out that actually, the second, like human life, I'll use that one, because it's a little more, less of a hot topic, the multiplanetary one, so then the energy, but with the multiplanetary thing, what if we found out like, as a true fact, somehow that the



second humans start, like civilized, like making, you know, other planets, living on other planets and everything like that, that, like, there's some aliens that are out there and like waiting for that to happen, and then they're going to like, create the apocalypse. And so suddenly, that becomes like some like, really bad thing. Right, right. So right now, do you think that would damage you?

Julia Galef 34:53

That's a great point. Well, I don't presume to understand the psychology of Ilan Nearly well enough to answer that question. But, um, but I agree with your general point that, like uncertainty about, you know, whether or when you will succeed is one thing, it's already kind of difficult for people to deal with. But you know, that's, that's one type of uncertainty. And then another type of uncertainty is about whether you're even pursuing a valuable project at all, even if you do succeed. And I agree, that is maybe even harder to deal with. I do know a number of people who are working on what's called existential risk, so ways of hopefully, reducing the probability that humanity will somehow wipe itself out, or that the universe will end up wiping out humanity through, you know, an asteroid or, or some other natural disaster. And, and, you know, these are people who are very committed to epistemic rationality and like, really want to see things as accurately as possible, even if that's not convenient or flattering, are easy. And, and they do acknowledge that, yes, there's uncertainty about whether the thing that I'm working on is actually going to help at all, or whether it's, you know, potentially gonna make things worse. And so they really kind of face that question head on. And, and I know that some people do that, that, it's really hard for them to square that with like being motivated on a day to day basis. But I know other people who who can square those two things. And I think, the way they stay motivated, even while acknowledging that there's some uncertainty about whether the thing they're working on is actually good, is it's really about, about internalizing probability and probabilistic thinking. And appreciating that the best you can possibly do is to pursue things with positive expected value. And that there's never a guarantee that what you're going to do, it's going to turn out well, or you know, is going to succeed. But that's not, that's not your fault. And that's not a realistic thing to hope for. And, you know, you should feel good about your choices. As long



as you know, in retrospect, it seems to you that you, you've made the best choice you could with the information you had, at the time, and you know, the limitations of human cognition. And if you feel that way, then, you know, if it were to turn out in the future, that actually your project went nowhere was unhelpful, you can still feel good about yourself for having made the best choice you could at the time. So one of my friends who's he's the head of a, of a nonprofit, trying to reduce existential risk from advanced artificial intelligence, he wrote this blog post about how he stays motivated, despite all of the uncertainty. And he had this line that really stuck with me. And it, I find it motivating when I'm facing kind of uncertainty in my life. I'm not gonna remember the exact quote verbatim, but it was something along the lines of you want to be able to get in the state where if the bad outcome occurs, you can use you simply nod and say to yourself, Well, I knew this card was in the deck. And I would still make the same bet, you know, at the time, given given the same information, and you should just feel good about that. So, you know, I'm not saying it's easy, but you can, you can have both realism, and, you know, happiness and motivation, if you, you know, are framing things correctly in your head?

Jake 38:21

Yeah, I think that's a great point. And so there's, there's two things there, one, I think is making the best decisions, you can at a given time, given all the information and then with sort of a scout mindset, keeping your head up to make sure you don't miss information, at least not miss, like obvious information that comes to light that you that soldier might just ignore, because it doesn't fit their, you know, path that they're charging ahead on. Yeah. And I think like, I've thought about this, even just in as simple of a context as investing, like, if you know, why you made a certain investment at a certain time, it's a lot easier, talking about, like, you know, investing money, it's a lot easier to sort of deal with it, if it doesn't work out, because there's, you know, that there's a risk and exactly, you just, you obviously didn't know that it would come to fruition, when you made the investment. That's great. That's much better than hearing from a friend that like you should put your life savings in Dogecoin. And then you, you go and invest and lose all your money or whatever. And I think for what it's worth, like, if that alien example that I



gave came to fruition. I don't know I am an Elon Musk fan despite the polarizing crypto stuff lately. And I think he would probably be heads up and sort of a scout enough to take that if there was a credible threat, he might, he might change his mind. But for now, it does seem pretty darn good to me to make to make life multiplanetary as quickly as we can. So going further, you mentioned him as well as Bezos as being leaders that you know, wherever To succeed, without overconfidence, at least in the probability that their companies would succeed. Another great leader, a young leader, who I admire who's been on both of our podcasts, who I think is a great example of how to lead without, you know, over certainty in certain things is Vitalik Buterin, the leader of the Ethereum, you know, project. I'm curious, you know, having spoken with him, how do you view him as like a leader? How does he sort of demonstrate some of these characteristics? Would you call him like, how would you? Would you sort of say, he has like a scout mindset? I'm curious to just hear how you think about that?

Julia Galef 40:42

Yeah, absolutely. I've, I have been following his writing, like his blogging and just his, you know, public presence for years now. Not because I've been all that interested in crypto because I actually am not, but because of his sort of unusual intellectual honesty, and, and commitment to just having accurate beliefs and, and, you know, objectivity? And so this manifests in a number of different ways. I've seen him, like, during the peak of the bubble, and what was it? 2017? Maybe what was like the

Jake 41:20

peak? Yeah, may 2017.

Julia Galef 41:22

Yeah, that's right. So during the, the peak of like crypto mania, he was kind of urging caution and saying, you know, there there's, like, there's, there's, like, good reason to think that this might be, I don't want to misquote him, but basically, warning against the view that like, everything's just gonna keep going up from here. And he actually, you know, advise people not to put all of their investments in, in crypto, and warn people that it was very volatile. And so, you



know, he's, he is a probabilistic thinker, and will, you know, try to give estimates of the probabilities on the predictions that he makes. And, also, I've noticed when he's talking about the decisions that he made, as a leader of the etherium community, he's very good about acknowledging the potential downsides of the, of the call that he made. So he'll say, you know, there's just always trade offs, like, this is what I ended up deciding was the best way forward. But I understand, you know, this, this policy has some downsides that other people, you know, might find, like, might find issue with, but on net, this seems like the best approach. Whereas most people, especially kind of leaders in the public eye, I feel, like whatever decision they make they feel seem to feel this pressure to say that it's all upsides and no downsides. And that's just not realistic. And I appreciate that. Metallic, acknowledges that. So. So yeah, when I, when I interviewed him on my podcast, one of the things I really wanted to learn was whether he found that this, this intellectually honest approach to leadership had any downsides. Because that's the thing that people always say, you know, oh, you can't be honest as a leader or you can't acknowledge uncertainty as a leader, because, you know, that'll demotivate people or, you know, people don't want to hear that. They just, they just want to hear positive things. And, and what he said was that, you know, yes, to some extent, like there are sometimes journalists who take his his statements of being less than 100%, certain in the future of crypto, they take that as an excuse to kind of, you know, to say, like, Oh, vitalik admits he has no confidence in the future of aetherium, or whatever. And there are some people who, you know, are part of the aetherium, or the crypto community who will chide him and say, like, Oh, vitalik That's no way to be a leader, you should be more of a cheerleader. But he said, You know, it was a conscious choice from the beginning to take this kind of intellectually honest approach to leadership, because even though it turns off some people, it attracts other people, and the type of people who tend to be attracted to intellectual honesty, are just, he just prefers those people, both on a personal level, and in terms of what kind of community does he think is going to give the best, you know, potential shot to aetherium for being, you know, successful and valuable in the future? It's, you know, people who actually really value accuracy and truth and intellectual honesty. And so, you know, I think the general lesson here is that you just, you have to decide who



you want to appeal to. And again, this, this applies more broadly than, you know, being a leader or being in crypto, just in any fit, like if you're, you know, forming a niche for yourself as a as a journalist, or if you're developing a base of clients as like a consultant or something like that. You You know, you can appeal Everyone, and you just have to decide like, do I want to attract people who like intellectual honesty? Or do I, you know, want to attract people who like 100% positivity? And personally, I prefer the former. But you know, it's true, you can't have everything.

Jake 45:17

Yeah, so I think it's gonna be really interesting, actually, you mentioned how sort of metallic made the conscious choice, it's going to be interesting to see how crypto develops from here, because aetherium being the second most valuable crypto in the world, I guess, largely led by vitalik seems to have very much of a, you know, of course, there's a wide variety of people who are involved and invested. But generally, it has like a pretty open minded, I would say, approach among like, the community and all of these kryptos are sort of all about, you know, that they just hinge directly on the community and who's in it, and how strongly they believe in the project and everything like that. Whereas Bitcoin being the most valuable, tends to I think their community tends to be less open minded in at least in this specific sort of context of like, which crypto is going to be the most valuable in the end, and you have a lot of what's called like Bitcoin maximalists, who basically say, if it's not Bitcoin, it's crap. bitcoins gonna win everything, and no matter why, and bitcoins inevitable, and things like this, and I'm a huge proponent of both Bitcoin and aetherium, as well as a few others. And so I think, like for me, but But still, for me, when I hear people say, like, Bitcoin is inevitable, I'm like, Well, you know, it seems like there's at least a 1% chance things don't really work out. And if it's a 1% chance, it's not inevitable, and maybe it's two or whatever it is. And I think aetherium, you know, vitalik himself, I wouldn't ask him in public, but he might say something where, you know, if you, if you were to ask him is aetherium 100%, inevitable to do X, Y, Z over the next 20 years? I have a feeling he would have,

Julia Galef 47:03



I think you could totally ask him that in public. And he mind giving a less than 100% estimate? Because, yeah, yeah,

Jake 47:10

definitely. I just wouldn't do it. Because it's sort of, you know, I wouldn't want him to have that sort of on the record for all these, you know, to go and, and do what you said, which is, oh, metallic says 5050 shot theory, um, dies or whatever. So, but yeah, but yeah, I think it's gonna be interesting to see how this all plays out. Another point from your book that I wanted to discuss was, you talked about just, you know, this kind of mindset, I think, involves a general sense of awareness, to sort of recognize these things that might change your mind. And so I want to talk about both sort of biases as well as willingness to change your mind. And let's start with the first How do you sort of keep an awareness about you to recognize situations in which you are being bias, and maybe we can use, I can actually combine them both. Maybe we can use the example of the book itself, where you went around you said, and sort of did these interviews and realize after the fact that you were actually sort of trying to drive towards a specific point. And sort of ended up changing your mind on like, what exactly certain chapters might be about and things like this. So changing biases, or being open minded to realizing your biases, at least, and then changing your mind are sort of two subjects that I'd love to hear your position on.

Julia Galef 48:31

Yeah. So I guess there's two kind of categories of techniques that I talked about. One of them is just kind of tools for making yourself more emotionally receptive to hearing things that you don't want to hear. And, and so an example of how to deal with that is just to just stop and ask yourself, like, Okay, if this thing were true, like this thing, I don't want to be true. If it were true, how bad would that be? Or like, what would I do about that? And so I use this technique, when I noticed, as you mentioned, that I had been in my interviews with people when I was doing research for the book, I noticed that I was kind of like, ostensibly, my goal was to learn about people's experiences, like with motivated reasoning, and, you know, soldier mindset and scout mindset. But what I had ended up doing several times was kind of arguing with people and trying to convince them that I was



right about Scott mindset, and that this, you know, had been a waste of several important interviews. And so I, I kind of stopped into this thought experiment of like, Okay, what if, you know, like, what if they were right, that soldier mindset has all these benefits, like, you know, motivation and happiness and so on? How bad would that be? What would I do about it? And I realized, well, you know, that wouldn't be the end of the world like I could, I could just write my book. saying like, here, here are the situations in which I think Scott mindset is really valuable. And I'm not claiming it's valuable in all situations. I don't have to claim that for this to be a, you know, interesting and useful book. And so once I realized that, like, I don't have to be, I don't have to be right about every aspect of or like, I don't have to claim Scott mindset is valuable in every situation, or, you know, in every context. That was very relaxing to me. And so I was able to actually hear what people thought the downsides of Skype mindset were. And I ended up as I mentioned, I ended up thinking, like, I still think they're overestimating the downsides of Scott mindset. And there are a lot of ways to get around those downsides. And so I talked about that in the book, but to even recognize, like, what people's objections were to scout mindset, and, you know, their hesitations that was really valuable, I think, I mean, I don't know, I could be fooling myself here. But I think that the book is, is going to be more useful to people, because it was informed by hearing people's like, genuine hesitations about having true beliefs. So that, that was one type of, of tool. And the other type of tool is is a thought experiment to try to notice when you're using a double standard, in thinking about something in order to get the answer you want. So this is like, a definition of soldier mindset that I really like is that, when you are evaluating something you want to believe you look at it through the lens of, can I accept this, and you're looking for any excuse to accept it. Whereas when you look at it, when you're evaluating something, you don't want to believe you look at it through the lens of must I accept this, and so you're looking for any excuse to reject it. And so thought experiments can help you notice that kind of asymmetry in your reasoning. And so I used one of these when I was going through the research, like the academic literature on motivated reasoning, my book, and I came across this study purporting to show that soldier mindset makes you successful. And I was like, Well, let me look at the methodology of



the study and see, you know, see if this is up to snuff. And so I looked at the Methods section, and it was actually not a well done study, it was, there were a lot of problems with it. And, and so I was like, great, I can dismiss it now. But then I was like, Oh, I should really do a thought experiment of what if the same study with the same methodology had found a conclusion that was favorable to my thesis? Like, what if it had found that scout minds that made us successful? What would I have done then? And I realized, oh, in that case, I would have said, Great, let me bookmark this, and I'll put it in my book. And so I noticed that, you know, the standard of rigor that I was applying to different studies was different depending on one, whether they supported my thesis, or whether they didn't support my thesis. And, and that wasn't good. And so I kind of forced myself to go back through the studies that I had bookmarked to cite in my book, and read their methodology sections with the same kind of critical eye. And, and indeed, I decided that a lot of them were not really very well done studies either. And I, I couldn't justify including them in my book. And so I had to throw that bunch out and rewrite a bunch of the book, which is one of the reasons it took me so long. But I guess yeah, those are two different types of thought experiments that I find really helpful in becoming more aware of your unsearched soldier mindset, and also becoming more willing to be a scout.

Jake 53:24

Yeah, that's a great example. And I'm glad you, you know, most people, it would be pretty easy to have sort of noticed this double standard of thinking on the different studies and been like, Oh, well, you know, I'm just going to assume that I don't have that double standard and keep the studies that I have in because I've already come this far. But to go back and actually, you know, apply that same level of rigor and looking at the methods of the ones that you did choose, and then sort of firming them up and rewriting a lot of the book, hopefully, you feel that it has a better product, because of it. And I think, hopefully, you know, worth the time, and especially just given the, the waters that you're navigating here, sort of a must do to to be sure that you sort of did the best you could to include the right sources and write support. The last question I want to ask is related to identity. So I believe you wrote in part of the book about how beliefs can sort of develop into identities. And I'm not sure maybe I



heard this in a podcast with you, where you sort of were inspired a little bit by a post that Paul Graham wrote about why you sort of should hold this few identities. As you can basically every identity that you hold, whether it's your religion, or your political party, or whatever it might be, basically gives you one last area where you can sort of reasonably debate or think about things. Yeah, so I'm curious to hear how beliefs turned into identities, and why you should be cautious about sort of what you identify with.

Julia Galef 55:00

Yeah, this post, this essay by Paul Graham was called keep your identity small. I think he wrote it in maybe 2010. thereabouts. And it was, it was very influential for me and a lot of people I know. And we, we kind of tried to keep our identity small, I think the way he put it was let us few things into your identity as possible. And the typical examples of beliefs that are part of some people's identity are, as you said, politics and religion. But anything can be part of your identity, as having lived in the Bay Area for many years, I can attest that beliefs about you know, which programming language is better than which other programming language can definitely become part of people's identities, and they can argue those points with as much, you know, passion and, and defensiveness as people argue about religion. So, yeah, I, I kind of theorize in the book about what is it that makes a belief likely to become part of our identities. And I don't think there's really any good research on this, but just kind of describing the patterns that I see. It seems to me that there are two things that make a belief, likely to become part of your identity. One of them is, if it's something that you feel proud of, like, if, if you feel like holding this belief makes me a good or admirable or smart person, then that's, that's gonna be something that it's very important to you to keep holding that belief. So like, I don't know, some people are very proud of being of being optimistic, like the fact that they think people are basically good, and the future is bright, like they, they are proud of holding those beliefs. And so optimism has become kind of part of their identities. A different factor that I think is also important is beliefs that make you feel embattled, like the world is, you know, against people who hold this belief where this kind of besieged minority. And so lots of minority subcultures, or, you know, subgroups have this feeling religious groups, certainly, but



even like, you know, lifestyle choices that are uncommon, like, I don't know, people who choose not to have children, that, that choice, or that belief, can become an important part of their identities, in part because people keep criticizing it. And so, you know, a number of people I have talked to or read about, have said that, you know, when they did ultimately end up changing their minds and deciding to have children, it was really hard, because, you know, they, they dealt with noxious people for years telling them, oh, you'll change your mind, or, you know, oh, you're selfish for not wanting to have kids, and so to change their minds felt like letting the enemy win. Which is really hard. And yeah, so I think those are two categories, like very general broad categories of beliefs that can become part of your identity. And I think it's, it's a fool's errand to not let anything become part of your identity. But I think it's valuable to, to at least, become more self aware of which types of beliefs are part of your identity, and try to have at least some detachment from those beliefs, you know, some distance so that you can recognize, you know, yes, this is what I believe now. But it could change. It's contingent, it's dependent on the evidence, and I don't need this in order to feel good about myself. Because the problem with beliefs that are part of your identity is that it just, you know, it's really hard to think clearly about them. And, you know, it's really tempting to just gather evidence that will help you defend those beliefs to other people, or help you feel good about yourself for holding that belief. And that's not that it's not possible to to do kind of an objective analysis of the evidence when you're in that mindset. Does that make sense?

Jake 58:55

Yeah, totally. And I think it was a good example, outside of like, the big ones of politics and religion, the one you gave about, you know, people who, who didn't think that they wanted to have kids for a long time and sort of have to fight for that side of the argument for a while, and then they decide they do want to have kids it's like really hard and probably happens even later, because they all sort of like the I don't know, like you said, you sort of are letting the enemy when it feels like and I think there's a lot to be said for people, you know, unfortunately, like as a society. You see this in politics, among other things, like changing your mind is viewed as a weakness, or, you know, letting the enemy win. But, hopefully, and I think you



would agree with this, you know, we can start to people can hopefully start to see, you know, changing your mind as a strength because I think it is, it's actually really difficult to do much more difficult than just sort of, you know, defending your beliefs endlessly. But anyway, anyway, I want to wrap things up here. I know we're running out on time, but thank you so much. Julia, for taking the time, it's been awesome talking with you and having you on. Congratulations again on the book. Where can people go to buy the book to follow you? And, you know, keep up with with everything in the future.

Julia Galef 1:00:13

Thank you. Thanks, Jake. It's been a pleasure. You can so the book again is called the scout mindset. You can get it basically anywhere on Amazon or, or at your local bookstore. Hopefully, my website is Julia, gallop calm. And that will link to my my own podcast rationally speaking, as well as to my YouTube channel, and some other projects that I've been working on. And I encourage you to follow me on Twitter. I'm just Julia galef. And I like to talk about these same topics in great detail on Twitter. And I'm often talking about kinds of like the edge cases are the things that I'm still confused about or unsure about. And so, yeah, you can you can help me think about this stuff by joining me online.