**Episode #19**

**Speaker 1** [00:00:01] Welcome to the Cabrera Lab podcast.

**Speaker 2** [00:00:07] everything.

**Speaker 1** [00:00:09] What

**Speaker 2** [00:00:09] I don't know.

**Speaker 1** [00:00:10] All things are out.

**Speaker 2** [00:00:11] I feel like everything's sort of all systems go for full force ahead. I feel we're sort of firing on all cylinders.

**Speaker 1** [00:00:19] That's the USMA systems engineer.

**Speaker 2** [00:00:22] Oh yeah, all systems go.

**Speaker 1** [00:00:24] West Point Systems Engineering slogan, tagline, all systems go.

**Speaker 2** [00:00:31] I was thinking about a few things. Yes. It's one of these moments where there's a bunch of things, to me, that are in my mind. But they're all related. But to most people, they seem unrelated. So if you remember a few days ago, I don't remember where we were. I was trying to find a cold beverage. And I really just wanted a bottle of water. And the only thing available was a Coke machine and a Pepsi machine. And then I said to you, isn't it weird that they're right next to each other, the Coke machine and the Pepsi machine, because they're technically competitors. And you had an interesting take on that. And then it spun into a whole other bunch of stuff.

**Speaker 1** [00:01:11] Yeah, I mean, the psychology of it is that because you would think why, you know, why are they always together, the machines and the but the psychology changes from do I want to Coke and not Coke, it's a distinction, identity, other problem that do I want to Coke not Coke or Pepsi not Pepsi, when you put them together, it is do I wanna Pepsi or a coat.

**Speaker 2** [00:01:34] Right, and there's no third option.

**Speaker 1** [00:01:36] There's no third option of not having one. It's it's do I do I want this or this? And so what they see when they put them together is that both increase their sales, right? Because because we've taken out the essentially remove the third option, which is not to get anything.

**Speaker 2** [00:01:56] which is neither Coke nor Pepsi, which is a whole universe of other possibilities.

**Speaker 1** [00:02:00] A whole universe of other things, yeah.

**Speaker 2** [00:02:02] the most universal of which is water.

**Speaker 1** [00:02:05] Yeah, water, which is the corporate sponsor of – well, now water is actually corporatized, right? But it used to be that water was just everywhere.

**Speaker 2** [00:02:17] but now.

**Speaker 1** [00:02:17] I was going to say we could make water the corporate sponsor of this episode, which is like...

**Speaker 3** [00:02:23] This episode is brought to you by water. Water. Drink some.

**Speaker 2** [00:02:27] Nutritious choice a non-gook choice.

**Speaker 3** [00:02:32] Non-liquid-cube.

**Speaker 2** [00:02:33] Non-liquid.

**Speaker 3** [00:02:34] That's like IV goop. Coke and Pepsi. Yeah, it's bad. It's not good.

**Speaker 2** [00:02:39] It's not good.

**Speaker 3** [00:02:40] Sugar water.

**Speaker 2** [00:02:41] Well, and Ryan, may I also have your Gatorade story? Yeah. The kid in the sporting goods store who had the choice of literally...

**Speaker 1** [00:02:47] We'll film that in another episode.

**Speaker 2** [00:02:51] The choice there in a sports store was Gatorade or soda. There was no water, there was no choice other than two things that compete with each other. Most people think of things as either or, that there's not a middle ground.

**Speaker 1** [00:03:07] If there was one thing, I mean, there's a lot of things you can do to increase your cognition and increase your ability to think and thinking obviously is the skill that underlies all skills. So thinking is pretty important. There's one thing that you need to do, if you're gonna get started to think better, is to love reality. And that sets up this distinction between your mental models and reality, and which one do I choose, right? choose reality, not your mental models. Cause if you choose your mental models and you fit reality to your mental models, that's confirmation bias. So we want to, we want to choose reality. So the first step is sort of love reality. Understand reality biases that like you have the, this mental model and that mental model is a representation, but not the same thing as reality. And as soon as you've done that, then the next thing is to realize that. Most of our mental models are incredibly bivalent. Bivalent just means two veils. Two, think of a veil like in a, what do you call those?

**Speaker 2** [00:04:23] Like a wedding.

**Speaker 1** [00:04:24] Yeah, like in a wedding or...

**Speaker 2** [00:04:25] Or like a welder's mask or I don't know.

**Speaker 1** [00:04:27] Sure. Yeah, and a veil that comes down over your face, right? So bivalent is like two veils in the veil. Maybe you had a red veil and a white veil. And so you're going to see the world with a red tinge, or you're gonna see the word with a white tinge or something like that. So, but bivalence means that you have two veiles that are right. Here's the thing. Most of our mental models, most of our thinking has been taught to be bivalant. Both taught and incentivized. So it's something we learn in school and it's something that we're incentivized in school in work to be byvalent. that would be fine except for most of reality is multi-valent meaning there are many veils, not just red and white or black and white, or whatever.

**Speaker 4** [00:05:18] Yeah.

**Speaker 1** [00:05:20] There's a whole universe of color, metaphorically speaking. So if we understand that, that our mental models, our thinking, tends to be bivalent and reality tends to be multivalent, well, that's a big deal. Because that means that most of our mental models are going to wind up short. Yes. So if can just change that one thing, that's kind of the next step. love reality, then... then focus on bivalency. And then you can get into the more technical aspects of cognition and metacognition and DSRP and all that kind of stuff.

**Speaker 2** [00:05:59] It's hard to see that your mental models are bivalent when everything around us is pushing bivalency. These sort of false either or choices that are in advertising, they're in politics, they're, they are in academia. A leads to B, and that's the only way it is. There's all of these things around us that if we're not thinking about it. are just, we're just gonna go with that norm, right? That flow. And so I guess the point is to be conscious about that and say, well, maybe there's a third option. Maybe there's the shade of gray here.

**Speaker 1** [00:06:42] Yeah, in science sometimes we refer to a thing called chaos theory, and chaos theory is about sense. I love when you get nerdy. Cause I get dirty.

**Speaker 2** [00:06:55] Chaos theory.

**Speaker 1** [00:06:56] Sorry.

**Speaker 2** [00:06:57] I like it.

**Speaker 1** [00:06:58] Chaos theory is really just about that the system and the way it behaves is sensitively dependent on the initial condition, the starting condition, right? Yeah. So it's just like saying all this complexity you see could have been really different if the starting condition, if the place it started was just a tiny bit different. It could have ended up dramatically different, right? So. If we want to understand how we got here to all this bivalency, we can go back to the initial starting condition of Western civilization. And that started with Aristotle, right? And Aristotle and his idea of the law of the excluded middle, right, and the law the excluded middle is exactly what it sounds like. you exclude the middle. So you have a continuum of options, from black to white, and you exclude the middle

**Speaker 2** [00:08:10] Interesting.

**Speaker 1** [00:08:10] Which means you have two options. A and not A. Yes. Right? A and NOT A.

**Speaker 2** [00:08:17] And that's for what, expediency or?

**Speaker 1** [00:08:20] Well, I was just trying to figure out the world. And he saw, you either have this or that. Any time you have this, you have therefore not this. And there's truth to that. There's truth that when you have something, there is the negation of that thing. And there is truth to it. But it's not the whole truth. It's not whole truth, so. It is true that there is bivalency in the universe, but it's nested in multivalency, right? So it is true that there are situations in the world every day where you have to make a choice, but we've sort of generalized that case to the entirety of the world. And all of our mental models are influenced by this by this generalization which is a false generalization. of bivalency, so like you said, our technology is entirely based on ones and zeros. Right.

**Speaker 2** [00:09:29] Legal.

**Speaker 1** [00:09:30] Our legal system, guilty, not guilty. Our political system, Democrat, Republican. And look at how difficult it is to get a third option, right? It's like co-Pepsi, you know?

**Speaker 2** [00:09:45] because they're dominating.

**Speaker 1** [00:09:47] Because, yeah, they have a vested interest. So why do they always show up together? Same reason Coke and Pepsi. To leave out the Pepsi. Because then you're not asking yourself, Democrat or not Democrat, or Republican or not, you're going, will it be Democrat or Republican? Those are my only two options.

**Speaker 2** [00:10:04] They're limiting your choice.

**Speaker 1** [00:10:05] They're limiting your choices, and they're making it so they're the only game in town. And there are many, many more choices. There are many many more choices in all these different places.

**Speaker 2** [00:10:19] So you said a minute ago, and you did this thing with your hands, where you said binary fits inside of multivalency. And so I guess I would pick at that a little bit more. You're saying that in a world that actually exists, where there is a middle, where there's continuum, shades of gray, however you want to, whatever metaphor you want use, were you saying then that you can still make a choice? an either or choice inside of a world of sort of, and both. In other words, you can be binary inside of the multivalent when it's functional.

**Speaker 1** [00:10:58] When it's functional and when it's necessary, but you don't want to over-generalize that binary. In other words, if I say, do you want a roast beef or a turkey sandwich? That's a binary. If on the menu there's roast beef for turkey, then that's binary. But there is the option of buying roast beef and turkey and making a roast turkey beef sandwich, right? There's always other options, a minced meat or mixed meat or whatever. That's what they call it. Sometimes. things are set up to make it seem like it's binary. But in reality, it is not binary. And that's not to say that there aren't real-world situations that are binary. It's just to say they're the anomaly, not the norm. The norm is multivalency. The exception is bivalency, and we've got it reversed. We've got the norm in our mental models is bvalency. And the anomaly or the exception is multi-valency. And so the more we build our mental models with that bias, the more often we're going to be wrong about nature and reality and.

**Speaker 2** [00:12:08] Right, because of the mismatch you said earlier, which is if we're thinking that everything exists in two states, but the reality is that it's multiple states. To me, one of the biggest effects of that is the idea of causality versus webs of causally. So we're always looking for an A to B solution. But the truth is there's a whole web of things that are feeding into any given

**Speaker 1** [00:12:35] Yeah, it's just a lot more complex. So we're always looking for like cause effect. What's the cause? Well, the cause is a web of causes, right? It's a web of causes. Yeah. So I mean, this should, this is a kind of HMB happy. I talked about that in the last episode or a couple episodes ago, the happy mind blown emoji.

**Speaker 2** [00:12:58] Yes, HMBE.

**Speaker 1** [00:13:00] This is kind of an HMB moment. Just think about this for a second. Anything that is caused, right? So the effect. So there's a cause and an effect. Anything that's an effect, which is everything, because everything is an effect of something. So anything that is an affect has a cause, but it doesn't have a cause. It has a web of causes. And that's true for everything in the universe. So there's nothing in the university that has a singular cause. Nothing. Everything in the Universe has a web of causality. So the next time you wanna blame something, take a more systemic view and see that while that thing might be part and parcel of the cause, it is not While it might be part, it's not parcel, right? While it may be part of the cause, it might a huge part of a cause, but it's entirely the cause. There's a web of cause. And what we're often doing in business, in corporations, in government, in families, in relationships is we're always trying to blame some cause. We're trying to find the cause, the cause. and we're trying to blame the cause.

**Speaker 2** [00:14:29] Why do you think we do that?

**Speaker 1** [00:14:31] It makes us feel good, right? It makes this feel like we got shit done.

**Speaker 2** [00:14:34] And we feel like we figured it out.

**Speaker 1** [00:14:35] We feel like we figured it out, we might have figured we're so smart. I found the cause, it's Bob, let's fire Bob.

**Speaker 4** [00:14:42] That's a lot of fun.

**Speaker 1** [00:14:42] You know, Bob did it. Let's fire Bob. And you're like, okay, fire Bob and let's see whether or not you still have the problem. Because I'm gonna, I'm going to go out on a limb and say, you're going to still have that problem because the problem is a pattern.

**Speaker 2** [00:14:58] Yeah, it was a.

**Speaker 1** [00:14:59] It was a bunch of stuff. Bob was just, you know, part of it all.

**Speaker 2** [00:15:03] or in the wrong place.

**Speaker 1** [00:15:04] Wrong place, wrong time, you know, whatever. But we feel this sense of like, oh, we've resolved this, right?

**Speaker 2** [00:15:13] Well, we have control over a situation.

**Speaker 1** [00:15:15] And I'm not, again, I'm, not saying, you know, take violent crime, for example, you have somebody that does something horrible. Yes, of course, that we can hold them accountable. We can and must and hold them, accountable for the violent crime that they've done. But we also, so that we don't have more violent crime. We have to think about what are the web of causality that led that person to this, to this event. And just and what can we do about that web of causality along with yes dealing with the person that's committed this violent crime So I'm not I'm saying like this has nothing to do with like letting people off or not holding people accountable or anything like that

**Speaker 2** [00:15:57] No, no, no.

**Speaker 1** [00:15:58] It's just to say that there is a web of causality. And if we don't deal with the web of causality, then we're going to just keep creating people who do these kinds of things. Right. Because it's like there's a factory that's outputting people that do these kinds of thing. And we keep dealing with the output, but we don' deal with factory.

**Speaker 2** [00:16:20] Yes, there was a really good study by the Children's Defense Fund many years ago when I was a graduate student.

**Speaker 1** [00:16:26] Who's the nerd now?

**Speaker 2** [00:16:28] But I'm fine with being in there. I've always embraced it.

**Speaker 3** [00:16:31] That's a really good s-

**Speaker 2** [00:16:31] It was a great study, it was a seminal study, a really important study, and it was looking at the issue of teen pregnancy. And I don't know if you know, in the 80s and 90s we had this huge surge in teen pregnancies. And everybody was trying to figure out what the cause was. And they were debating about access to contraception, they were debate about quality of schools, They were debating about geography, like they were... And so of course, it became a political debate about contraception and providing, how do you provide teens sex education and contraceptions? And the CDF did this study and they said, well, let's actually look at what's really happening in this young girl's life. What is the web of stuff that's happening? And they figured out that there were all these variables between socioeconomic status, access to nutrition, and how all these things. And that those things combined led to one variable that was the deciding factor, which was hopelessness. When a young woman felt that she had no options, then she would do that. But they couldn't have gotten to that had they not been open to the idea of all of these other factors and webs in that causality to say, and the thing about hopelessness is hopelessness was related to every single one of those pieces. And so then they had to go. and work on each one of those from the perspective of how do we create a future of hope for these young women? Through education, through nutrition, through contraception, through this, through parental relationships, it was amazing.

**Speaker 1** [00:18:13] Yeah, I mean, that's a great example because what people will say is, well, we don't have the time or the money or the whatever to go and solve all those issues. And you go, well okay, that makes sense. You don't the time to solve all of these things in order to deal with this thing. Right. But apparently you have the time to keep dealing with this thing. because that's what you're deciding. You're not deciding not to deal with these things and this goes away. You're deciding to not deal with these things and have more of these effects. So do you have the time? Do you have money to deal with these effects and their knock on effects? Or should we do the job right and figure out this web of causality that's leading to these, this pattern of behavior.

**Speaker 2** [00:19:12] Right. And what they also do a lot is they say, we're going to work on this one. This is the one. And they spend a lot of time and a lot of money, and they put all their eggs in that basket. And then they're like, oh, why isn't changing it? Why isn't it changing it. Why are we getting it out?

**Speaker 1** [00:19:28] And it gets worse. It gets worse because once you've done that, then you say, we tried that. It didn't work.

**Speaker 4** [00:19:36] Mm-hmm.

**Speaker 1** [00:19:36] So you throw it out. And then you go, okay, let's do that one. Oh, we tried that. It didn't work. Let's throw it up. And then the next one. And then next one, and what they don't realize is that it's the dynamic of these things. It's the interrelationships.

**Speaker 4** [00:19:53] among them.

**Speaker 1** [00:19:53] among these things, among the parts of a whole, the cause is a web of relationships of a bunch of parts that make up a whole that are leading to this effect. You have to have it all. So if we try to focus in on any one of them at a time, we might not see the results that we're looking for. And then... We have the costly mistake of ruling that out as one of the causes, but it's one of a dynamic of causes. And that is a mistake that we make over and over and over again in policy and corporations and all kinds of things.

**Speaker 2** [00:20:38] all kinds of decisions.

**Speaker 1** [00:20:39] All kinds of things.

**Speaker 2** [00:20:39] I mean, even, you know.

**Speaker 1** [00:20:41] even personal relationships and silly decisions.

**Speaker 2** [00:20:44] You rule things out before you actually know.

**Speaker 1** [00:20:46] Even stuff with our, you know, your kids and stuff like that. You know, you, you're always looking for that. Our kids, like one's kids, you know, like we're always looking for the one thing. Yeah. And it's a bunch of what's causing this. So you're like, yeah, that's a lot of things. It's a whole bunch of things

**Speaker 2** [00:21:03] Well, even we were talking about technology. You think about the addiction to phones. It's not the phone. It's all of the other stuff that's a web of stuff. The social, the distraction, the manipulation by the people who are creating it. It's ALL of these things that are causing that problem. It's just not one thing.

**Speaker 4** [00:21:25] That's right.

**Speaker 2** [00:21:25] I want to talk about the things that are excluded because, you know, I'm kind of the word B. I don't even know the word. I'm strangely focused on politics and binary, bivalent polarization, purposeful polarization.

**Speaker 3** [00:21:46] Yes.

**Speaker 2** [00:21:47] Manipulation.

**Speaker 3** [00:21:48] what we call othering.

**Speaker 2** [00:21:49] I think that right now is a time where the dangers of this bivalency are becoming more and more obvious.

**Speaker 1** [00:21:59] Yeah, so there's in DSRP, which we talk about a lot. In DSRP the D of DSRP is made up of two elements, distinctions is the D, it's made up two elements. One is the identity, and the other is the other, right? So there's the thing and the not thing, right? And in that sense, that is very binary. It's identity and other. where it becomes somewhat not binary is the other can be its own identity. And when you add the r and the s and the p, or perspectives in particular, you see that this binary can exist in a much larger continuum of binary. So you can have red and not red, but red can be part of a rainbow of colors. So there are many more options. But yes, there is the binary of there's red and then there's not red. bivalency occurs within multivalency. So distinctions is made up of the identity and the other and there's all kinds of, as you were referring to, manipulations and shenanigans.

**Speaker 2** [00:23:12] Oh, I like that one.

**Speaker 1** [00:23:12] or shenanigans.

**Speaker 2** [00:23:13] shenanigans. That's a great word.

**Speaker 1** [00:23:16] Yeah, it's a good one. That we do around othering. So we kind of focus on the identity and then we otherize some group, some person, some argument, right? We create straw men out of a person's argument. That's kind of othering it and we ignore that the other person exists. We mischaracterize the other or their identity or their whatever. We don't even recognize them as an existent thing. We pretend that they're not even there. We don' invite them to meetings. There's all kinds of othering, right? It's terrible. All kinds of the othering. And when we have a binary system like Democrats and Republicans, then really kind of all you have to do is otherize. So it's like, this is who we are and they are the worst. You know, this is who we are and they are evil. This is who are and they are Nazis. This is, you know, no matter who it is, they're both saying that.

**Speaker 2** [00:24:20] Yeah, about the other.

**Speaker 1** [00:24:21] about the other. And ironically, we talked about this in a recent episode about this in in marriages and relationships. Yes. Right. Where we have relationships brought to you by the number two versus relationships brought you by the Number Three. When when you're talking about relationships brought by the No. Two, and you have some issue that you don't like, then the only place to put that is the blame is it goes with the right right so the national debt Who created it? Well, they did. It's always they did!

**Speaker 2** [00:24:56] both of them.

**Speaker 1** [00:24:57] And you're like, well, I'm pretty sure you both created it, right? Like, so.

**Speaker 4** [00:25:01] Yeah.

**Speaker 1** [00:25:02] We're always othering. And so being metacognitive, what we want to do is try to minimize the amount that we other. Because it's unethical, it's unfair, it doesn't make you a good person, it doesn' make you feel good about yourself to just constantly be doing shenanigans.

**Speaker 2** [00:25:21] This might seem a little bit more complicated, because the reality is there are two choices, right? The way that the system is set up, there's two choices.

**Speaker 1** [00:25:32] You mean in the political system? In the political

**Speaker 2** [00:25:34] In the political system, and we can also talk about Coke and Pepsi and Guilty and Not Guilty, but in this case, you're right that they're always blaming the other, right? But there's also sort of collateral damage in that this is how it's framed for the American public.

**Speaker 1** [00:25:49] For the American people, yeah.

**Speaker 2** [00:25:50] and there is seemingly no other option.

**Speaker 1** [00:25:53] Yes, even though there are, I mean, they are invested in there not being any other option for the American public, but there should and could easily be other options.

**Speaker 2** [00:26:05] Right, which means, yes, if you're a person who says, and I think this is true with Coke and Pepsi, it's true with Democrat, Republican, any of these choices, take that moment back and say, wait a minute, are there really only two options here?

**Speaker 1** [00:26:20] Yeah, like in 308 million people, are these the two idiots that we have the choice to offer? I mean, this is the best we have to offer? No. This is it?

**Speaker 2** [00:26:31] The problem was we needed to ask that question two years ago. to get any momentum to start to think about, how do we have a non-binary choice here, right? But it's the same thing. So you can say it's about this, but you can't say you're standing at the cash register and you're like, oh, well, are there more options than what's being put in front of me? That's right. You have to ask yourself that question at all times, just like when you're trying to solve a problem, is it really just this leads to that? Should I take a step back and look for all of that? Because I know it's there. We know that there is multivalency in the reality of the problem, that it's a web of stuff.

**Speaker 1** [00:27:17] Actually, it reminds me of that case that we do of the water desalination plant in our course at Cornell

**Speaker 2** [00:27:25] students love that.

**Speaker 1** [00:27:26] And this case basically sets it up, you know, where it's a case in San Diego of, do we want a desal plant for $30 million or not? Right? And your job is to decide yes or no. Exactly. Right? And the reason we use this case, and we're gonna let the cat out of the bag for future students if they watch. We'll find out what the case is. Is to get students to, because... The students will buy into the way the case is framed. But there are many other options other than yes or no. There's a little bit of both. There's maybe, there's yes and some other things. And it would be far smarter, based on the numbers, to do a mix of things, rather than a yay or nay vote. But because it's framed in a particular way, they all get sucked into the yay or nay. Yeah. But so much of it is about the way things are framed. All of it. Yeah. Things are framed, right? Maybe not all, there's so much of them. We shouldn't say all.

**Speaker 2** [00:28:39] So much.

**Speaker 1** [00:28:40] I think so. So I guess the idea is that when we come to these situations of life, just look out, pay attention for the framing of black and white. Pay attention to that framing. Whenever somebody's framing things in blacks and whites, whenever somebody's framing things and the Republicans and Democrats, and guilty and not guilty, or the one that my pet peeve is. good and bad. You know, this is good. This is bad. Everybody labels this. I'm doing good. Good and bad, I'm not talking about, you know, there is real bad in the world, you know. But I'm talking about like judging, labeling everything you're doing as good or bad, you know? This is good weather. This bad weather. It's just weather.

**Speaker 2** [00:29:28] It's not.

**Speaker 1** [00:29:28] It's not good or bad weather.

**Speaker 2** [00:29:30] Just right

**Speaker 1** [00:29:31] rain isn't bad weather. Rain is good. Rain is good or not. See what I just did? I did it. Right. So we frame things in these ways a lot. Yeah. And be aware to try to not frame them that way or try to not be so susceptible to buying into that right?

**Speaker 2** [00:29:50] But so much about what we talk about comes down to just having that moment of bringing that subconscious ease into the conscious and saying, well, wait a minute, is it really this or that? And just taking a moment to say, what is the other possibility? What are the other possibilities here? And even to the point of, if you go a step further, why has it been framed that way for me. Who is it serving that is framed that way? Coke and Pepsi are making a lot of money because they've decided to make my choices Coke or Pepsi products and nothing else.

**Speaker 3** [00:30:28] And if you guys want to sponsor the podcast, we just run that part. I think we're pretty much ruling out anybody from ever.

**Speaker 2** [00:30:35] Let's see who wants it the most. The frame matters.

**Speaker 3** [00:30:40] Completely

**Speaker 2** [00:30:41] The way things are framed for you, you should know that they're being framed for your first.

**Speaker 1** [00:30:46] They're always framed by the way everybody's everything always has a perspective associated with it even if it's not being intentionally manipulated, you know, might be unintentional or whatever, everything's coming from a frame. And if statistically speaking, most people's thinking is bivalent, which it is, then a lot of those frames, a lot the way that things are being framed is gonna be bivalant. It's gonna be black and white framed in some way, shape or form. So just be aware of that. Just be aware that the norm in thinking is black and white framing. the norm in reality is multivalent. Right. And what this sets up for us is a disconnect where we get it wrong. And it also sets up this idea of this either or what sometimes we call the tyranny of either or versus the genius of both and. Yes. Right? Yes. And we don't get the genius of both end or maybe more than both end because we're constantly suffering from the tyrany either or. Either or. You get this option or this option. Yeah. And nature doesn't work that way. Yes. Reality, the universe, doesn't work that. It is the anomaly that it works that way, it's the norm that it works in multivalency. So just be aware of it.

**Speaker 2** [00:32:15] So would it be fair to say, my smart husband, that we should be looking for that excluded middle, or that we be aware of that excluded, if you relate it back to what you're saying about Aristotle, would you say that it's looking for that middle, or knowing that that middle exists?

**Speaker 1** [00:32:35] Yeah, I have a little pet peeve of the, you know, it's pretty technical, but it's like anytime you go looking for something, you're going to find what you're looking for. So if you go look into be offended, you are going to get offended. If you go to look into this or that, you going to to find it because of confirmation bias, right? Yeah. So I wouldn't say go looking forward, but I would say just be aware. Just be aware that there's this tendency for it to be excluded, for it, to be for the middle to be exclusive. There is this tendency. There's this bias towards, there's this leaning towards bivalency, a pretty strong leaning in humans towards bvalency, in our culture, towards bialency. So just be aware of it. Just be aware it. And don't put it where it isn't, because sometimes you're gonna find beautiful multivalency and great, that's awesome. But be aware if it and try not to participate in it, Try not to add to it. and love reality. That's what loving reality is all about, is like, let's just let reality be what it is and understand it. And see it for what it. And see for what is. And if we wanna change it, like knowing it is the best way to change it. If we don't like the way reality is, then the best solution will be to understand how reality is and then change it Right. Yeah, just be aware of it. you know, metacognition awareness.

**Speaker 2** [00:34:07] Well, and if you love reality and you see reality, then the things that you do are gonna be more in line with how they actually exist, and you'll be much better off.

**Speaker 1** [00:34:15] Yeah. And as a slightly more technical, like if you really want to get into it, like DSRP is the antidote tour to bivalent thinking. Yes. Like if you start practicing more DSRP like thinking, what that's helping you do is, is limit the bivalency that you're because it'll open up other options. It'll give you more opportunities, more options in your thinking than just the byvalent ones. And it also will allow you to be bivalent, but it'll allow you to be byvalent inside of multivalency. You can say, this is black and white from this perspective, but there are other perspectives that make it a range of colors.

**Speaker 2** [00:34:58] Yeah, I mean it's really a new kind of logic.

**Speaker 1** [00:35:00] It is a multivalent logic.

**Speaker 2** [00:35:03] extension of.

**Speaker 1** [00:35:04] that is more advanced than the Aristotelian logic. Yeah, absolutely.

**Speaker 2** [00:35:08] I think that's a great place to wrap because I love that.

**Speaker 1** [00:35:11] It's always good.

**Speaker 3** [00:35:11] to wrap on Aristotelian logic, if only we could.

**Speaker 2** [00:35:15] No, it wasn't that. It was an expansion of Aristotelian.

**Speaker 3** [00:35:18] Yes, that's right, thank you.

**Speaker 2** [00:35:20] That was beyond that.

**Speaker 3** [00:35:21] No, I'm saying we could put a rap on At Least It's Really Mazzy, it was kind of a double entendre joke. I totally missed it.

**Speaker 2** [00:35:30] I'd be curious to know who else missed it.

**Speaker 3** [00:35:32] Probably if. Probably just me. No.

**Speaker 2** [00:35:34] It could just be me.

**Speaker 3** [00:35:35] I don't think so.

**Speaker 2** [00:35:36] Okay, so this is the moment where we remind people to comment, like, and subscribe.

**Speaker 1** [00:35:41] We try on this podcast to help people understand the moves and the structures that help you think smarter, more systemic and more like reality and faster. And because over time, you know, we need smarter, more systemic, faster thinking to keep up with all the complexities of today.

**Speaker 2** [00:36:04] That's officially. That's a wrap.