**Episode #49 (AMA #2)**

**Speaker 1** [00:00:05] Hey, how are you?

**Speaker 2** [00:00:07] I'm awesome.

**Speaker 1** [00:00:08] I think I'm awesome too. I'm so excited because today is as cause anything. It's like a party.

**Speaker 2** [00:00:18] It is like a party in a box.

**Speaker 1** [00:00:21] This is a series of questions that come in through our training camp.

**Speaker 2** [00:00:25] You have to join Basecamp for free. You have access to ask us anything and all of our podcasts and a bunch of other cool stuff So you can ask and then that gets on this episode of the podcast

**Speaker 1** [00:00:39] So we have some fun questions, some deep questions, some good questions, and we've got a lot of them. So we'll try to spend a few minutes on each to make sure we get everybody's question answered.

**Speaker 2** [00:00:49] Yeah, the hard thing is a lot of questions, you know, you could spend like a long time answering.

**Speaker 1** [00:00:52] All right, our first question is a really good question. Actually, a variety of people have asked us this, not just didn't ask us anything, but when we're out and about. When we're thinking about listening for organization, how do we actually do that? What are the kind of tips and tricks we can offer for that?

**Speaker 2** [00:01:09] Yeah, so George is talking about not organization like companies, but organization in the mental model sense. So a mental model is equal to how we organize information, meaning when we organize information, we make meaning or mental models. So M equals I O. And so what we want to do is listen not just for the I, but listen for the O because the O is determining the meaning of the Bye. I is information, O is the way it's organized. DSRP is the we organize the information. So knowing DSRP gives us the language to understand and talk about the O and listen for it. So that's the first part is just having that language, the language of DSRP and the understanding and awareness of DSRP helps you to listen for.

**Speaker 1** [00:02:03] Right. So, for example, when you're talking, I can listen for places where you're distinguishing between one thing and another in the way you're saying it. I can listen for when you are saying, even gesturing, well, this is connected to that. Yes. And I'm listening. I'm hearing the structure of what you're saying, which is that you're relating two ideas. about

**Speaker 2** [00:02:20] And not just listening with your ears, but listening with your whole body as a sale, as we say. And like you said, you know, I'm making gestures sometimes when I'm talking or I'm bobbing my head left and right. And that might be an indication of, well, it could be this choice or I could make that choice. Oh, I making a distinction of choice. I've got two choices. So we're listening for that. And when, when we listen for that and then as we are utilizing DSRP structure, you can say, well, maybe you have more than two choices, for example, maybe your mental model is that you only have two choices. That's this or that, but what if it's this and that, or what if this or this other thing, right? And so you can help people by listening deeply. to what they're stuck in. They might be stuck in, well, I either have to do this or I have to that. Well, that's really interesting, right? There's a relationship there and we can challenge the distinction of that relationship of or to possibly be both and. And we can say, maybe there's more than just two. Maybe it's not either or. We can explore those kinds of things, the kind of structural or organizational things. The other piece there is that this is what we call the synonyms lists or the root lists. Yes. And we have a synonymes or root lists for D and S and R and P. And learning those terms will help you hear the organization and the way that people describe things. I often say that the words we use are like billboards to our mental model. So they give us indication, they're indications of what the deeper mental model is. So if we pay attention to the words we use and the intonation and the emphasis that we use, a lot of times we can see the distinctions. We can see perspective. For example, I use the word Well, C is almost obvious and always reference to a perspective.

**Speaker 3** [00:04:35] Right, right.

**Speaker 2** [00:04:36] Right. So when we're using visual type language, we're talking about perspectives. We're using metaphors for perspective.

**Speaker 1** [00:04:45] Okay, so then that means that there were a few parts to the answer. One is listen with everything, not just your ears. Two is go beyond the information and listen for those synonyms of things like connect or the way I see it is an indication somebody's taking your perspective and things like that.

**Speaker 2** [00:05:05] Yeah. And then there's also just the parts of speech, right? Like speech can communicate the verbs. A lot of the verbs are relationships and all the nouns are definitely identities. Distinctions. Distinctions, the identity part of a distinction, which means that you have another that is possible. Right. and all of the nouns can be systems that maybe have parts that you're not recognizing. You're talking about the whole, but you're not talking about parts. Or you're talking the parts, but you're referencing the whole. So I go, well, what's going on there? Yeah. Right? Yeah. Or you are referencing the point, but not the view. So your language might include one of the structures, but not the other structure, the opposing element. Right. and so you can use that. to really deeply listen and understand not only what the person's saying and where the person is, but where they're not. Yes. And where they could be. Yes. And that's a big part of coaching. I mean, listening is the crux of all coaching, listening. I mean coaching, therapy, relationships. Human connection. Human connection, it's. being good at the listening and listening for meaning rather than listening sort of like a lawyer for catching people in words, information, but listening for the O instead of the I, not instead of I, but alongside the I is critical. So there's a bunch of ways, but at the end of the day it's practicing those things, getting good at it.

**Speaker 1** [00:06:40] Well, and I just think just reminding yourself to listen for the mental model, not just hear the information that's coming across to you, but like, what does Derek really mean by that? Yeah. Use the word mean, like what does he mean by that? What are the things he's doing? What is he connecting and those kinds of things?

**Speaker 2** [00:06:55] So I'll give you just one quick example. I just said at the end of the day, it's practicing. So that's me kind of collecting all the things we just said into a whole. And then making an arrow of practice to have the effect. So all the stuff we talked about will be useless. Essentially what I was saying is all the stuff we just talked about, will be useless if you don't practice relationships. So this whole part, whole system of the answer we just set will be, useless. if you don't practice to have the effect that you're looking at. So that's the compression.

**Speaker 1** [00:07:30] Interesting. Can one say that a mental model without any bias is reality itself? Yes. There you go.

**Speaker 2** [00:07:41] Yeah, it's hard to come by. George Box was fond of saying all models are wrong, but some are useful. So all of our mental models are wrong. That's so important to understand that, that all of our mental model are wrong. It gives us tremendous humility and understanding that we're all trying to be right all the time, instead of just acknowledging that we are all wrong all the Bye. We're wrong because we're biased. We're only seeing a tiny sliver of the reality. In many cases, we don't need to see the whole reality in order to have something be effective. We can see just some level portion of it. Bias isn't just coming from the perspective that we're coming from, it's coming from that distinctions that we are making, the level of part whole that we deciding on is important. And so if we fully DSRPed, first of all it would be just too huge. We would be describing the whole universe. Right. At some point we have to make decisions about what we're gonna include and what we are not gonna include for the given situation. So bias is always there, but we can reduce bias by taking into account a few extra things in a given situation. We can reduce the bias that's going to affect us in that situation.

**Speaker 1** [00:09:07] So you can reduce it, but you can't completely eradicate it.

**Speaker 2** [00:09:11] You can't eradicate bias because the only way to truly capture all of reality is to explain it all, which we can't.

**Speaker 1** [00:09:21] Well, that was the next question, which was a follow-up from Ronaldo, which is, is there a formal way to actually guarantee that a mental model has no bias?

**Speaker 2** [00:09:29] Guarantee? No. But mitigate? Sure. Absolutely. You can take more than one perspective. For example, Leonardo da Vinci was fond of saying whenever you look at something, in his case he was talking about the dissection of organs, and he would draw the heart or he did these amazing drawings of the heart, or the lungs, or whatever. And he would say you have to cut it from three different angles. Well, that's mitigating bias. Would his understanding of the organ increase if he cut it from 20,000 angles? Sure. But would it increase enough to make a difference? Probably not. So three is a good rule, right? Take looking at something from three angles. We see the same thing when you're in the mountains and you're doing map and compass, we call it triangulation in order to find where you are. one azimuth or one sort of line from a mountain top to where you are is not enough to really determine where you're accurately. But three is a pretty good rule of thumb, right? But if you took 30, you would be even more accurate. But you would take more time to get that. And you wouldn't benefit that much from knowing that you're, you know, two feet to the right rather than. You know, two feet to the left. So, as an example, three perspectives is substantially better than one perspective. In terms of bias, for sure. In terms bias. But is 50 perspectives worth the time? Maybe not. Is three perspectives from three different types of people better than three perspectives from the same type of person? Sure. because you're getting, again, you're not coming from the same angle.

**Speaker 1** [00:11:30] It sounds like one of the things that we talk a lot about in class that relates to that. It sounds one of the ways to really reduce the possibility of bias in your mental models is to almost interrogate them with DSRMP. Challenge, are the distinctions I'm making clear? Have I got enough or all of the ones that matter in this space that I'm thinking about? Then obviously, just checking, are the things it need to be related, are they related? Yeah. Are you taking enough perspectives, all of you?

**Speaker 2** [00:12:01] Yeah, if you follow what we call the DSRP-483 protocol, which is kind of the steps which is on training camp, like that will mitigate a lot and probably enough.

**Speaker 3** [00:12:15] There you have it.

**Speaker 2** [00:12:16] Unless you're really trying to do something at the most extreme and refined level, that's going to get it like 90% of the time.

**Speaker 1** [00:12:27] Can you explain what is meant by validated by research? And he gives a reference. He saw a podcast that had an ad in the middle of it for AG1 supplements, and said exactly that, that it was validated by a research. And he's wondering about the district. Validated by research, empirical, science-based, all of those terms, what do they actually mean?

**Speaker 2** [00:12:53] Yeah. I mean, we could do 200 podcast episodes on this answer. So I mean this is really important. It's also a little technical. But at the end of the day, it doesn't have to be super difficult. At the end the day we're talking about validity and reliability and replicability in science, right? So is something valid? So the way to think of one of the best ways to think about this is like, take a target, you know, if I hit, uh, in the same area, if I shoot at a target 10 times and I hit in the same area then that's valid. Uh, I'm sorry. That's reliable. If I hit in this in the where I'm aiming, that's valid.

**Speaker 1** [00:13:48] Right, meaning you can have a cluster of holes anywhere on the target and that's reliable because every time you shoot it's going to the same place.

**Speaker 2** [00:13:56] Yes.

**Speaker 1** [00:13:57] whether it's in the center or not.

**Speaker 2** [00:13:58] It might not be where you're aiming. It might be reliably off-center, right?

**Speaker 1** [00:14:02] Right, but when you hit it right on the target in the center...

**Speaker 2** [00:14:04] And it's clustered. That's valid and reliable.

**Speaker 1** [00:14:07] Right, because you're hitting what you want to hit.

**Speaker 2** [00:14:09] if somebody used the same technique that I did and got the same results, that would be replicable. Right. Right. And that's really fundamentally what science is. The reason we're transparent about science is so that people can replicate what we did about our methods and stuff. So that's the first part. That's the easy part. It's kind of like what science is about and what science means. The hard part is First of all, nothing's complete and nothing's finished in science. We're always learning more. So to say it's validated by science, it's like, well, first of all what's it? That the bigger issue in that sentence is not validated, it is validated by a science. It's what is it? What is validated science? Is the effect of AG1 validated by the science? Is the... the constitution of chemicals that are related to the constitution of chemicals, that we need validated by science. What exactly are they saying is validated? Yes, because it could be a lot of things. And they probably didn't validate all of the things, they validated a few of the.

**Speaker 1** [00:15:20] Well, I think if you look at validated by research versus empirical versus science-based, to me, empirical just refers to what types of methods people use inside of their research, like the degree to which they used actual um.

**Speaker 2** [00:15:34] I mean, empirical is just referencing, it's kind of a little vague, but it's referencing that there was some kind of method utilized. But that method could be a lot of different methods, some of which are more or less valid, they're more or least rigorous than others. But then it gets complicated because it matters. what the condition of knowledge is, right? So you don't want to use, you know, you might say, well, an experiment is more empirical than a, say, observation. Right. Well, not really, not if in the experiment, you assume a bunch of construct validity that we don't have. And construct validity means that we're close to measuring what we say we're measuring. If I have an experiment on empathy, I might say, oh wow, an experiment, on empathy. That means I can trust it. Well, maybe, it depends whether or not they have any construct validity on what they mean by empathy. Whereas if you had a Jane Goodall observation where she sat and watched a bunch of people being empathic and then described it observationally, That actually might have more validity because we don't know how to, it's hard to capture the construct of empathy.

**Speaker 1** [00:17:05] Other than observing the behavior itself.

**Speaker 2** [00:17:06] Yeah, exactly. So I think you should be cautious of those claims. And you should try, if possible, to read the original papers. And and you should educate all people should educate themselves about what science is. Yeah, what it means. And, you know, because I've read a lot of Research. Research that is highly flawed. And that's not to say we're going to just get rid of the whole research edifice because just because I mean research is done by people and people are flawed. There's nothing flawed about science. There is nothing flawed about science, right? There's people who do science.

**Speaker 1** [00:17:54] And those people are flawed. Well, I think the most important thing actually to take away from Scott's question is, and I commend him for saying, well, what do these things actually, like what's the actual difference between these things? Because people are using these terms to make claims. And I think it's the thing to take away from this question is question those terms. Like if somebody says something science-based, well. figure out if it is science-based and what they mean by that. To me, that's a very broad term.

**Speaker 2** [00:18:26] That's what I'm saying. The science-based isn't the problem. It's the it. The identity, the DSRP is more necessary here than understanding science. It's distinguishing what do they mean by it. Because, for example, you could take AG1. You could set up a thing where you have a bunch of people take AG one and then describe how they feel. And then you could sum up all the statistics. Science-based. And you could say, you know. 9 out of 10 people feel better when they take AG1.

**Speaker 1** [00:18:59] Yeah, and maybe those not people work for AG1.

**Speaker 2** [00:19:02] Exactly. How did they create the sample? Yeah. It's the it. What is it? Yeah. What is being claimed? About any of it. What is the hypothesis that is being tested? That's the IT. So you could have a science-based. isn't really what they're saying.

**Speaker 1** [00:19:25] And just to be clear, we are not picking on you too much.

**Speaker 2** [00:19:27] No, no, no. I'm not. I am not.

**Speaker 1** [00:19:29] Some of us are fans of AG1. It's any market, any claim, anything about, you know.

**Speaker 2** [00:19:37] Pete said that in the question. So you got to ask yourself, what's the it? Because chances are, they're not fully, they, whoever's saying these things aren't fully lying about the science, but they're also probably just using that because they can't be very specific about the question, right? And so they're They don't have enough room or people aren't going to listen long enough for them to explain all the things that they did and how they did it. So they just say, oh, it's validated by research. Well, it probably is validated by a research. That's not the problem. The problem is what's the it.

**Speaker 1** [00:20:17] Yeah, so you did.

**Speaker 2** [00:20:17] It is validated. What is validated by research?

**Speaker 1** [00:20:20] Right, so the takeaway from this answer is, question it, figure out what it is, and try to figure out the question.

**Speaker 2** [00:20:26] I mean, I'll be transparent. You know, we use that term in the general public because we can't explain it all, right? Yeah. All the research we've done. DSRP is validated by research. Well, DSRP makes dozens and dozens and dozens of hypotheses and many of those hypotheses. have been validated by research, but there's still a bunch of them that we haven't validated yet. Ones that aren't even part of what we train on or anything like that. There's ones that eventually we'll wanna do research on.

**Speaker 1** [00:21:01] Right, but the point is, anybody who wants to know what that means when we say it, there's source documentation that they can go and look at and see what we mean by it, and it's all written out clearly so they can see our study design, what our sample was, how we designed everything, what are, you know.

**Speaker 2** [00:21:20] But that doesn't mean that we know everything there is to know about DSRP. There's a bunch of cool things that I want to know about DSRP that haven't been validated yet. Well, that's what we're doing. The gist of it, the fundamental, the most important claims that DSRP makes have been validated by science. That's what I'm saying. Nothing is complete and everything is ongoing. That's really important to understand. and nothing is, it's not like. every possible implication of a theory has been tested. Because there are many implications of evolution that haven't been tested yet or haven't been validated yet. And it's been around for hundreds of years. So it's an ongoing process. We're learning all the time new stuff.

**Speaker 1** [00:22:06] And we should always be looking. I think we should. I think it's a great question. Yes.

**Speaker 2** [00:22:09] Yeah, it's a very important question.

**Speaker 1** [00:22:15] What are some instances, personally and collectively, where it could be beneficial to have different mental models of reality?

**Speaker 2** [00:22:24] So, I mean, fiction is a great example, right? If you're a fiction author, you're writing, what's the one you like?

**Speaker 1** [00:22:33] Harry Potter.

**Speaker 2** [00:22:33] Harry Potter.

**Speaker 1** [00:22:34] J.K.

**Speaker 2** [00:22:34] J.K. Rollins, right? She's not trying to write about reality. She's writing about a reality that she's creating that is fictitious, right. She has to think about all the DSRP that's happening in that new, in that reality she's Thank you for watching and have a great day!

**Speaker 3** [00:22:50] I see.

**Speaker 2** [00:22:50] And she can make that DSRP up. And she's very good at weaving it all together, all the different ways that things are related and perspectives and all that kind of stuff. And the groupings of the houses and all of that, part whole stuff. Obviously there's tremendous, anytime you're doing any kind of movie that's not a straight science-based or history-based documentary, you're inventing a new reality.

**Speaker 1** [00:23:19] Also, wouldn't it be any time you're hypothesizing something, you're hypothesesing two possible realities.

**Speaker 2** [00:23:26] Yeah, absolutely.

**Speaker 1** [00:23:27] And then you're testing, and then you decide it was fine.

**Speaker 2** [00:23:29] You have a null hypothesis and a hypothesis.

**Speaker 1** [00:23:32] a new instance of that.

**Speaker 2** [00:23:33] Yeah. The one thing I would say though is even in the case of J.K. Rollins, she has to have a mental model that is in love with reality about what people want. Yes. Right? And she got that right. She did. She loved reality and got it right what people are going to be attracted to in her fiction. Yeah. Yeah. And she consistently gets it right. Yes. All right, so So there is always an aspect of matching and paralleling your mental model to reality, but in the case of her fiction, then she's creating a new reality. Now, I would also say that these people that create these worlds like Star Wars or Lord of the Rings or Harry Potter, she creates a world that is so internally consistent that if She does something that's- that- in that world doesn't make sense DSRP sense her fans will come and you know say that's not right yeah you know that couldn't happen in this so much detail right because there's so much detail and that happens in star wars and star trek and all kinds of stuff right where people go well they have arguments about what would a stormtrooper do you know they have terrible aim They would never have perfect, you know.

**Speaker 3** [00:24:56] That's right.

**Speaker 2** [00:24:56] What is a stormtrooper sniper? It's an oxymoron.

**Speaker 1** [00:25:02] Do you have a suggestion for an instance where two parties feel firmly that they are loving reality and also failing to acknowledge the other's mental model as legitimate?

**Speaker 2** [00:25:15] Yeah. We've all been in this situation where you have Thanksgiving dinner and you have two people that just can't see the other person's perspective. I think you've got to get out of the I. Again, going back to M equals I O, you have to get it out of that information and into the O. In this particular case, what I would do if it was really like these people just aren't willing. to see the other person's perspective.

**Speaker 1** [00:25:46] That sounds familiar.

**Speaker 2** [00:25:47] you know, yeah, exactly. Exactly. It's pretty typical Thanksgiving dinner. What I would do is is sort of try to get them to see the structure of what they're doing. Both of them. In other words, I would take the fact that the eye that they're both saying is incompatible and then show them that while their eye and their eye is incompatable, What they're doing with the O is exactly synonymous, exactly analogous. And then I would shame them for it. I would shamed them into being more ethical about the way they're arguing.

**Speaker 1** [00:26:26] OK, so let's.

**Speaker 2** [00:26:27] When I say shame, a lot of people take the word shame wrong. Shame is actually a really powerful human tool. In some of the most advanced justice methodologies, like restorative justice. In psychology, we use what's called reintegrative shaming. Shame is a very powerful instrument that we can use to be like, and we should feel shame when we behave badly. Thank you very much. I don't mean shame like, oh, shame.

**Speaker 1** [00:26:57] Yeah, you mean like an introspective

**Speaker 2** [00:27:00] internally yeah when i do something when i don't when i don't behave to my standard i feel like oh man i yeah that was that's not who i want to be that's a sense of shame i want to be something different than that right so i would say guys like you know you're both doing the same thing you're, both alienating the other you're Both are the rising. and you're both taking a single perspective instead of being able to take multiple. You're both binary about there only being one option. Yeah. So you're really both a lot alike.

**Speaker 1** [00:27:34] Well, I think a way to think about that is, at the underlying structure of how they're thinking about it, they're doing the exact same thing, but just with different information at the top. Exactly. And the thing is, until they see that commonality underneath, they'll never get past the in the heads of the information.

**Speaker 2** [00:27:52] And the great thing is when you do this, they will get on the same side against you.

**Speaker 1** [00:27:57] Oh. Let me resolve that.

**Speaker 2** [00:27:58] Let's say you've resolved it, right? They'll suddenly be on the same side because you'll have an emotional reaction to how you're quote unquote criticizing them for doing what they're doing, which is just them behaving and you describing it like a mirror, but then they'll take offense at it.

**Speaker 1** [00:28:16] Interesting so the so the idea

**Speaker 2** [00:28:18] So they'll suddenly be on the same team.

**Speaker 1** [00:28:20] Yeah, I mean, I think the way to do it is just what you said, which is have people try to go underneath and see that, really, they're both just taking binary perspectives. And because you're doing it and I'm doing it, then maybe I need to reconsider my perspective, which means then the conversation can change.

**Speaker 2** [00:28:39] Yeah, they're so they're each taking a single perspective. They're otherizing the other perspective. Yeah. So that is so and and they're creating a world where only one perspective can exist. Right. So and both of them are doing that.

**Speaker 1** [00:28:53] But they don't realize they're doing that. I mean, a lot of people don't realize when they're doing that

**Speaker 2** [00:28:57] Yeah, or they're not connecting deeply enough with how shameful and unethical it is.

**Speaker 1** [00:29:03] So this one is about translational research, making the complex easy to understand and clarify a practical ways to do that with some examples.

**Speaker 2** [00:29:12] That's really your neck in the woods.

**Speaker 1** [00:29:14] The idea behind translational research really started in medicine. And the idea behind it was, how do we take all of this really good scientific research in the medical field and get it from what they called sort of the bench, the laboratory, to the bedside? So how do you translate what we learn in science to tools and practices that will actually improve the human condition? So it all started in in medicine Thank you for watching! But over time, what's happened is translational research has taken a broader definition as it's been applied to different contexts, right? So I'm a person who came up through the social sciences. So in the social science is what translational research means is simply how do we take what we're learning at sort of theoretical levels, empirical research, knowledge that we're developing, and turn it into things that are actually coming out into the world in terms of practical ways to. change behaviors, improve the human condition, right? So if you wanted to think about, well, untranslational research is interesting because it has a focus on application, obviously. A lot of translational research comes from interdisciplinary teams. In the medical field, it was all medical, but now it's more like, oh, I wanna work on world hunger, so I need, you know, or a disease, I need an epidemiologist, I need a nutritionist, I needed this, I needed that. So you bring different teams to the table, and expertise. And also translational research in the social sciences is focused on social impact. changing conditions, improving conditions for people. So if you wanted an example, I'll give you a really good example in education. There are stages to translational research, just like there are stages, so there's sort of basic research, then there's application and pilot studies, hopefully sort of institutional policy kind of adoption, and then the idea generally is then for it to be a societal impact from that, right? So there's like these stages. That's true of also the medical stuff they had, but it was very specific to medicine. So if you imagine there's a new piece of research on active learning and education, that it's really good for students. So that's your sort of basic research. And then you take that and you develop classroom strategies. So that your application stage. And then, you go to the testing stage, where you do pilot tests of this new strategy in classrooms. If you prove that those are working, then that goes to a policy where, say, for example, the State Department of Education says, OK, active learning has to be a part of every classroom, with the goal that hopefully the benefits from that original research you did on increasing student performance becomes a net societal good, a net suicidal impact in terms of student outcomes. Does that make sense? Yeah. So translational research is literally translational taking research and translating it.

**Speaker 2** [00:32:07] Yeah, so you're translating like you're translating theory to practice.

**Speaker 1** [00:32:12] You are translating theory to practice, but it has a very specific perspective of widespread impact in the social sciences piece of it.

**Speaker 2** [00:32:22] Yeah, I think that's I mean, there's a there's an old saying which is there's nothing more practical than a good theory. Yes, I agree. I think I think we miss that a lot about the translation of theory to practice that if you can't if the if the theory doesn't have like a deep practical utility, then it's not a very good theory

**Speaker 1** [00:32:46] I think that's true, but if you reversed it and you said if you think of all of our best practices in anything, they came from a theory.

**Speaker 2** [00:32:54] Absolutely.

**Speaker 1** [00:32:55] at some point, but we forget that.

**Speaker 2** [00:32:57] They're they're they really I don't think we should think about theory and practice as being separate. They're like two sides of the same coin Or they're like a Mobius strip, you know where it seems like it's two surfaces, but it's really one Yeah, that a good theory is imminently Translatable in the practice and it might take some time to learn All of the ways that it that it translates into practice because a good. Theory can be quite abstract but, and practice can be quite specific. Yes, that's right. But that translation of that abstraction, that universality, that abstraction of theory to all these specific instantiation of things, to me, that is the translation. Yeah. It's like connecting the theory to all of these instantiations.

**Speaker 1** [00:33:51] Yeah, and I mean, if you think about DSRP, I mean think about where we started. Yeah. Way back when we met and you had very successfully written your dissertation, done your doctoral research on DSRP as a theory of cognitive science, learning, all of those kinds of things. And the goal was to sort of bring that out beyond just the walls of Cornell, as sort of, you know. one of the jewels of Cornell kind of thing. And the way we did that was I said to you, well, let's go teach kindergartners about this. And the reason that was the suggestion was to come up with a way, a strategy to teach small children such a huge theory meant that we could, if we could do it there, then we could go back up. And so that's what it means. You have a theory, you have a benefit, you figure out a way to teach it, to have an actual method to get these kids to practice it. And that was sort of the origin of all things. And then we played it back forward.

**Speaker 2** [00:35:05] And it forces you to to apply the theory, you know, and in a particular instantiation, this little kid is trying to make sense of it for their life. That's one little instantiation of the theory.

**Speaker 1** [00:35:18] Well, yeah.

**Speaker 2** [00:35:18] And then you take that and then you see how they practice it, how they apply it. And then, you do multiple other instantiations and you see the pattern across instantiates. And then that becomes, in a sense, a translatory device, that pattern that translates the theory into wide applicability.

**Speaker 1** [00:35:42] Yeah, I mean, you start with the question, how would I know that a kindergarten is making a distinction? Yeah. And then you're like, OK, what's the context in which I would teach that? What's their world? What are they learning right now? Right? So we started with, how do we?

**Speaker 2** [00:35:56] with a part hole or whatever, right, with the fire truck. They're breaking down the firetruck.

**Speaker 1** [00:36:01] Yeah, and they're distinguished between colors, right? And they're learning the relationships between and among numbers on a number line. Like, so you just sort of have to bring what you know theoretically into a practical context and then practice it. How does one use DSRP for large amounts of reading and encoding for exams?

**Speaker 2** [00:36:20] So, I mean, I think the first thing you got to do, really, is just, I mean, you got use DSRB to understand what your goal is. Because if your goal is simply to memorize some information so that you can pass the exam, or memorize some information and understand how the exam is structured so that you can pass the exam, then you're taking the perspective of the test designer. Like, for example, if you're trying to do GRE, GMAT, SAT, We know that you have to take the perspective of the test designer, not really, you have understand the information that's being tested, but you also have to the perspective of the way the test is designed. So it's a game to pass the test and you quickly forget that information. So you have distinguish, is that what I'm trying to do? In which case, there's a strategy for doing that, which we use all the time for all these tests. Or am I deeply trying to understand the information and also pass a test? Right. Right? And those, to me, are different goals. Very different. Very different goals, the first one we already talked about. The second one is the way that I study, because I really want to understand the information, and I don't really care that much about the test. And I think that's the way, that when you really, we're learning sticks. You know, you care about the understanding. Yeah. In that case, what I would do is what I do is I try to map the different parts of whatever it is, the large amount of writing. Like take something like evolution, for example, or what Darwin's talking about. It's a lot of stuff. It's lot. I try to understand the different pieces and then I try to see relationships between the different places. I essentially use the DSRP protocol, the 483 protocol, to sort of understand the distinctions, how the parts, the part parties and the zoom ins and the Zoom outs and then eventually get to some level of compression, which is the last step, where the goal is to get all of it on one page. with a font that's readable, which means probably seven point and above, right? That's what I do. I try to get it all on one page. So that's what we mean when we talk about compression is you get you have a lot of DSRP that compresses into a very small amount of DSRP. Right. I think that when you understand all the tentacles of the thing, and you have a map of it, so you understand how it all fits together and you can compress it into one page. Yeah. That's when you really understand it. And Einstein used to say, if you can't explain it simply, then you don't understand it, and that's, I think, really true. Yeah. And that is a function of compression, like being able to understand it in the simple. is the compressed and then being able to expand that compression into all the tentacles of understanding is that's what experts can do. They can kind of wrap it up and they can pack the suitcase and they an unpack the suitcase.

**Speaker 1** [00:39:52] Yeah, I mean, you think about, like, I always think about my doctoral dissertation, which was, you know, this huge, complicated map where I analyzed legislation, I had all the statistics on child and maternal health and well-being, and then I had, you know, just, it was a huge, huge canvas. But then when you compressed it up, it was the relationship between a piece of legislation and the status of a group of people. Yeah. And that's it. So when people ask me, what's your dissertation about? I'm like, the relationship between this piece of legislation and this group of people. And they're like, oh, they didn't need to know all the others.

**Speaker 2** [00:40:29] But if you wanted to unpack all that, you could unpack all of that.

**Speaker 1** [00:40:34] I noticed that modern American English sometimes has words that have different meanings depending on the context and it's not very specific. So I'm wondering, does cultural origin and context and or language impact how we use systems thinking?

**Speaker 2** [00:40:49] Yeah, that's kind of a that's an interesting question because it's it's kind of mashing up two things that I would try to separate a little bit and distinguish a little bit. So we did a whole episode on context, first of all, so you should go watch that. But but it's, it's absolutely the case that language affects the way people think. And it's absolutely the case that context as we think about it affects the way we think. and culture affects the way we think. There's no doubt that language affects culture and culture affects language and those things affect the way we think about things. But it doesn't affect the organizational patterns that are universal to thinking. In other words, we're all under, so it's about levels. There's research, for example, that looks at people that were born and raised in Japan, call you grad students that were born and raised in japan versus born and raised in Michigan. Yes. And the way they, their thought styles are different and their language is different, all that kind of stuff. And and so we see that there are differences. But that doesn't mean that they're not both using DSRP. They're both, they're both using at the level of DSRP, they're are both using the DSRP

**Speaker 1** [00:42:14] Yes, so that research.

**Speaker 2** [00:42:15] DSRP is pre-linguistic, pre-contextual. It happens before those things. That's not to say that when you speak German or when you speak Japanese or when you speak English that's not also going to have an effect on your thinking because the language is structured in a particular way also. Right. But that is happening at a level higher than what this DSRP level is.

**Speaker 1** [00:42:43] Right, and that research, what it showed was that Eastern thought styles will see relationships much more.

**Speaker 2** [00:42:54] more so.

**Speaker 1** [00:42:55] more so than Western, which more more likely to see sort of distinctions in the systems, whereas Eastern were more relationships and perspectives. So they're all do, they're both both thought styles are are dependent on and built off of DSRNP, but the cultural piece of it has them favor.

**Speaker 2** [00:43:14] Seeing certain things not doing yeah, they're they're all doing them. Yes more of them Yeah, being aware of them. Yeah, and seeing those having those things highlighted and other things low-lighted Yes, but they're doing all of it the same

**Speaker 1** [00:43:30] Can we use systems thinking or DSRP to uncover and detangle confusion rooted in these cultural differences?

**Speaker 2** [00:43:38] Yeah, I think that's probably one of the only things we can use is because it's below the language, because it is structural, right? So, if you're using a different word like shin, I think in French, like shin or something like that. Shin is dog, right, or paro, or you know, in Spanish and then dog in English. You know, those are different I, but their structure that a Frenchman has or that an Englishman has, or that a Spanish person has for dog is probably pretty similar, right? They're all four-legged, nose, you know, blah, blah blah, pets, whatever. So the underlying structure is the same, but the word is different.

**Speaker 1** [00:44:35] Right, but they're all three of them are distinguishing a thing that is a

**Speaker 2** [00:44:39] that has a similar mental model. And that's why translation is even possible. Yes. Because if that wasn't the case, then translation would not be possible. Perro is not the same as dog. Right. Therefore, there's no connection between them. Yes, that makes sense. Because Perro was not dog. Interesting. But Perro IS dog. It's just in a different language. Yeah. Right? Yeah. So. So yes, I mean, it's it's not not only can you I don't think there's

**Speaker 1** [00:45:10] Any other.

**Speaker 2** [00:45:10] Any other thing that you could use to...

**Speaker 1** [00:45:14] I'm impressed by the questions.

**Speaker 2** [00:45:16] Yeah, these are great.

**Speaker 1** [00:45:17] So keep them coming, especially you newcomers, we love to hear from you.

**Speaker 2** [00:45:20] That is a wrap.