The-Extended-Mind-Part-1

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SPEAKERS

Chris Casillas, Annie Murphy Paul

C Chris Casillas 00:09

Have you ever sat down at a bargaining table and looked at your opponent on the other side and realized from just how they were sitting that some bad news was about to be delivered? Or have you spent the morning in bargaining, racking your brain about how to solve a tough issue only to suddenly find a solution after a brisk walk during the lunch break? For some of you, maybe that thorny problem that has nagged you in bargaining for years without a solution in sight suddenly comes together after the parties jointly work around a whiteboard to brainstorm some ideas as a team, through which a solution finally presents itself. For any of you who have experienced these or similar phenomenon, it is not simply a coincidence that you were able to sense the tone of an impending message just based on how someone was sitting, or that you suddenly found a solution after your short walk or when brainstorming with colleagues. There's actually a great deal of science behind how we deploy what are referred to as extra neural resources. In other words, our bodies in the spaces and people around us, in order to help us think beyond what our own minds are able to produce, and, in turn, solve some truly complex problems. This episode of the PERColator is the first of a three part series. We're co host, Chris Casillas, is joined by famed science writer Annie Murphy Paul to discuss her book The Extended Mind. While Annie's work, which spans the field of behavioral psychology, philosophy, and neuroscience, is in its own right, a fascinating deep dive into the world of thought. It also offers a number of important lessons and techniques to be applied at the bargaining table. Please join us for this multi part conversation into the world of how we think not just with our brains, but also with our bodies, our spaces and our relationships. Welcome to the PERColator, I am one of your co host, Chris Casillas, with the Washington State Public Employment Relations Commission, and I am honored to be joined here today by our guest, Annie Murphy Paul, the author of the book, the Extended Mind, and I do want to give any chance to talk about herself and her book here in a moment and introduce us to it. But before I do that, I just wanted to mention a couple quick things. One is, you know, I'm extremely excited to have the opportunity to speak with Annie today about this project, even though the book is not directly about the world of labor negotiations and collective bargaining. As I was reading the book, I was just struck by the many applications to to our world. And as our listeners know, one of the kind of points of the negotiation project here at PERC of which the podcast is a big piece of that is to bring in outside research and scholarly work. And think about how that can apply to our day to day lives as as negotiators and trying to kind of improve that labor management relationship

through your contract negotiations, which is one of the missions here at the agency. The other thing I wanted to mention is just there are many accolades that have been bestowed upon this book, including being named the New York Times Editor's Choice Award, and Notable Book Award and the Washington Post, best nonfiction book of 2021. So, a real honor Annie Murphy Paul, welcome to the PERColator. It's great to have you here. Please tell us a little bit about yourself. And this fantastic book.

A Annie Murphy Paul 03:51

Sure, well Thank you, Chris, for having me on and I am really excited to share these ideas with you and your, your listeners. So I am a science writer, but I am a science writer of a very particular kind I only write about human beings, about people about psychology, and in particular, I'm interested in the field of cognitive science, you know, the study of how we learn and how we think. And a few years ago, I found myself, you know, I'm a kind of a research nerd, you know, I love reading psychology journals. And I found myself really drawn to several bodies of research that just kept popping up again and again in my, on my radar. And they were bodies of research, like embodied cognition, this idea that we think with our bodies and not just with our brains, situated cognition, the idea that where we are affects how we think, and socially distributed cognition, the idea that we don't think as individuals we really think with other people. And these were fields that were, you know, well within the lot within mainstream cognitive science and psychology, but a little bit challenging the paradigm that we've all kind of been acculturated to which is that mind and body are separate. And you know, the brain is like a computer it can, kind of it's an information processing machine that can do its work anywhere, that we live in a very individualistic culture, that says that we kind of, that elevates and celebrates the, you know, the solitary genius, and is suspicious of things like groupthink, you know, so I liked that this, that these bodies of research were pushing back against kind of dominant paradigm that's always intriguing to me as a journalist. And I felt that these bodies of research were related in some way, but I couldn't quite put my finger on what that relationship was until I read an article in a philosophy journal. So I'm not just a psychology, journal junkie, I'm also a real, I love research of all kinds. And so I found my way to this philosophy journal. And in this article that was published in 1998, it was called the extended mind, it's by two philosophers Andy Clark, and David Chalmers, they the very first line really grabbed me, they said, Where does the mind stop and the rest of the world begin? So that's a provocative question, in part, because it seems like it has an obvious answer, you know, that the mind stops with the skull, it's identical with the brain, you know, that's that would be the conventional kind of response. But Clark and Chalmers we're arguing that No, actually, the mind extends beyond the skull it, it extends into the body, into our physical surroundings, into our relationships with other people, and even into our devices and technologies, and that all of these are mental extensions that are what you could call extra neural resources, you know, things outside the brain that help us think, and this was an exciting idea to me, because it seemed to suggest that if we could learn to more skillfully and intentionally use these resources outside the brain, we could think better, you know, we could allow our limited, you know, sort of quirky, idiosyncratic, and, and in some ways, flawed brain, we could allow it to sort of overachieve if we if we brought in some reinforcements, you know, so that was the kernel of, of what eventually became my book, The Extended Mind.

C Chris Casillas 07:44

Yeah, great. And I like how you kind of mentioned kind of feeling like, you know, there's this

paradigm out there about how kind of we go about this process of thinking and, and being excited about the opportunity to kind of push back against that, but I think we all, you know, certainly, myself included, especially before I read your book, kind of all, just kind of generally speaking intuitively think, you know, when we're trying to kind of solve a problem or come up with an idea, you know, we always kind of try and bear down and, you know, I just need to focus, I just need to really kind of concentrate more, you know, and you kind of like are giving your brain a pep talk, you know, to really think about that, and how to solve the problem. And I think part of your book is kind of premised on the idea of really pushing back against this idea. And, and thinking about how this bias is a real problem and how we go about kind of solving some of these problems and being creative and wonder if you can talk to that about that for a minute.

A Annie Murphy Paul 08:48

Yeah, absolutely. I mean, that's certainly the paradigm that I grew up with, and that many of us grew up with going back to school days, you know, like, if you need to get something done, then you put your butt in the chair, and you say that you stay there until it's done. And even something like the growth mindset with which many of us having encountered along the way, this idea that the brain is like a muscle and you know, the more you exercise it, the stronger it gets. That's how you get smarter. That's a very empowering message for a lot of people. But it's also limited in the sense that it's still very brain focused, you know, very brain centric. And Andy Clark, one of the originators of the theory of the extended mind has this term that I really like brain bound, we have a very brain bound paradigm of how thinking works. And that actually, those brain bound assumptions effectively cut us off from a whole lot of avenues and opportunities and occasions for thinking with these outside the brain resources that we don't use. We don't take advantage of because we think that the brain has to do it all by itself. You know, and I will say that when I started researching and writing this book, I was myself a very brain bound person you know, I'm a freelance writer, I have worked mostly on my own for 20 years writing about, writing about psychology and cognitive science. I definitely absorbed the message from my my editors early on in my career that if you want to get something done and meet your deadlines, you know, you sit there until, it until it gets done. And I am a person who very much lives in my head, you know, and, and I'm always kind of living up here and almost forgetting that I have a body. So I always say writers really kind of often end up writing the books that they need to read, you know, or we write what we need to learn. And it was really quite an education for me to learn about how important and vital the body and spaces and relationships are to thinking because that wasn't initially my my orientation.

C Chris Casillas 10:51

Yeah, and so I think you just mentioned three key terms, which are maybe a little bit more easy to understand, from a layman perspective, I think you use the kind of more technical terms earlier, but our bodies, our relationships, our spaces, these these are the these are the, kind of what you call, extra neural resources that that really what you're arguing is we should we should rely on more in terms of kind of going about our processes of thinking about new ideas and solving complex problems. So could you speak to that a little bit more?

A Annie Murphy Paul 11:27

Yeah, sure. I'll just say a few about each one. I mean, first of all, there's thinking with the body, which is, you know, and I, as I've think I've mentioned, in our culture, we tend to separate mind and body. And what embodied cognition does is bring bring brain and body mind and body back together and say that actually, we think with our whole bodies, and that happens in a number of ways. One is this capacity called interoception, which is better known as just a gut feeling, or a gut instinct, you know, the sense that the body knows things that the conscious mind maybe you know, is actually following up behind the body. And it's, it's true that actually, the, the, the body is the repository of the the non-conscious kind of patterns and experiences that we, we pick up as we go through our everyday lives, you know, we're absorbing so much information from our environment, we couldn't possibly process or store it all consciously, we but we do store, process and store it on a non-conscious level. And then the way we become able to use that knowledge that stored wisdom is through the body kind of alerting us, you know, the those internal signals that I was talking about, and notice interoceptive signals, things like your heart starting to be a little faster, or butterflies in your stomach, or a tightening in your chest, these are the body, getting your attention, in a sense, like tapping on the shoulder and saying, hey, you know, we're recognizing a challenge here in your environment, and we're preparing you to meet that challenge. The problem is that in our society, where we do separate mind and body and tend to elevate mind above body, we often tend to push aside those internal signals. And we, you know, going back to what we were saying earlier, Chris, we think that if we have to get something done, we've got to suppress those internal signals, we've got to kind of power through, you know, and ignore the body. But what the science of embodied cognition says is that we should actually be very deliberately and intentionally tuning in to those internal signals, because they carry a lot of information, a lot of accumulated experience and wisdom.

C Chris Casillas 13:40

Yeah, and so to build off this concept of kind of what you call interoceptive awareness, is this something that, you know, that that that makes sense to me, and I think we've all experienced, you know, the, the kind of physical phenomenon you just described, but can somebody kind of train themselves so to speak, in terms of how to be more aware of these signals? And how to how to incorporate that into our into our thinking?

A Annie Murphy Paul 14:06

Yeah, what's interesting is that people do exist along a spectrum in terms of how interoceptive li aware that they are some people for example, if you ask them, When is your heart beating? They know exactly they they are in tune with, when their heart is beating, and they they're very precise in noticing when that's happening. Other people, the set, the question doesn't even make sense to them, you know, like, how would I know? And but the fact is that interoceptive awareness can be cultivated, deliberately cultivated, and one of the most effective ways to do that, research shows, is a practice called the body scan, which, if your listeners have experience with meditation, or mindfulness, that's often how mindfulness or meditation session opens with a body scan where you're bringing non judgmental, open minded curious attention to those internal signals as they arise in your body, and just sort of tuning into them and paying attention to them. And what's amazing when you when you sort of make a practice of instituting the body scan, and it doesn't have to be a formal practice on the meditation cushion, you can just kind of remember to check in with your yourself on a periodic

basis is that you realize there's this flow of internal sensations that's there all the time, you know, we're so, there's so much, we live in such a noisy world, and there's so much external stimuli coming at us all the time that we often forget that there is this internal world as well. And we want to sort of periodically check in with that world, I also want to add that it's, it's especially useful to do that, when you're communicating with another person, because by reading off your own internal signals and feelings, you can get a better sense of what the other person is thinking and feeling, you know, we, we, we are kind of in our own little bubbles in the sense that the the mind of another is kind of a black box to us, but the body can be a kind of channel of communication. So this is, this is known as social interoception. And I've found it to be really helpful, it sounds paradoxical, but to tune into your own internal sensations, when you're in in communication with another person can be a really useful tool for building empathy and understanding.

C Chris Casillas 16:21

Yeah, that's so important in our world of labor negotiations. I mean, we're, you know, we're sitting, oftentimes, kind of across the table from our opponent, another party, and, and I think we're, we spend so much time thinking about how to, you know, listen to what they're saying, and kind of really focus on their words and trying to kind of interpret that, but you're, you're really introducing this other element of also kind of being aware of just kind of the, you know, body body movements, and kind of that, on that level, as well, in terms of informing us kind of what what they're thinking and where they're at.

A Annie Murphy Paul 16:57

Exactly, right, right.

C Chris Casillas 16:58

Yeah, I was also kind of in this part of the book I was, you started kind of talking about these terms like anchoring and availability heuristic and self serving bias. And it was my alarm bells were going off in my head, because we do, in the negotiation field, we spend a lot of time talking about kind of the psychology and negotiations and thinking about all of these, you know, kind of unconscious or subconscious biases that kind of influence our decision making process, and how that can really impact us at the at the bargaining table. And this concept of kind of interoceptive awareness, you know, struck me there as well, in terms of possibly being a way to kind of help us overcome or check some of these biases that are kind of naturally occurring as part of just how our brains kind of process information. But as a, as a, as a instructor of negotiations, we kind of identify these things for people as a way to like, if you know about them, maybe you can kind of consciously try and counteract them, which is not always the most effective way of dealing with them. But this this concept struck me as a way to kind of to counteract these in another way that I wonder if you could talk to for a moment,

A Annie Murphy Paul 18:17

Sure. Yeah, yeah, it turns out that the difficulty of countering those those biases that you're talking about, with conscious thought is that that uses up a lot of mental bandwidth, you know

talking about, with conscious thought is that that uses up a lot of mental bandwidth, you know, to identify the bias that you're engaging in and to try to correct it, you know, all maybe while trying to do something else, like engage in negotiation, that's a really heavy lift for our, for our conscious minds. So what the science of embodied cognition suggests is that the body can offer a sort of a sort of bypass or shortcut past all the those mental machinations because it turns out that when we are thinking sort of, with the body, rather than with the conscious mind, we're less susceptible to those, to those biases that you're talking about. So I describe in the, in the book, a study of a bunch of, of experimental participants who played what's known as the ultimatum game where you, you, it's, it's a negotiation kind of setup, where you have to, one person has to split up a pot of money, and the other person has to decide whether to accept the offer of the first person or not. And of course, it always makes sense. It's the rational thing to accept whatever your opponent or partner gives you, because it's better than nothing, but because human beings are so inclined towards fairness. Often people who are given a low offer will reject it to kind of show that they are angry or show that they think that that's not fair. So that's an irrational kind of response. It's a biased response. And interestingly, the researchers were able to show that those participants who played the ultimatum game and were regular meditators who, who had sort of gotten more in touch with their bodies through their meditation practice and whose there was a brain scanning aspect of this study as well. And whose insula, were more active during this during the study. And the insula is a structure in the brain that is sort of mediates between brain and body. So it's like, what it's higher levels of activity. And insula suggests that we're tuning in more to our bodies. So the meditators were tuning in more to their bodies. And they were the ones who responded to a low offer in the ultimatum game, with the rational, you know, what an economist would say, is the rational response. And the the ones who were not meditators who were not in tune with their bodies, they tended to activate the prefrontal cortex, which is involved in judgment. And you know, they're looking at this offer and saying, and judging it and saying, No way that's not fair and turning it down. So what's so interesting to me about that study is that again, we we tend to separate mind and body in our culture and elevate the mind and call the mind something rational, you know, we praise it as rational and, and sort of above the fray, whereas the body is supposedly sort of irrational and subject to all these appetites and you know, roiled with all these desires, and in the end, yet, in this case, it was those people who were tuning into their bodies who made the, the more rational choice. So I think the benefit of thinking with the body is that it, it requires less of that cognitive horsepower that gets used up so, so quickly, when we're engaged in cognitively complex activities like negotiating.

C Chris Casillas 21:50

Yeah, I just love that story. And that that experiment, because I play that ultimatum game in my class every, every quarter. And I'm, you know, it's always so fun, because, I know what's coming, like, you know, there's gonna be students, there's always one student who offers, I usually do it with $10, I give my students you know, $1 bill, so they can kind of feel it and, you know, experience it. And there's always that one student who's like, Oh, I'm gonna offer just $1. And then, you know, to watch it most almost everybody offers like, you know, $4 or $5, you know, even though they that doesn't, as you say, from an economists perspective, that's not rational, you should offer the least amount because everybody's going to be better off but, and then we debrief afterwards. And it's, you know, the same, the same kind of things that you mentioned about people feeling it's not fair and being judgemental, and that the brain is actually kind of forcing us into a kind of a bad outcome there that you mentioned like the body, kind of being tuned into the body can actually counteract some of that. Yeah, I love that. I love that. Well, that will do it for the first part of our interview with Annie. But please continue to join

us for part two, where we talk about emotion, movement and gestures at the bargaining table, as well as part three where we dive into the physical space in which we bargain. Talk a little bit about the Home Team Advantage and how to think more creatively and generate new ideas.