

Announcer:

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Dave Asprey:

You're listening to Bulletproof Radio with Dave Asprey. Today's guest is a neuropsychologist, author, teacher, speaker who spent 46 years meditating. He's a senior fellow at UC Berkeley's Greater Good Science Center. He's lectured at NASA, Google, Oxford, and Harvard, but not in that order. And he's taught in meditation centers worldwide. And the reason I wanted to have him on the show is he's an expert on positive neuroplasticity rather than negative neuroplasticity, which is what a lot of us are getting, thanks to all of this constant fear cycle in the news. He's had five New York Times bestsellers as opposed to my small three. So I'm already intimidated. Rick, welcome to the show.

Rick Hanson:

Dave, it's such a pleasure to hang out with you again, really.

Dave:

I think it's been quite a while. We're on somewhere around episode 700-ish, and you were guest on episode 243, so this is going back with two thirds of the history of the show. And we talked about happiness and hard wiring happiness back then, but you have a new book out called Neurodharma: New Science, Ancient Wisdom and Seven Practices of the Highest Happiness. And that title is basically crack for me. I'm like, wait, ancient wisdom, new science, okay, you got me. Why after five other books, what's new in Neurodharma? What is Neurodharma?

Rick:

That's great. Well, I was just thinking there for a second like you as I know you have this aspiration for the highest levels of health really broadly defined, the really highest levels and it much that same way that aspiration fuels the book Neurodharma. It's a made up word, it really means putting together the ancient traditions with modern brain science. And what it's basically about is looking at seven ways of being, that are perfected in enlightenment and then in effect, reverse engineering those seven ways of being so that we can develop them inside ourselves, literally hardwired into our own brain.

Dave:

Is our hardware built for us to be enlightened?

Rick:

That's a deep question. There's a fundamental question like what's our true nature, what's the deep nature of everything? And I would say that on the one hand, our deepest nature in a fact has already awakened. And yet it's really difficult to rest in that true nature for more than a few seconds in a row given the brain's survival biases and then the ways that modern culture floods us and distracts us. So I would say fundamentally it is in our nature to be wakeful and free. And what is interesting as well is that when people are not disturbed, including our other non-human animal cousins like zebras, Why Zebras Don't Get Ulcers and the title of Sapolsky's great book, right? So when we don't feel disturbed, when we're not agitated, when we're not provoked, when we're rested, and there's not much of the craving which the Buddha identified as this driver that comes from a sense of deficit and disturbance, we tend

to drop into a, what I call the green zone in which the mind is colored with a sense of peace, contentment and love. And that's one aspect of awakening.

Rick:

Other aspects include a sense of being able to completely rest right at the front edge of now and what the book's got a lot in it is super cool cutting edge brain science. Like how do they do it, right? When you see someone whose great at something, you want to understand how do you do that? I've done tons of rock climbing so I would watch people that are climbers and go, whoa, how do you do that? Right? And then I kind of imagined being the way of myself and live into that way of being and much the same way. How do they grade sages? How did they enlighten people throughout history or the people who are very realized today, how do they do it? What's happening in the brain? So the books have very respectful inquiry into that with tons of plausible neuroscience. And it's all very practical, because I'm a practice guy, I'm a methods guy in the trenches.

Dave:

And your perspective on that is pretty unusual. And it's one that I share, Rick, my neuroscience company of 40 Years of Zen, I want to find the highest performing brains out there and make them perform better. But I get to look at them along the way and say, oh, what brain patterns do you have? And our ability to look at them now is incredible. And it teaches you a lot because it's one thing to go sit with a guru and get a hug from ... Or whatever growth you find, but then you have to go home and like, how do I take this? How do I learn that so that I can do it for myself? And that's a challenge. But is it a challenge that most people are going to do, at least in this lifetime?

Rick:

Well, it's totally interesting. So, in effect, the question is why bother, right?

Dave:

No, not really. I think it's worth it, but like how fast can we do it is the question.

Rick:

Oh, okay. Yeah, both are true. I think the crux of it is practice. And also people start wherever they are. For example, the book explores, like I said, seven practices or you said in the subtitle seven practices. So just take the first one, steadying the mind. So just take the first one, steadying the mind. We all know what each one of these seven ways of being feels like and we develop them in ourselves so they're more stable, literally based on positive neuroplasticity, physical changes in our neurology so we can develop them so they're more stable.

Rick:

So first one, steadying the mind. We all have a feeling for that. We all have a sense of becoming more mindful, more concentrated, more stable in our presence. And we can probably have had times where we were really dropped in, super dropped in. It's hard to sustain though without practice and then we can recognize people who have really developed that. They've kind of perfected it. I think of the mountain of awakening many roots at the top, but the same seven steps on each of the routes to the very top. It's certainly one of the fundamental steps is steadying your mind, which involves certain neural factors that are exploring the book, like five in particular that's helped steadiness of mind. So absolutely.

Rick:

And to be pointed in this time, I think there's been a loss of aspiration, which is one reason why I really value your work, Dave. The intelligence in it, the complexity of it. The respect for the complexity, and I think that at a time when people feel stressed and distracted and sort of a wash in consumers as well, it's easy to lose sight of the peaks of human potential. I kind of came of age in the 60s and 70s where there was a lot of appreciation for self-actualization, peak experiences, full awakening. What really is available to us, why not? And as you develop steadiness, lovingness, equanimity, present moment awareness, sense of wholeness, sense of allness, even a sense of timelessness. As you develop these seven qualities of being, I talk about you become a lot more able to deal with the crud of everyday life.

Dave:

You certainly do, at least I would think you would. I'm not probably having achieved all that I could in those areas. Now I focused on anti-aging in my last book in part because I always learn more from people who have more mileage than I do and you've been ... For me to have the number of years of daily meditation that you have, I would have had to start meditating when I was two.

Rick:

I didn't do it every day, but I think it's also true. A person could be genuinely meditative and I'm going to interrupt you if it's okay. I'm just going to drop in this quote that I think about a lot from of all people, Milarepa, this great Tibetan sage, who is describing toward the end of his life, his own life of practice and it applies to his lifespan. It also applies to specific smaller things that we are looking to develop. He said, "In the beginning nothing came, in the middle nothing stayed, in the end nothing left." And I think that describes a progression or practice. In the beginning, we're trying to help ourself have experiences, have states. In the middle we're trying to stabilize those states as traits, but they keep slipping away when we come at it. And then by the end they've really stabilized as traits.

Rick:

We really are steady, loving, calm, happy, content as our ground of being, which is the basis upon which then we meet the next wave of life, right? We don't stop engaging life, but what's inner core as we deal with life? And what is the possibility for actually developing a kind of unshakable inner serenity, contentment and love and strength and wisdom that we see perfected in people who are far along. For me, I want to get to the top, right? Also my ego is really, really smaller than yours, and all that, but what really matters is, is the next step worth taking? Right? Can you see the next step? Does the trail lead onward? Does it feel like it's full of heart? Can you respect people who are a little farther along.

Rick:

I've gone climbing a ton as I've said, and I've had friends who are farther along to me and they would turn around up a route or up a trail and kind of beckoned me onward. "Hey, it's cool up here. The view is amazing, watch out for the eyes. You can do it. Quit whining, start climbing." Right? And I think much the same way the great teachers, they're turning around with a sweet smile and saying, "Hey, keep going. It's cool. You can do it. Just take the next step."

Dave:

I really like that. It's fantastic. And you talked about steadiness. Now, I've had people on the show talking about flow states, extra several different people. And when I was young, oh, let me just mountain bike downhill really fast. That'll do it. Because you have to focus, otherwise you hit a tree and

then sort of using the environment to force you into that. And there's a lot of people now who have ADHD who don't know it and/or sometimes they eat in such a way that they have ADHD for at least the day and they don't know that happened either. And that seems like the opposite of steadiness. So how does one cultivate steadiness, especially if you have a mind that's prone to bouncing around, which seems it's spreading?

Rick:

Yeah. One part of it I think is to respect normal variation in human temperament and to appreciate that as our ancestors evolved in small bands, roughly 40, 50 people, it was adaptive for bands as a group, which competed with other bands, often in very violent and intense ways for scarce resources. It was adaptive for bands to have temperamental diversity that's genuine diversity. So it was helpful to have, I think of a kind of cautious, careful plotting turtles and then also excitable spirited ADHD-ish, let's say jack rabbits. I don't think of it as a disorder myself as a clinical psychologist, it's an-

Dave:

It's a super power.

Rick:

Yeah, it's a normal variation. And then you have to kind of tweeners in the middle. I'm kind of probably sort of a tweener, although I'm playful and excitable. Anyway, it's good to be all those things. So anyway, first step is just acknowledge who you are and if you stop struggling with it and resisting it, that's half of it right there in terms of developing greater steadiness. And part of that is if you want to help yourself steady, make sure you've got enough [stim 00:11:36] coming to satisfy stim hunger so that you don't get agitated, that you're not getting enough stimulation. To use an extreme example, I worked with a, I'm a therapist, so I worked with this kid who was about 11 when I saw him. And he was not neuro-typical, he was very neuro atypical and he cried all the time when he was an infant, he was never settle-able. And his mother finally in desperation put a TV in his bedroom when he was about six months old and turned it on, to like a cartoon channel, something called Assam.

Rick:

And then she just left it on 24/7 and that's what put him to sleep. He needed the stimulation to be able to settle. So if you're meditating, for example, in your restless, choose something more stimulating than the feeling of the breath or on your nostrils. Walk around, focus on the sense of your body as a whole, which is a fantastic hack. It does like two or three things, it wants to just be aware of the feeling of being a whole body breathing or focus on something that's more stimulating and enjoyable, like gratitude or a feeling of loving your dog or your friend, that's another thing to really do. And then I would say the last thing that's really cool neurologically and there are multiple other things, but this is I think will appeal to you. Dopamine.

Rick:

So if you want to stay focused on something including this conversation or this stream of consciousness all together, or something very specific, like the sensations of breathing inside your body. If you want to focus on anything operationally, what that means is that the neural substrates of working memory and the upper outer frontal regions of the brain are gated so that they sustain the representation of whatever you're focusing on. That's a kind of geeky way of describing it, but it's factually true. Well, what regulates that gate? It's regulated by dopamine and when dopamine levels drop, the gate opens.

So new distractions can come in. I think of them as like frisky little animals that want to come into the pasture and disrupt your calm and mellow shape, right? But on the other hand, when dopamine levels stay steady, the gate is closed because in effect, what you're focusing on is rewarding. So you keep being focused on it, we share this mechanism with other primates.

Rick:

Another thing that opens the gate is a surge of dopamine with a new opportunity for reward. Something kind of cool that might happen. So you open the gate, you could deal with the next thing. What this means functionally is that happiness is skillful means, as we increase emotionally positive experiences, so the sense of reward increases, dopamine remain stable. And as we intensify that, as we cultivate really strong feelings of contentment, tranquility, gratitude or love, dopamine levels are already at their ceiling. See, they can't get a spike and you stay concentrated and stable in the focus of your attention. A lot of people kind of push away positive experiences. They have this sort of grim dour attitude toward life and contemplative practice in awakening. And that's not skillful. What's really skillful obviously, is to appreciate what's painful and sad and so forth while increasingly cultivating a kind of unconditional joy inside yourself, gobsmacked with gratitude. When you look around yourself at a blade of grouse in part because it helps to steady your mind.

Dave:

What about drugs? So you say, hey, let's stop some GABA activation. Just have a couple shots of vodka and lets ... Oh, how about some endocannabinoids? What are the role of those in your book Neurodharma?

Rick:

So I'm personally pragmatic, for me there are multiple ways to influence the physiology, right? And there are multiple ways to influence the experiences that our nervous system is representing and enabling. I've used all kinds of drugs. I find for myself that-

Dave:

You are at UC Berkeley, just wanted to get, your sort of stating the obvious my friend.

Rick:

That's right. That's really right. So our kids, [crosstalk 00:15:55], and they're like late 20s, early 30s and they think they're really cool and my wife and I just sort of stare at them. And we're like, you have no idea, you have really no idea. Anyway, so I think of Gurdjieff flying about drugs. He says they're like a telescope. They show you what's possible, but then you need to walk there on your own.

Dave:

Thank you for saying that. Yes.

Rick:

Yeah. It's the walking there on your own part that the older I get, the more I kind of appreciate that part.

Dave:

When I talk with the elders of the psychedelic community and some of whom are in Berkeley based, they will almost universally say that. And some of the younger, more ebullient people are sort of saying, I've done a hundred Ayahuasca ceremonies and I'm like, I hate to tell you it's not working. You're not supposed to have to do that.

Rick:

That's right. That's really right. Well it's that Milarepa line, what stays and what doesn't need to be propped up. And we're recording this, really in April 2020 and I think a lot of people are realizing that their circumstances and settings and activities and the experiences they've had have propped them up. But when the storm has come at this pandemic, it's stripped out away. And what people are left with is what they've cultivated inside that's stable. And for some people they look inside, it's kind of like an empty cupboard. And that's why I think again, it's so important to keep focusing on that transition from state to trait. States are easy, experiences are cheap, they're so easy. What are the lasting residues they leave behind woven into your body physically, that's what really counts over time.

Dave:

That makes a lot of sense. And so if that's steadiness, let's go to the next part of your book and we're sort of getting the masterclass on Neurodharma and I think we can get all of it into one hour or thereabouts worth of episodes, just a little bit of each one.

Rick:

Yeah. I definitely want to accelerate on the last four because I know you will geek out the most on them.

Dave:

Okay. So loving this. Now, this is the opposite of meditating on the blood of your enemies.

Rick:

That is exactly right. We're at the plastic line, right? Resentment is taking poison and waiting for others to die. Yeah.

Dave:

So what is lovingness?

Rick:

For me again, it's what do you see perfected? Pick your tradition or including secular traditions, right? And what you see developed is this unshakeable capacity to be rested in compassion and kindness while also being fearless interpersonally. And there's a saying, a proverb, one is wise who is peaceable, friendly and fearless. And it's that combination together, I think. So there's a lot of research, some of it involving the vagus nerve complex, some of it involving flows of oxytocin, the way that it interacts with the threat response system.

Rick:

There's plenty of evidence that we really can gradually cultivate trait, compassion trait, kindness trait, interpersonal courage. I think a lot of people are quite courageous and brave when it comes to business and physical activities. I would say to generalize, maybe controversially, men in particular, but when it

comes to interpersonal relationships or vulnerability or intimacy or full self-expression, they're kind of cowardly. They don't really have much courage in that department. So that chapter of the book, there's one chapter for each of the seven practices. It's a real cut to the chase book with about 800 references and notes buried in the back and the fine print for those who care about that. So yeah, I think loving this is definitely something we can develop, we can cultivate the warming of the heart.

Rick:

As the heart warms, it's easier to steady the mind. As the heart warms, then the third practice I call resting and fullness. It's what is it really like to rest in a sense of peacefulness, contentment and love? Equanimity in a word that's warm, that's saturated with wellbeing, without craving. The brain is designed to crave, it's really hard not to crave, including extreme subtleties have driven us or resisting what's unpleasant or clinging to interpersonal supplies. Do you like me? Can you give me more five star ratings? Like [inaudible 00:20:19], the hunger. It's really hard not to do that. Right? So that chapter, resting and fullness really explores how powerful it is to repeatedly internalize the felt sense of needs met enough in the moment so that you gradually rest in that even as you deal with challenges. So those are the first three. You could summarize them as steadiness, lovingness, and fullness. And they kind of go together. You can feel it, right? Oh, yeah. You could feel it. And then on the basis of it, bring it on. Come on life, let's play.

Dave:

Okay, so you've got those. Now, the last four in your book, wholeness. Okay. But not fullness, we're talking about wholeness. Is somehow that's different from fullness. Okay. What is that?

Rick:

Yeah. And again, I really invite people to kind of orient to this both in terms of what do you recognize in people that you just think to yourself, like that kindergarten teacher who was kind of a living Saint. When she passed away, 300 people came to her Memorial in that small town. Just what was going on there, right? How do you do that? So you could see it in others, you can feel it in yourself. It's not exotic. So what do I mean by wholeness? I mean fundamentally a sense of accepting yourself fully, feeling undivided and increasingly experiencing your own consciousness within ordinary reality, your own consciousness as a unified whole, not as parts in conflict with other parts and a really powerful piece of useful underlying brain science about this ... If you'll kind of bear with me I'll take about a minute to summarize it.

Rick:

When we are task oriented, we tend to engage cortical networks in the midline of the brain, midline of the cortex toward the front. When we are spacing out and engaging the default mode network, we tend to engage cortical networks in the midline as well, more toward the back and spreading. This is very familiar to you. In either of those networks which intertwine, there tends to be a lot of mental time travel focusing on the future, thinking about the past. Also, with those strong sense of self and a lot of verbal activity. There's a place for that, but if we think about a lot of our suffering, it has to do with being lost in the simulator or the ruminator we could say, and you've probably seen research that shows that when people are randomly pinged throughout the day on average they're distracted 50% of the time, they're not here, they're gone.

Rick:

They're lost in thought 50% of the time. At least that's the average. That means for people like you and me who are apparently present, there's not a big volume, all are really gone 80% of the time. And the more gone you are, the more distracted you are, the more your mind tends to be colored with negative emotions of various kinds. So being able to get some kind of self-regulation of those midline cortices is really useful. On the other hand, this is one of the coolest, most useful findings of all. When people are really dropped into the present, when they're in the present with little sense of self, not abstracting, not trying to solve problems, they're not lost in thought, midline cortical activity decreases dramatically and activity increases dramatically on lateral networks, on the sides of the brain, especially the right atmosphere for right-handed people reversed for many left-handed people, but the principle is the same because the right hemisphere of the brain does gestalt holistic processing, the sense of things as a whole.

Rick:

And a very simple hack people can do just right now as they listen is try to get a sense of your body as a whole. You may need to be quiet for a moment or two to get a feeling for that. And notice what happens in your mind. It's like a gear shift. You're shifting modes, you're moving from midline mode of doing in a word to the lateral mode, lateral networks on the sides, right-sided mainly of being. And you can immediately feel that or if you get a sense of the room as whole. As soon as I start looking around my room as a whole, anything as a whole, you're working that right hemisphere and you're tending to increase lateral network activity, and reduce midline activity. So with training and research shows this, most people have no capacity to sustain the lateral mode of being. And yet with training, even college sophomores, the great Guinea pigs. So social sciences with an eight week mindfulness type program can stabilize lateral mode activation. And you can see this circuitry lighting up as it were in MRIs, much more stable. So that's a sense of wholeness.

Rick:

And I find that that is a very useful thing these days, especially when we're bombarded with all these parts grabbing for our attention to be able to rest in the sense of wholeness, wow, honestly, it's really peaceful.

Dave:

So that it's a big deal in the idea of being a complex system, hardware, software, but all working together versus seeing individual aspects of it. Sort of seeing the whole elephant versus seeing the elephant's leg kind of thing.

Rick:

That's right. And feeling it. So in a great way and like I said, is feel your body as a whole. And then if you want to, you can bring in the sense of hearing and seeing. Suddenly you're in your mind as a whole. And if you think of it, a structural feature of unhappiness of any kind is parts struggling with parts. Right?

Dave:

Right.

Rick:

See the cookie, that's a part. Want the cookie, second part. Self-criticism. No, no, you don't deserve a cookie. You're fat, that's the third part. The fourth part comes in, Dave Asprey's voice, well, you just

need to work on your ketones or something or other, you know? And then the fifth voice goes, what am I, insane? Parts struggling with parts. When you drop into the whole and you can observe it directly in your experience, it gets quiet. It's like you're the whole pond, which is always still, if you think of it as a whole, even though the surface has ruffled by the worldly winds.

Dave:

Now, that raises all sorts of questions around the technique to actually get there. Is there some kind of a breathing thing that you have people do or did they have any electricity? Like what's the best way for that?

Rick:

I love the weird saying you've got to know it from MIT's media lab demo or die, right? You've got demo it. I think about the Buddha, kind of my root teacher, he was interested in what's true. He was much more interested in what works, right? So while it works, what are the methods? What serves? So there are many methods in the book and for example, with wholeness, like I said, if you just take three breaths, you'll notice there are a lot of sensations of breathing, but you'll notice that much like an image has many parts in it and yet we experience it as a single visual percept. You and I are looking at each other right now on Skype, we're seeing each other. I'm aware of the room I'm in. It's got many parts, but it's one visual field, one percept. You can do the same with sensations.

Rick:

You start to get a sense of your sensations as a whole, all of them together as a single whole. Let's say starting in a small area around your chest, maybe around your heart as you breathe, and then expanding into the torso and then the legs, the shoulders, the back, eventually your whole body. After a while nothing leaves. You're very able as I am now, to just drop in at will to that experience, including in a busy business meeting. It's really useful to be able to drop in to the sense of your body as a whole. You are engaging those lateral networks and you'll just watch, it just sucks you into the present in a good way. Decreases the sense of me possessiveness taking life so personally, it's very calming. That's a great way, just feeling your body as a whole. If you want to do it visually, you can just get a sense of the room as a whole, suddenly you're in a sense of a whole. And that's very effective.

Dave:

Over the course of my practice and meditation and all the other weird stuff that I've studied from around the world, very early on it, it was you study body awareness, focus on your toes, focus on your knees and you work your way up. But eventually you find you can sort of spread that around-

Rick:

Exactly.

Dave:

And it becomes relatively effortless. But it does take time and for me the feedback with technology helped a lot. How does that tie into numbness?

Rick:

Numbness is so interesting. I mean, because it gets at some deep questions about physical reality, right? And what is now, what is time? Why is there anything new? Why is the universal still changing? And in the book I mentioned this notion from Richard Muller, a world-class physicist at UC Berkeley that he talks about the big bang universe as four dimensional which is kind of basic relativity, one of the four dimensions as time the whole universe is expanding. We don't recognize the spatial expansion directly. You need sophisticated telescopes to recognize the ways in which the universe itself is expanding spatially in three dimensions. What if time is that fourth dimension that's also expanding? So the expansion of the four-dimensional universe in terms of time is the next moment of now, right? So we are all living in creation. In fact, at the emergent edge of now, the question is how to rest their subject of life.

Rick:

And this goes to two attention networks in the brain, right? So the older, more primal one, lower down in the brain that we share with simpler animals like lizards or goldfish in my backyard pond, is continually updating consciousness. It's like the leading edge of the windshield of consciousness. What's new, what's new, what's new? It's alerting. And we can be mindful of the sense of being alerted to something new in the first ... Like something happens, the phone rings let's say, and then you freeze the movie and you rewind it slowly. There's that very first quarter second something has happened. You don't even know what it is, you don't even know where it is and then coming online, usually when the other couple of half seconds is what it is and what to do about it. But that initial surge of the new is managed by an ancient attention network in the brain that manages alerting and updating.

Rick:

Okay. Then if we want to sustain attention to the phone and decide what to do about it, we start engaging networks that are higher up in the cortex or more recently evolved through which we've sustained focused attention. And therefore, if you want to operationalize being here now, if you want to really operationalize the felt sense of being at the emergent edge of consciousness, it means becoming more mindful of the alerting network of attention and we're able to regulate it rather than getting sucked in to the cascade behind it. And if you think about it structurally, again, if you're interested in suffering less, right? And abiding in with this emergent sense of freshness and delight, letting go continuously, not attaching to the experiences following through, which is a major aspect of the perfection of awakening, right? That quality of receptive presence while continuously letting go, continuously let it go.

Rick:

How do you actually do that? Right? Especially with the brain that's very good at mental time travel and leaving the present. Well, there are a number of ways you can train and alert it and being able to just turn it on it well so you live in that arising freshness of the moment, which is totally delightful. And then actually you start to become more and more able to just continually abide in this temporarily, infinitely thin slice of time that is now. Right? You can abide right in the now while functioning while engaging life, which is like walking and chewing gum more than that kind of at the same time. And neurologically we can really, really do it, especially by training yourself to just relax into the updating of consciousness and not chasing any particular experience.

Dave:

This isn't in your book, but I want to ask your opinion on it anyway. I've come across a bunch of different shamanic teachings and I was trying to explain this to my kids yesterday and the general perspective there is that, if you own the land then time owns you, but if the land owns you, then you own time. True or false?

Rick:

Well, I would say experientially true. Yeah. Because when you're ... It's so interesting, you must know Dogen, the great Japanese Zen master who wrote this beautiful collection of writings called Essentially Being Time, time being, for the time being. And he also has this classic saying that to study the way is to study the self. To study the self is to forget the self and then to forget the self is to be lived by all things. And I think there is that truth when we are lived by all things then we are increasingly rested in the eternal present as time passes.

Dave:

I have gone to great lengths to not really pay much attention to what time it is or what day of the week it is. And it drives my wife nuts, because what are you doing later this afternoon? I have no idea. Like I have a calendar, it's all written down and I'm going to do what the calendar says, but I'm not kind of focused on it because that's not what I'm doing now. And I don't want to lose my focus on what I'm doing now. And other people, what are you doing next April? I don't even know if it's April right now and truly I don't, I have to think about it or maybe you look it up sometimes, but that can be a little bit dysfunctional to be perfectly honest. I can do that because I have an assistant who helps me do my calendar. But if I had to do my own calendar, I'd be pretty damn focused on not now-ness, on lateness or what did I forget-ness? How do normal people without assistance do that?

Rick:

That's really interesting. Well, I would say that I think there are people who are rare, like Ramdas guru, Neem Karoli Baba, who just seemed to have a hard time functioning in a complicated technological society. So they have support. But in most cases, the people that I know, at least who I would say are very far along in their practice, they're really quite functional. They're perfectly able to deal with functionality and they can kind of live in both worlds. They have this rest of this, there's this kind of sweet smile usually that is in their background. Well, meanwhile they're running a monastery, right? Or they're managing their thing.

Dave:

I just recently interviewed Deepak Chopra, who by the way is on your book, he recommended your book.

Rick:

That's good.

Dave:

And so we sat down and after the interview he's like, I don't really like going to, doing conferences like this, I do them because they're helpful. But really what I want to do is just go out in the forest and be by myself for four hours a day, that's amazing. But he was fully worth the Michael Milken conference, a big charitable investor conference kind of thing. So he was clearly able to walk in both worlds and be happy in both which was neat.

Rick:

That's right. Think about the Dalai Lama, right? On hand spiritual leader, on the other hand he's sort of the exiled chief of state, essentially, for the Tibetan people in exile. Trying to manage the Tibetan diaspora. So, yeah. Well, let me talk about all of this.

Dave:

Yeah. Let's talk about all this.

Rick:

Because again this is like, to me, this is the really, really neat stuff. So wholeness, couple of questions, clearly about a third of the people surveyed worldwide without psychedelics have had these radical, they're called self-transcendence experiences, peak experiences that have two fundamental characteristics. The details often vary. They can be religiously saturated or not. The details vary, but the essence is simple. First, the ordinary sense of self just drops out, usually suddenly gone and it's replaced by this wonderful sense of the universe shining forth in radiant perfection, both together, just one. And I've known people who have experienced only the sense of self dropping out can be deeply alarming if not psychotically disturbing. You need both actually.

Rick:

So question is, what in the world is going on in the brain when that happens or more generally, how can we as the Dalai Lama said to the hot dog vendor, make me one with everything, right? How can we actually have that very beautiful sense of not being separated and beleaguered and at war with reality but more buoyed by it. Interdependently arising. How do we actually live in a felt way continuously that kind of those classic recognitions identified in Buddhist psychology in which we recognize that emptiness of existing phenomena. It's cloud-like, not brick-like, while feeling that we are a local expression of everything. That we are a wave in the ocean of allness and our nature is water, right? How do we actually do that?

Rick:

And it turns out is that in your brain normally are these two circuits, and this will start to connect with now-ness and wholeness. We normally oscillate back and forth in normal brain function between what is called an egocentric perspective, not pejoratively. It's not bad to be egocentric in this sense. It's a self-referential. So I'm doing it right now, I'm looking around the room, I'm looking at you and it's in reference to my perspective and there's a sense of personal relevance in it. What's this got to do with me? Then the brain usually several times a minute visually especially cycles through a sense of everything impersonally as it is, with no perspective privilege and it is like what it is. So that's called an allocentric perspective.

Rick:

Interestingly, the allocentric perspective is much more ancient than the egocentric one. Very simple animals have this, they're grounded in the allocentric perspective of just the jungle as a whole or this little moment of being a beetle crawling on a leaf or being a lizard, recognizing the tree, the leaf and the beetle, right? That's allocentric. Not my sense of self, right? To the extent that to practice the way is to study the self, and to study the self is to forget the self. But that's a value. It then gets really interesting. What's the underlying neurology of selflessness? You're still a person. You're not depersonalized. You

have dignity and rights and responsibilities, but the sense of ego, the sense of contraction, the sense of identification and possessiveness really falls away. What's going on in their brain when that happens?

Rick:

Well, the egocentric perspective is much more recent. And to do a little hack here. If you look down kind of towards what's near you, you will naturally bring that egocentric perspective online because in the wild stone age or Jurassic Park, what's close is personally relevant, friend or foe, eat it or be eaten by it. Right? On the other hand, if you lift your gaze to the horizon or above, you can watch your own mind. You will start to move into a sense of things as a whole. There will be less self-referential processing and probably will come along with it a sense of kind of a peacefulness, a presence, right? Because that's engaging the allocentric perspective. Yeah.

Dave:

Can you do that inside a small apartment?

Rick:

Yeah, you can do it anywhere.

Dave:

So it doesn't matter how far the gaze goes.

Rick:

Exactly. Exactly right.

Dave:

Does it work better though if you get to go outside and look at, at least something across the street or in my case Salt Spring Island.

Rick:

Yeah.

Dave:

I feel like it does, but it might not in the practice you're describing.

Rick:

I think you're exactly right. And there's a lot of research on the basics of this, but the actual super practical applications, it's more anecdotal and you can run experiments in the laboratory of your own body mind, right? You're a master of that one. So what you can notice, it's about two, three meters away from yourself. When the gaze starts to shift, which really is interesting an evolution that that's a natural distance for primates, especially humans. And the hominids, for it gets significant when it's within a few meters. But if you start moving out, it just starts shifting and you can feel it. And it really starts to speak to the common fact that many people have had awakened in your experiences out in nature, which tends to pull you into that allocentric space, while gazing out, if not even up to the heavens and often involving surprise. And this is where I'm going to tie it all together.

Dave:

Okay.

Rick:

The allocentric networks neurologically are located lower in your brain, much as the attentional networks are lower in your brain and the updating network of attention, the alerting network of attention that most primal [inaudible 00:42:27] of now-ness is low and right-sided. Okay? Lateral networks, right sided. Allocentric networks, low on both sides and you can start to feel the ways that they reinforce each other. When you come into that sense of being of midline, pardon me, of lateral activation, a sense of wholeness, okay? That tends to naturally bring you into now-ness, you're more and more the emergent moment. Things are happening, things are happening. I don't need to control them, I don't need to understand them. I don't need to fit them together. It's all happening so fast as I'm just kind of flying forward through reality, now-ness.

Rick:

That naturally also pulls you into almost that sense of everything as a whole. And that what you are experiencing right now is just a quivering locally in the vast tapestry of reality. And that experiential integration of wholeness, now-ness and all-ness is supported by the neural neurological integration of the circuitry of those three, which you can strengthen and train over time, so more and more you can drop into that when you want.

Dave:

Now, if you were to take that and look at the neuroscience of it. So when you say it's lower in the brain, is there certain frequencies? A lot of the work that I do now, in the neuroscience group is around networks. So it's about making, if this network talked to that network. So are we talking, oh, you've got delta frequencies and the occipital lobes, or do we really not know that yet?

Rick:

I don't know everything, I know something. And if we know something, we know more than nothing, right? One is infinitely more than zero. So, what I would just say about that is I've never seen any operationalization of the more circuit based neuroscience that I'm speaking of in terms of brainwaves, for example. I think that would be a deeply interesting exploration to go into what is clear. The one thing that is clear in terms of brainwave activity is that people live a long meditative practice and can drop into the sense of wholeness really readily, they didn't have much more both resting state and on demand gamma range brainwave activity, which is you know, of course is very, very fast synchronization of vast coalitions of neurons all firing together 30 or more times a second. And that sense of gamma range activity or gamma range activities associated with integration and wholeness and also steeper learning curve, steeper growth.

Dave:

Yeah, it's funny, in the 90s, we were all into, Oh, it's all about these alpha brain waves because we could measure them, because they're easy to measure. And it turns out a lot of the crazy Buddhist stuff comes from gamma and it comes from waves on top of waves from this one little node to another node. But I feel like as a whole, the field is teasing that out. And I literally at every week, at least, when the pandemic hasn't put things on pause for a while, every week it's like, oh, there's a few new brains coming through where people were already at a certain level. And then what are the super high

performance things that stand out? So I'm just looking at the outliers. Let's look at the outliers. Let's look at the outliers and see what's going on.

Rick:

Exactly right. It's funny Dave, just when you started speaking, honestly, I felt this kinship with you around exploration. It's exciting to explore and I-

Dave:

It is.

Rick:

Yeah. And to feel that we have the capacity to do it. I personally like exploring just inside the inner temple because we can always do it. We don't need anything complicated and no one can defeat us there in the inner most sanctuary of our mind. While simultaneously I have tremendous respect for the kind of technology really broadly you've developed for example.

Dave:

It's not just me, I hire smart people.

Rick:

Yeah, that's right. But it's that spirit of exploration. You know it reminds me of, I would go into the wilderness a lot with friends and I had two friends in particular. One friend we'd set up camp somewhere and he would plop down in a camp chair he brought along with his cigar and a novel, that was his idea of a good time. Okay, I respect that. He's probably more of a turtle, but I had a friend named Bob, longtime climbing partner. We went to sort of have breakfast, finish our coffee and look around and we'd see some kind of Hill or peak or Valley or something and we'd go, wow, that would be kind of cool. Let's go there. And it's that spirit of exploration that I really respect and appreciate.

Dave:

You mentioned earlier in the interview that there's the turtles and there are people like that. Do you have a good taxonomy for the types of people there are? So how many explorers like you or me are there versus aliens versus robots? I have no idea. What's your taxonomy look like? Muggles versus wizards? How do you think of this?

Rick:

Yeah. Well, I'll give you one that just, I've never said to anyone really in an interview. So one version of it would be to imagine yourself in some guided visualization way going back down a deep tunnel and it's all very ancient and then you come to a door made of wood, clearly tens of thousands of years old, you're going to come out into a stone age environment and you're going to be who you are in that setting. All right? Given the kind of roles available to people in that setting, archetypally who are you when you walk through that door? Right? So I find that really interesting to explore. Who knows what it might say about past lives, don't know. But in terms of our own psychology, who are you? So that's one.

Rick:

I think the temperamental spectrum is very useful. There's a lot of value there. A lot of therapists kind of ignore temperament at their peril, I think that's a big mistake and a lot of kids are pathologized because they're jack rabbits turned to live in a turtle pan, taught by turtles, well-meaning turtles who are trying to make them turtles. And it's a problem with fit. It's not a pathology, so there's that one. And a few others, in the Buddhist tradition they're so-called greed types and hatred types. And I think they left out more of the interpersonal types the kind of clinging types. But, I'm probably more of a greed type. I'm opportunity oriented more than threat oriented. So those are some typologies. Who do you think you would be if you popped out 30,000, 40,000 years ago?

Dave:

I would either be the guy making flint or I'd be like the village medicine person going out there and eating plants and seeing what happen to me too.

Rick:

Yeah, that's a totally you.

Dave:

Yeah, that would probably be the good fit. But I don't know, I think I've evolved a little bit since that time, so I might've just been the guy out there bathing myself in the blood of my enemies too. So it tends how linear time really is, doesn't it.

Rick:

But you could see that? Like I respect warriors, the warriors kept the rest of us alive, but you kind of see people's nature and you can kind of have ...

Dave:

Yeah,

Rick:

I myself, I would be like a shamanic character, kind of my nature.

Dave:

Nice. I can see that you've got that calmness. It's a very good time now in the world because there's way more peace than there's ever been, even though people always are freaking out about whatever is in the news. But statistically there's way less war, way less of that stuff and way, oh, you can just get food. It just arrives at your door even during a pandemic, there's a box of food, like seriously, like how cool is that? Normally you'd have to go out and like kill a neighbor to get it, and that's most of human history. So that warrior thing has been kind of necessary because if you wanted to be the shaman, you probably needed some warriors around you or someone would come in and steal your drum or whatever they did to shamans back then.

Dave:

So that the British violent history of humanity is something that a lot of us have forgotten about. The number of people walking around now who are 30, who have never once been in a fistfight or wrestled with someone who really was trying to do them harm, it's actually pretty shocking to me in the West.

But I think if you go to most of the non-European countries, it's exceptionally common because it happened in fifth grade or something. But here they're throwing fifth graders in jail for that kind of stuff. It's weird.

Rick:

It is interesting. I think about this quote from, I always mispronounce his name, At-Nehisi Coates who said that privilege is not having to take something into account. And I've reflected on that a lot. I walk down a dark city street in the middle of the night, I'm a tall dude and I don't worry about sexual assault. I might worry about being robbed, but I don't worry about sexual assault in a word, it's a charged word, but I could call it privilege. Well, I think one thing that is just remarkable to me, which goes exactly with what you're saying, we continually forget that up to just 10,000 years ago, a blink in our evolution, our history as a 300,000 year old species, anatomically modern based on another two million plus years of tool manufacturing, smart hominid ancestors, we all lived in small bands and we just routinely forget that.

Rick:

I'm amazed walking down a street that people are not slugging each other or robbing each other or frankly raping each other and we leave it out. And this is where the privilege of modern technology to forget our hunter gatherer origins, and yet that is our deep neurobiology. That is our deep neuropsychology as hunter gatherers.

Dave:

It's funny the way you talk about that, I'm a 200, 210 pound like, tall white dude. I was in Nepal in 2004. This is when I ... Actually went from Nepal to Tibet to study meditation and to learn about yak butter tea apparently. But the Red Cross had left the country because there are Maoist rebels who were overthrowing the government and they basically said, all Americans go home. And I'm like, I'm going to just carry some Canadian currency and pretend like I'm Canadian and I lost my passport. Young and dumb. So I'm walking around, not a lot of tourists present and I've never really felt that fear of sexual assault. But then you know, the Nepalis are very polite, nice people and they say, oh, I'll help you find your hotel, which in winding streets.

Dave:

So I'm following this guy and then he starts kind of trying to make the moves, but he doesn't want to have sex with me, he wants to bring me to his friend. So I'm like, wait, there's some like dark guy who's sending people out to pick up tourists. And then he said, "Oh no, it's through this park." And I'm like, I'm going to get jumped in this park. And like for the first time in my life, right, the only time in my life I was actually worried about sexual assault. Like, good thing I have a pocket knife and I'm sure the guy doesn't know it. I had my knife, like ready. I was like, I can at least take one of these guys down, but I don't know where my hotel is. And I've never had felt that fear, just made me, that popped back into my mind.

Dave:

And of course, because it's Nepal and because Nepalis are generally very nice people, he just took me on a shortcut to my hotel. He was like, there you go. I was like, oh thank goodness. But so it was all in my head.

Rick:

False alarm.

Dave:

It was all in my head. But I do remember that feeling because that was so random. But if I was a 5'4 woman, it might be in my head all the time and like how would I know?

Rick:

It's really intense, isn't it? To appreciate that. Well, we don't have to take into account all kinds of people in the world right now have to take into account. And it's, to me it's really important. There's a Zen saying nothing left out except we always must leave things out, there's no way around it, but at least we don't have to leave out that we tend to leave things out. Now, you keep [delivering 00:54:28], this maybe goes back to metaphorically really that wellness practice of looking out to the horizon. What am I not including and how can I include more broadly, morally, as well as I include more, I'm going to be able to be more effective and successful in this world.

Dave:

I very much appreciate that perspective. I want to pick your brain on another thought here, Rick. We talked about the hardware of enlightenment at the beginning of the show.

Rick:

That's right.

Dave:

How it ties in with Neurodharma and how our hardware is designed to do this. I have a theory, and I didn't have this theory when I interviewed you last time and this came about from writing Head Strong, which is my book about mitochondria and the brain. And I now believe that the algorithm that's baked into our hardware before we can think of it, from which the ego actually emerges is just based on four rules and really three primary ego ones in this order. Number one, runaway from, kill or hide from scary things. And I know because all life does that because otherwise you get eaten right away and it works for bacteria, works for mitochondria, works for trees, works for zebras, doesn't matter. You have to do that right now.

Dave:

Number two, eat everything because famines killed your ancestors. Okay? That's why we can't say no to the bagels and whatever. Number three, have sex with everything else because if you don't do that, the species ends. In that order. Right? And then number four, if there's anything left, make friends, build a community. So they're all F words basically. And that by following that unconsciously in a distributed system throughout the body, so quadrillions of different compute nodes, each of them being mitochondria and then cells and then organ systems, and then kind of rolling that stuff up into the brain where we strip stuff out that we don't want to pay attention to. And then we get a tiny bit of that left that that's where all of the egoic behaviors actually can be explained from a hardware perspective, that they're in there before we catch them with our consciousness and then decide what to do about it. Sound true or not?

Rick:

Well, a comment and a question.

Dave:

Yes.

Rick:

Okay. So on the comment side you've described what are these three classic needs for safety-

Dave:

[inaudible 00:56:50] hierarchy, right.

Rick:

Well, no, a little different one. For safety, satisfaction and connection. And this is a very common framework. I kind of built it out in my book *Harboring Happiness*. You have two applications of the connection need. One is reproductive, the other is affiliative to use a fancy term, as you know, pack animals. So those are our three needs. And you nailed them. And I think it's a very useful framework and they're loosely associated in order with the evolution of the reptilian brainstem, mammalian subcortex, primary human neocortex, blah, blah for safety, satisfaction, connection managed by avoiding, approaching, attaching. And you also take it down to the cellular level, which always sounds great. So I'm just, my feedback here is just fantastic stuff. Then my question for you is what do you mean egoity or what do you mean egoism?

Dave:

Well, I've been looking for that source of the ego and I believe the ego is separate from the self, it has its own decision making, its own willpower and is different. It's a different speed than our conscious rational thoughts. And I can prove that with neuroscience, you react to things before you think about them. Right? That's a very simple test to do. So given that there is a system in there that reacts before you can think, how would you construct that system? Now I'm a computer science, my concentration was in a form of AI and all this stuff. So how would you do that in a scalable way that works across all life? Because all life has to do this. Not conscious life, including even a life that's not conscious or is much less conscious than we are. Slugs, bacteria, spores, it doesn't matter.

Dave:

And so these would be the three rules that you have to follow. So now I take Stephen Wolfram's research IS called a new kind of math and he shows that if you take simple rules and repeat them almost infinite numbers of times, you end up with very complex behaviors and these amazing patterns and it explains much of nature. I think these are the core rules that make all life behave the way systems of life do. You just have to do that all the time. And if we program those into a neural net, by the way, don't do that. You'd probably make something that would kill all humans. But if you did do that, you'd end up with a very close model to the way people behave before they develop the stages of enlightenment you've talked about in your book.

Dave:

And before we realize, oh, now I intercept these, now what am I going to do with the signal that came from my threat detection systems that are in my hand detected something and it came up and my body did something and then my mind did something of what my body did, so that I've been using that app.

Rick:

Yes. Really interesting. So let me throw a complication in and see what your take is. Okay, great. So we have, I'll say three needs, organism, whether it's at a cellular level or scaled up to a lizard, mouse or monkey or human, let's say. Need to be safe in various ways, need to be satisfied in various ways, notably food, and also need to be connected with others of one's kind, including being able to procreate and so forth. Okay. To me the question is how do we meet those needs? Do we meet those needs on the basis of an underlying sense of deficit and disturbance? Something missing, something wrong that pushes us into what I call the red zone. And then tends to trigger fight, flight, freeze behaviors of various kinds. Or alternately, do we avoid harms for safety? Do we approach rewards for satisfaction, then attach to others for connection on the basis of an underlying sense of wellbeing, of fullness and balance already, right?

Rick:

So the key distinction is not around the needs. Yes, you're exactly right. Life must manage these needs. The definition of debt is in a sense, failure to manage one or more of those needs at a critical level. We must manage those needs, but do we need to do it on the basis of something missing and something wrong. And for me, so much of what the path of awakening is about and just ordinary training and wellbeing, whether you're working in the hardware, from the bottom up or you're working in the software, in fact, from the inside out. To be able to meet our needs and help others meet our needs without the lights on the inner dashboard all flashing red. That's a key distinction. And then another key distinction that I flipping this by you, this is very cool stuff, is are we meeting our needs on the basis of being a person who exist, has continuity as a body mind process over time and has individuality as a body mind process, your particular wave in the sea of causes over time.

Rick:

Or are we managing these various needs on the basis of, what I'm going to call now, the psychological self, that belief in or sense of a kind of reified essentially entity inside who is driving the show. And I would just argue that the more that we manage our needs on the basis of being in the red zone, something missing, something wrong, the more we suffer and harm. The more we move into the green zone, the less we suffer and harm. Same thing. The more we manage needs on the basis of a felt sense of being a person, a kind of distributed, spacious, ongoing process rather than a contracted, possessive, beleaguered, vain, narcissistic self, we're also going to have less suffering and do less harm. All right, what do you make of all that?

Dave:

It matches. For me, as long as you identify that, that system that runs those things, it's not you, you just inhabit that. Like, oh, this is a characteristic of my body and the default behavior is that, but you don't have to choose the default behavior. And it's becoming aware and seeing the default behavior and saying, oh, like that was interesting. Let me either change the programming so that the body now doesn't interpret something as a threat. That's not a threat, that's a boss move. That's a lot of the neuroscience work that I'm doing now on myself and a few others.

Dave:

Or you just say, okay, I recognize that I got a false alarm so I'm not going to get the security service out the door. I don't have to, and I'm just going to stay centered and experience allness and fullness and all of that. But if you believe that you are your hardware, then it's very hard to sort out which of those are you. And I just look at all the things I've ever done that I'm, would be embarrassed of or all of those first three F words.

Rick:

That's interesting. I think for a lot of people, including honestly in the world of psychology, it's a revelation to realize that you can have your safety need really challenged. You can be in a very hazardous environment. For me, rock climbing is such a metaphor, while simultaneously not at all being upset, not being freaked out. Maybe there's a little anxiety around the edges to keep you on your toes, but you're not panicked. I think of Alex Honnold, when he was interviewed in a 60 Minutes show early on about him soloing these two, 3,000 foot peaks. Before he did El Capitan he was asked, do you feel stressed? And she said, "You must be stressed up there holding on to a Tiny Holds, the width of a pencil lead." He said, "No, if I'm getting stressed, something has gone terribly wrong." So for many people, it's a revelation that they can deal with important needs without being contracted and uptight. And it's also kind of regulatory that you really can relax the sense of self and still function really effectively as a person.

Dave:

I very much like that. And to do that is definitely at least one life's work if you're into that multiple life thing. And your book Neurodharma is a definite contribution to our knowledge as a species and is even more relevant now that a lot of people are quarantined staying at home and social distancing and all that kind of stuff. So take your time, pick up Neurodharma and read that or listen to that instead of binge watching your favorite Netflix. But if you did want to binge listen to Bulletproof Radio, there are worse things you could do.

Rick:

Now, that's totally true. And I would just, if I could just say what this one more thing, which is that, the book's very inviting for people who are really beginning a personal growth process. They're kind of at the beginning of it. The book really focuses on an intermediate to advanced practice. So if a person feels like, okay, I'm a little mindful, or, okay, some self-awareness. Okay, I've been developing myself psychologically a little bit, what now? In a really sustained way I think they would really like the book. It's a book I wrote for myself. I mean, honestly, I was geeking out all time and I was-

Dave:

Those are the best books.

Rick:

Oh yeah, no, it's like all this fantastic wisdom of the ages, but not plugged into the latest neuroscience and then applied really pragmatically in lots and lots of ways. So for me it was just a thrill to write it.

Dave:

If you look at the ROI on books, so this is a podcast and my expectation, I'm really clear about this with people who listen to the radio show regular hear me say this, is that, look, you should get more out of the hour that you just spent with Rick and me than you put into it. You put an hour of time and some amount of your attention. So if you don't, if the ROI is flat or negative, like find another podcast or just stop listening to podcasts, that's the standard. And when you go to a book though, you might ... And for us to do this, okay, there's eight or 10 hours of prep work to do a good interview like this. And you compare that to a book where what, you spend a couple thousand hours writing the book?

Rick:

Yeah. At least, building on all kinds of ... It's a real combination book.

Dave:

Right now, but it's an Opus, right? You've been doing this for 46 years and so you've got all of that in there and you threw away all the stuff that didn't make the cut, right? And so what you've done-

Rick:

I don't understand.

Dave:

You've distilled-

Rick:

You sound like an actor.

Dave:

2,000 hours of distillation to distill hundreds of thousands of hours of stuff. And people are going to read the book in about what? Six hours.

Rick:

Could be a little longer, if you're going to savor it. There's a lot of experiential practice.

Dave:

Okay? So maybe 10 hours, but the ROI, you're getting a lifetime of experience plus 2,000 hours of distilling the experience for you in a few hours, that's why books are so valuable if they're written with the sense of curiosity and exploration and interest that you have and the good authors do, guys like Ryan Holiday and was even written about it in one of his books he's like, how do you make your best work? And there's also the, hey, I just strung together a bunch of transcripts and made it into a book. It's a different mindset, but that's why you're the type of author I like to have on the show because hey, this is my highest and best where there's not a wasted word in there, and that is not easy to achieve. So thank you for taking the time to write a book that's [inaudible 01:07:47].

Rick:

No, it's meant for you, Dave.

Dave:

On that note, everyone, if you follow me, Dave.Asprey on Instagram, as I finish these interviews, I am going on Instagram and you can actually ask authors questions because Instagram, the shared interviews don't work very well. I actually have this amazing technology where I turn my camera around and we just use a Skype through Instagram. So you got to try this out. You'll see what I'm talking about. I save the stories on my YouTube channel and all that stuff. So come check it out. You can actually ask questions. I'll read the questions off the screen to Rick and we'll all share it. So, if you're listening to this on iTunes or something, this interview is already done there, but if you follow me regularly, you'll get notifications that there's a new, fresh, before you even heard it interview where you can talk to the person that's on the show. I'll see you on Instagram.