[00:01:02] Dr. Ann Kelley: Hey everyone, this is Ann. Today's episode is the last in our series focused on working to relate more securely with ourselves and one another in a world that feels so insecure right now. And we all feel it. The constant barrage of the media from our political conflicts, ongoing racial tensions and the very real impact of the climate crisis. So in the series we're going to cover some of these extremely difficult topics, but we're not doing it to add to your sense of stress and overload. Instead, we're focusing on helping us navigate and cope with today's realities, because the threat is real. We're not going to thrive individually or as a community if we stay in our protected states, going from anger and hate at one another, or letting ourselves get flooded and ignore the issue, or just pulling the cover over our heads. This is especially true for helping our younger generations who have been seeped in this stress throughout their young lives with social media, etc, so we can feel the overload and the impact on mental and physical health in this series. Of course, it's not about solving any of these issues. We don't have that expertise. It's instead focused on helping us find our more secure selves in these deep and hard conversations so that our collective wisdom and our sense of wellbeing of being in this together is what prevails. So if you haven't been listening, let me just touch briefly on the series. The first episode is about our natural tensions that arise between generations when talking about things like the climate crisis. And of course this can be most challenging inside our own families. And so we decided that's where we should start. Sue and I jump into the deep end with you. We take a risk. So in episode 202, our quest is our son Mason. And of course, so that makes it a very special episode for us, but we share, together, our journey over the years about really how damn hard it has been to have these conversations and how hard we really have worked to learn how to talk together, how we've impacted one another, and how we've grown. We're sharing our journey, but that journey's not over. It's not like we have it all down, but we hope you can relate to the process and gain from what we've experienced in sharing our vulnerability with you. In episode 205, then we extend this discussion on climate with Dr. Anna Graybeal. In that episode, we talk about our natural resistance to even having these hard conversations because it's so normal, but it's so vital that we work with our natural resistance, and that's what we process, how to do it, why we want to do it. And then in the series, we have two amazing episodes on navigating racial trauma, systemic racism and identity with Gliceria Perez and Deborah Chapman Finley. So that one's really full of insights. Sue did that interview. I was really grateful for it. I learned a lot from their perspective, especially as a Therapist. Then in episode 206, we dive deep into healing intergenerational and ancestral trauma. And that was very powerful. So today we're going to cap it all off in this series, and you might have a collective sigh of relief if you've been along on this journey of these really hard topics. And of course that's intentional - but we're going to talk about awe. The feeling of it, the science behind it, how it can transform us individually, but also how it transforms us into more generous and open and secure relating community. This is why we're capping off this series with it, and it's something we need more now than ever. I love our guest. Our guest is Dr. Dacher Keltner. He's the director of the UC Berkeley Greater Good Science Center. And he and his teams have been studying emotions for a very long time. How they're coded in our body, how emotions impact our brain, our perceptions of the world, and just how we relate to the world. And Dr. Keltner, he's one of the leading experts in the field of human emotions. In fact, Pixar turned to him for consultation about emotions about the hit movie Inside Out. If you haven't seen that movie with your kids, highly recommend it. All of his resources led him to investigate one of the deepest, most transcendent emotional experiences, and that is awe. Moments when we have a sense of wonder, an experience of mystery, of unknown, of reverence, and how this experience can literally transform our brains and help us connect to something greater than ourselves. So he writes about the culmination of his research in his most recent book. Awe, The New Science of Everyday Wonder and how it can transform your life. So this is a book that both Sue and I found fascinating, extremely motivated by it, and impressed by how he unpacks the neuroscience of awe. And then he weaves it in the history cross culture exploration. Frankly, he impacted us so much, both of us. In reading this book, we decided to interview him together and I really enjoyed it. We got off and talked about how much we enjoyed not only the insights, but just the interview with Dacher personally. And by the way, the show notes for this episode and all of the show notes of this series are just really full of resources and go-tos. That's really part of our goal, and in these show notes, we're going have really specific, practical ways to cultivate all in your everyday life. All right, so let's jump in.

[00:06:36] **Sue Marriott:** Given that we've been in with such heavy topics, one of the fun things about this is awe is it's just pleasurable, isn't it? To just even talk about

[00:06:45] **Dr. Dacher Keltner:** It's not only pleasurable, but it's about meaning and you know, and I think that's very relevant to your stuff.

[00:06:51] **Sue Marriott:** Exactly, and so that's part of why we wanted to land here is so that we could sink in and really hear from you about the science related to this incredible emotional experience so that we're kind of tying it back in. So this is still the larger system, but in this case, instead of the larger system stressing us out, it is going to

bring us more security and more stability. So there's fires happening and New York yesterday was the most dangerous place to be from an environmental standpoint, from the pollution. So how in the world, at a time when the world is this shaky and people are being persecuted in legislature and all of the things happening, I'm thinking of it as like a little fire and you know, like how do we begin to cultivate this little fire called awe? What is it?

[00:07:43] **Dr. Dacher Keltner:** Awe is an emotion that we feel. So it's a brief state that changes in your body, in your mind. When we encounter things that are vast and mysterious, you know, that are beyond our frame of reference and that we can't make sense of with our current knowledge structures. And what's really fascinating, just to round out the definition, is that even though awe is about uncertainty in life and you don't understand things, It also feels positive and empowering, and people want to explore and discover and learn out of experiences of awe. So it's an emotion we feel when we grapple with the vast mysteries of life.

[00:08:22] Sue Marriott: And you've done the research around this, so you're saying that it is coded into our muscles and the muscles in our face and our endocrine system?

[00:08:32] Dr. Dacher Keltner: It is and it's striking to me because when you read people's writings about the sacred and the profane or the numinous and the phenomenal, or you know, all the ways in which we, the sublime and then the ordinary - there is this sense intuitively that is beyond the body, that it's transcendent, it's spiritual. But in point of fact, it has a very clear neurophysiological pattern in your body, which is when we feel awe out in nature, encountering someone's inspiring behavior or music, etc. Parts of your brain, the default mode network are deactivated, which is interesting. So this kind of self-focused region of your cortex guiets down. Oxytocin can be released during experiences of awe. The vagus nerve is activated, this big bundle of nerves that kind of calms and opens up your mind. You have reduced inflammation in the body, which is remarkable that the activation of the cytokine system, which heats up the body to kill pathogens, is trouble when it's chronically activated, just cools down during awe. And then, you know, we often overlook this, but we tear up with awe. We have facial musculature responses. We vocalize. We're like woah, and we get goosebumps. And there's a whole science of goosebumps piloerection, you know, where you know these little muscles around hair follicles are contracting and you feel the sensations of the chills and all of those. They're almost the antithesis of fear and terror, which is cortisol and amygdala and elevated blood pressure and deactivated vagal tone is kind of this more open, connecting, calm, exploration oriented, physiological profile, and that tells us something fundamental about this emotion that it really is an antidote to stress and and uncertainty.

[00:10:31] **Dr. Ann Kelley:** Well, it's an antidote that not only like calms our own nervous system and what I was struck, and I love the way that you express it in your book, it not only calms our own nervous system, but it connects us to our desire to want to connect to others beyond ourself.

[00:10:48] **Dr. Dacher Keltner:** Yeah, and we didn't really think about that going into this 10 years of research that led to the book. And like time and time again, when you feel awe in our experiments, you can be outdoors by yourself, you can be listening to an amazing passage of music, you can think about somebody whose life really inspires you. You have this urge to connect. To be part of community, to be good to other people, to share with other people, to make the world and your community a little bit better. And that tells us something fundamental about the DNA of awe. That it is a communal emotion that we are in short supply of today. You know, Sue, you talked about this fire of awe and cultivating it, but you know, however we do that, what we know is that it's a counter to the loneliness of our times. [00:11:40] **Sue Marriott:** When I think of it, I think of it as an experience that's not someplace you live. It's a surprise, but I would almost say kind of rare. I mean, the way we think of it. So what about this cultivation of awe, because that's really where we wanna go, is like, how do we get more of this? If you were selling something, I'd be like, yes, I'll buy it

[00:11:59] **Dr. Dacher Keltner:** And it is not for sale. It's free to everybody. So, the first point is that you, your phrase here you use is really accurate, which is it's somewhere else, you know? I really think awe is one of these emotions of the imagination where you get beyond your current understanding of the world and this default ego that defines so much of the voices in your head and you get outside of it and you're like, I didn't realize people could do that, or that nature could be like that, or that music could transport me to other realms of consciousness or spirit medicines or psychedelics make me feel like I'm in touch with the world.

[00:12:41] Sue Marriott: Yeah, that's the mechanism for the psychedelics working. And so that's rather magical in and of itself.

[00:12:49] **Dr. Dacher Keltner:** We've written about that David Yen, Peter Hendrix, like, "Hey, these psychedelics, there's no mystery here." It's these transcendent states. But, you know, one of our most striking. Findings, and I'd call it a discovery, Sue, is I too felt that awe was rare. And I also thought that it took a lot of resources to experience. Like, you know, if you ask people how do you, how would you find a big, intense experience of awe? And they'd say

something like, I go to the Arctic and look at the Northern Lights. But in actuality, our research in different parts of the world finds people feel awe a few times a week. So it's around us. And I call that everyday awe in the book. It's in the just looking at the sunset or night sky or marveling at how humans behave in cities, and all that they do brings us awe. And so what that tells us to your question is it's something we can lean on and cultivate and find pretty easily contrary to what we might assume to better our lives.

[00:13:57] **Dr. Ann Kelley:** Yeah. I think the small ways that you were talking about in your book are so inspirational and really conceptualizing what awe is like even when you describe it, when we describe it as just being in an uncertainty, you know, on our podcast, we talk a lot about that. When we're activated in our threat response, one of the ways we respond is by becoming rigid and certain and absolute, you're wrong. I'm right. And so the idea of moving the, the health benefits of actually leaving this idea of certainty and going into a sense of uncertainty, being part of awe, having curiosity really is part of how you define awe. Am I accurate?

[00:14:39] Dr. Dacher Keltner: Oh, fundamental. You know, there are a few core themes to our experiences of awe. You know, one is, As Sue said, like, wow, I'm part of something. A second is I feel smaller and I, I'm, I'm not as sort of distracted by my ego, which I think is good news for mental health as you guys, I see you nodding your head emphatically. So that's definitely part of the story of awe. You know, when I was writing this book on awe and I was trying to capture Ann, what you're talking about of like. You're always curious in a state of awe. You realize you don't know things. You're really interested in the unknown. And I kept coming back to the word mystery. And I think our culture, we struggle with mystery. We get immediate answers on Google. Google Maps tells us exactly how to get to someplace. Uncertainty is hard for people. And you guys see this, I'm sure. More deeply than I ever would in your clinical practice. But awe is about mystery. It's this delight we can take in not knowing things and diving into the mysteries. You know, I wrote this book because I. I lost my brother, my younger brother, and Rolfe, and watching him go, I felt wonder and awe horror, of course, at colon cancer. But I also felt awe. And that's because it was a mystery for me. Like, what is life? Why do people die? How do I keep him around me? How will he stay around me? Is I live without him physically? And those are mysteries within the awe of grief. That led me to exploration. And so especially teaching young people who are, so, everything's a checklist and you know, they got an answer with an app and so forth, and awe tells us we have to really dive into mystery, as you're suggesting Ann, which is an important reminder about this emotion.

[00:16:35] Sue Marriott: Yeah, in your book I was thinking it was, you know, gonna be, I would nerd out a little bit and things like that and I could not put it down. It certainly delivered plenty of goosebumps, particularly around the systems and tying things together. So one, one direction is about systems, but also there's some terms in there that I want to just highlight that are just so beautiful. So Moral Beauty collective effervescence. In order to capture this, you went to a lot of literature to poetry. You needed to pull back into history because we're talking about things like soulish and language fails us often. So one in particular that I was excited about to talk to you about is the music and what have you learned, uh, in your science about music and awe.

[00:17:23] **Dr. Dacher Keltner:** Yeah. And thank you. I'll just put a little asterisk. You're one of the first people to ask me about, you know, how awe opens our minds to the systems of life. And I think. You know, that is, some people believe that's one of the greatest cognitive achievements of the human mind and our cortex is to see things in terms of systems and not, you know, little objects in the world that we have to.

[00:17:43] **Sue Marriott:** Right. Well that was actually one of my big goosebump moment, right. Was the it, it worked. It definitely worked. And I'm like learning, learning. And all of a sudden, you know, it's like click. It's like, oh, holy mackerel. This is evolutionary. This is part of our dna.

[00:17:59] **Dr. Dacher Keltner:** Yeah. You know, there are what I call eight wonders that bring us awe that we did a lot of work in 26 different countries to validate moral beauty, you know, people's goodness, collective effervescence, moving in unison and dance, sports, et cetera, nature. Then music, visual design, spirituality, and then the more subtle ones of. Big ideas or epiphanies and life and death, which it's important to remember. Music is fascinating and really primordial in how it produces awe, and there's a whole vibrant science now on why are we such a musical species? 80,000 years, a hundred thousand years, why do we sing, you know, lullabies that have this universal sound structure to them. Recent science, to me, a question that's not yet answered is, But I think Oz as part of it is like we all define our identities in music. You know, you'll hear patterns of sound waves and it's for my mom, it's Bob Dylan. And she's like, that's my identity. And for me it's Brian Eno or, or African music. That's a mystery why music reveals the core of our soul to use your words to. But what we know, you know, in this preliminary science of music is that one is music opens your body. It just shifts you physiologically. To suddenly like, wow, I'm the vagus nerve is activated. I less cortisol. I'm open to the world A second is that music? Certain kinds of music will repeat the sounds of, all right. They're structured around and this is a central thesis of music and emotion is music has acoustic features

that resemble how we express emotion. So joyful music, so. Sounds like how children laugh with joy. Right. The structure of it. And you know, once you grasp that, you suddenly are like, wow. When I hear choral music, I start crying and I think about the divine and choral music. Sounds like, whoa. Sounds like aw, right. You know, I was, uh, lucky enough to be tracking in the Himalayas and heard. Buddhist monks chanting and the chanting, and you sit there and you're like, the sounds of the music put you into the mental state of awe. Just the very structure of the sounds. The other big one that we forget is music just turns us into a collective body. We dance together, we move together, our brains are synchronized, and that's a whole new area of science now on. How music turns us into the collective. But there, there's so many unanswered questions. You know, one that blows my mind is that music transports people. You know, you hear a song and the next thing you know, you're like, whoa, I'm six years old. You know? Or transports you into different spaces. So there's a lot to learn about music and all, but it's fundamental to us.

[00:20:50] Sue Marriott: I think you said in there that there was, uh, patterns within groups that ended up producing similar music.

[00:20:57] **Dr. Dacher Keltner:** You know, that's to the identity question, and this one I believe is one of the big mysteries about music is you and I love asking people, and our audience can entertain this question of like, think of a time when you were listening to music and you just teared up and felt like this is who I am. Have you guys had an experience like that?

[00:21:22] **Dr. Ann Kelley:** I'm gonna forget his name. Isn't that horrible? Do you know who I'm talking about? The movie Once? Yes. I forgot his name too. Well, I got to see him live and there was something about I could feel myself. Like connect to the music and sort of completely transport. It was, it felt like I was in the experience with him. It was not that I was observing him. There was something about the way he was able to, I. Stir me to where I could just feel I felt part of something, something much bigger. Of course, the audience creates that, but it was the music. It wasn't just being there. There was something about how his music transported me. That just makes me feel, and it made me tear up and I didn't wanna leave that moment. How about you, Sue?

[00:22:12] Sue Marriott: So many. I was thinking also of how it's bonded us with our children that by tuning into their music and listening to their music is a way into their inner world. But the first thing that had popped up with mine, there's a artist named Shaky Graves here, that he has a whole band, you know, like he, with his foot, he's doing the. The tram, the trampoline. You can tell that I was thinking about the kids on the tambourine. You know, he basically, and then he had the drums on his, on his other foot, and then his songwriting is just amazing. And another thing you said was, it was about change, I think. And so, you know, then you, you get the rhythm, you get the rhythm, and all of a sudden it's like, it turns unexpectedly and it's just, that's part of the feeling for sure.

[00:23:00] **Dr. Dacher Keltner:** So, Yeah. And I just think that, you know, the, the point of the exercise is these examples come so readily to mind and they tell us that there's something magical about the sounds and the lyrics and the moment of a piece of music that speaks to us, right? And brings out this sense of our relation to big things in the world, our identity, our meaning that we find. And so, you know, I think the science of awe. Kind of brings new light on some of these old phenomena, like why music matters so much?

[00:23:31] **Dr. Ann Kelley:** Well, the connection, why we want to go to a concert instead of just listening. You know, we can get it on our stereo system even better at times, but when we're in the concert and when we're with everybody who is moving and swaying and how that captures a sense of being part greater than ourselves. [00:23:49] **Dr. Dacher Keltner:** Yeah. And you know, one of the sources or eight Wonders of life that I got to write about is Collective Effervescence. And Sue brought it up earlier of like this bubbling feeling of joy and, and one mind when we moved together and you know, in our solitary Zoom worlds of lockdown, we've lost a lot of that and it's profound just to, and people ask, and I know you're wondering like, how do we. Recover this. How do we nurture that fire vaught And one is move with other people. You know, you might join a choir or find a dance society, or, I love to write about sports in the book because one of the things people are joyful about sports is moving with other people. You know, they cheer together and have this collective moment. So there's a lot that awe reveals about old ways to find new kinds of wellbeing.

[00:24:43] **Dr. Ann Kelley:** You know, it was one way that I thought about that. It had never crossed my mind that I think the therapists out there are likely going to relate to this, and this is when you've been a Therapist. There's periods of time when you feel exhausted and disconnected and you just physiologically feel yourself like a wilted flower. I think everyone I know that has experienced a period of time and then. We go to a training of somebody that inspires us or enlightens us, and we're in there. I mean, it was during your book that I was thinking of this as I was reading your book, the physiological transformation that I have in that moment that I physically feel it's not only being in the room with a bunch of people who are asking questions and excited, but I can feel that it's accessing part of my mind that I didn't know it was bringing me wonder. It was teaching me and I was learning, and I could just feel myself

just like one of those flowers in the, once it gets the daylight and it goes like this, and now I'm inspired, and I had never crossed my mind that that was an experience of awe. It was just, oh, I got to learn something new, but I didn't understand why it was impacting me on such a physiological level.

[00:25:49] **Dr. Dacher Keltner:** Yeah. You know, the physiology just impressed me the most in some fashion that all quiets that default mode network, which is such a nagging voice of the self, all quiets inflammation, you know, which is the. Overheating of the body. It activates the vagus nerve. That opening, physically feeling of opening of the chills, and it starts to point to pathways by which awe heals or helps with mental health, you know, and physical health. There are these neurophysiological pathways. They are the, in many ways, the counterpart to the stress response that you've been teaching. And that's good news for the body, you know? And it starts to illuminate like, well, this is why. A strong relationship to music helps you. You know, this is why Emerson said there's nothing that nature cannot repair, that we just get out into awe and our bodies feel stronger. And I definitely, you know, when I was in a period of intense, intense grief, losing my brother off, awe saved me. You know it, I mean, on a daily ba of course I was gonna live, but each day I would find it and just like, okay, you know, I'm strong enough to. Get to the end of the day and, and move forward. So I hope our audience, I'm sure they already feel it, like, Hey, this, this should be part of the clinical practices, is getting people to feel awe.

[00:27:14] Sue Marriott: We talk a lot about secure relating, which what we're aiming for is ventral vagal social engagement system. So are there feelings kind of like, here's awe and here's, you know, what's on the sides of awe. You know, like what are close by feelings.

[00:27:29] **Dr. Dacher Keltner:** Profound question, you know, Sue, and so relevant to therapy, you know, in the book I write about this really cool work I've done with Alan Cowan, more computational type work, where you map where the experiences are. And I would encourage people to look at those maps of alan cowan.com of emotional experience and expression and music and visual art, et cetera. But awe is in the space of positive emotions of, it's really close to beauty as you might imagine. Love admiration, amusement absorption interest. So it is fundamentally a positive state, which is good news, but we find about a quarter of experiences of awe. Are negative and they do not have the benefits that most all does. They still have elevated stress. They don't help with your wellbeing. And it raises this question that we've been touching upon. And the key to that is where you start to feel threatened. And it may be that it's your temperamental makeup where you're like, God, if I hear weird music, I feel uncertain. I get agitated. Or if I get out into the woods and I don't feel safe, which is often justified. It takes away the awe, or I hear the rhetoric of an inspiring speaker, but I feel threatened by it. So threat is kind of the one that you're pointing to sue of like, watch out. Cuz if that is blending in into awe, you can start to feel terror -

[00:28:57] Sue Marriott: and horror

[00:29:00] **Dr. Dacher Keltner:** Yes, horror. That's right. Terror being about the ending of your life. Horror being about physical destruction and those are nearby and we gotta watch it.

[00:29:09] Sue Marriott: That is really fascinating. Oh, that's interesting. Now what about animals?

[00:29:16] Dr. Dacher Keltner: We are an animal, so

[00:29:19] Sue Marriott: you're right. What about other animals?

[00:29:20] **Dr. Dacher Keltner:** Yeah. Yeah. I always love tracing emotions back in our, you know, the mammalian evolutionary history and a lot of, you know, social mammals like wolves and dogs and rats. Fluff up their fur. They pilo erect, and thank you for using the term. And, and they do so to join in with others to face peril. And so what that tells us is really social mammals have the beginning physical foundations of awe, goosebumps, erection, leaning in. Coordinating with others, which is cordal, that then is elaborated as we become this symbolic species with the cortex and the like. So that's the core is whoa, something's uncertain. It's maybe perilous. I'll join with my fellow group members to warm my bodies or face that thing that's perilous and dogs and wolves and rats do that. And the great apes and you know, I love. Dana Goodall, who kind of put a dramatic point to this where she observed pile erection and all like behavior in the chimps, she observed and said, you know that I think this is awe and the beginnings of spirituality when you are amazed at things outside of yourself. And that's what sociality requires, is it's not just about me, it's about how I relate to others, how I relate to the ecosystem. And awe begins very early with these social enamels.

[00:30:55] **Sue Marriott:** Yeah, and then, and that would make sense because if it's a system, then you know, why would it only be in humans?

[00:31:02] **Dr. Ann Kelley:** especially if we think about it from a Darwinian perspective, if it's helping us live and survive and it's bringing us in a community of a collective experience, it would make sense why. All sorts of social animals would have that. It brings some kind of a collective meaning, a collective purpose together.

[00:31:20] **Dr. Dacher Keltner:** You stated that so eloquently and it took evolutionary types. Richard Dawkins, the selfish gene. It's all about self-interest. That's 1978 and now 40 years later, people are like, no, we're super social. It's how we met the challenges to our survival. And that raises this question of like, well, how do I shift outta self-interest and become a good community member? There's no better way to do it than all. It just, you know, it makes you humble, cooperative, altruistic, your identity changes during experiences of all. You're like, I'm part of this group, and it helps us do exactly what you said, Anne, of like. Now I'm a a really solid member of this, this collective, and we'll do better together.

[00:32:04] **Dr. Ann Kelley:** You know what's interesting about that and challenging, I'm really curious about what you were saying about the negative aspects of a cause That never crossed my mind. I think, I think of s more mystical and in inspiring. I think there was a research that you mentioned in Japan where they were showing signs of awe of like mountains and it was gorgeous or tornadoes. And threat inspired awe and IT impact, and both of them, you know, reduced the default mode and made us less self-centered, but the negative was more activating of the amygdala. Did I get that accurate?

[00:32:38] **Dr. Dacher Keltner:** You certainly did. That was a spectacular summary and you saved me the embarrassment of trying to remember it, so thank you. Yeah. You know, it's so interesting. In more hierarchical societies, more religiously dogmatic societies or China, you know, awe has more threat in it. And so it doesn't have as many of the benefits that we've been talking about. And one of the things I think it's important to honor about, you know, kind of the, the American version of all, if you Will, of Emerson, and. Margaret Fuller, whom I wrote about, and Rachel Carson and others, is like this kind of expansive, freeing up of William James of the ecstatic type of awe that has a lot of positive stuff to it. But awe does have its stark side. You know, one of them that needs more exploration, but there's preliminary evidence is, I'm glad Sue loved that awe promotes the systems view of the world. I think it's. Transformative for the most part, but it can lead you astray. And there are studies showing like awe makes you see patterns and systems in random digits. Awe is probably part of what's so thrilling about conspiracy theories. You're like, I was just gonna go there. I was just, you know, like, oh, kanons got all the answers, you know. And it's this wild speculative theory.

[00:34:04] Dr. Ann Kelley: You feel part of something bigger. That's what I was thinking.

[00:34:06] **Dr. Dacher Keltner:** Yeah. And so we don't know scientifically, but I think intuitively that probably is true, that there are people hungering for larger systems of meaning and they can be exploited. You know, like all of our human tendencies, they can be put to good uses and sometimes the bad uses.

[00:34:24] Sue Marriott: We just turned in a manuscript actually, and one of the things we were talking about in it was this, um, kind of group think versus collective intelligence. And tying in that we do need to form groups and it's a matter of kind of what direction that the group goes into. And once you pick your group and you align behind someone, That also serves to calm down your amygdala because now you're not having to be in that painful discerning, how do I feel about this? You, you don't have to worry about that. There's, that's the kind of the group think.

[00:34:56] **Dr. Dacher Keltner:** When I was growing up in the late sixties, parents were worried about their kids. Being awe struck by Charles Manson. You know, and like next thing you know, they're in a cult. You know, I love John Height's view of this, which is meaning and morality come outta these emotional intuitions like awe. But then how we make use of them as a society requires discourse. It requires podcasts and conversations and debate, and we often forget that you know, that emotions and their wisdom need. Sort of this kind of structured discourse to debate. You know, if you just took the physiology like you're suggesting of, oh, now I'm part of this QAN society and I feel great, and my vagus nerves firing and you know, I have low inflammation, that's not enough to really assess its impact in society.

[00:35:47] **Dr. Ann Kelley:** I'm wondering if I'm seeing it a risk of seeing it too simplistic. So help me in this regard. And so when I think about firing, I. The amygdala up in the fear like, okay, so we can have an awe, I'm curious, and then we fire up the amygdala and we're all afraid, right? And then we promote division, right? I need a team that can tell me what to do, who that calms me down. But there's something that I feel like in the aspect of the unknown, promoting the unknown, being what continues to make the collective rather than the known. So I feel like the challenge is, Like you're talking about the cuon part of the satisfaction is they leave the awe. And they go into the known. So it feels like that transformation from the unknown to I've got the answers we're right, pulls you, the almight have inspired you towards the group, but laying in any group in a division that says, we're right and you're wrong. I don't, that's not living in our awe. That's like satisfying the, the threat amygdala response it feels like. And uh, is the promotion of the unknown, of the discourse of the curiosity is keeping us. More towards what we call the green zone,

the secures more towards the uh, the awe. If I can stay in the unknown, then I can ask you and I can have discourse. It's when I move into you're wrong and I'm right that I've left that.

[00:37:11] Dr. Dacher Keltner: Yeah, and I think that's a really spectacular intuition. I've spent a lot of time studying emotions that are right at the heart of ethical traditions. Part of my career was on compassion, which car and Armstrong feels is the key to spiritual, ethical traditions. You know, part of my work was on gratitude and in awe, love, and, and I think that we need criteria as clinicians and as teachers and, you know, political leaders and so forth to say this is a, and Aristotle wrote about this, like this is a good use of the emotion and this is problematic. And one, I believe is. Does it lead you to be more generous to people who are downtrodden and less fortunate and different than you? That's a good test case and another that I hadn't thought about, but you've articulated Ann is does it keep you open in this spirit of democracy? Like I'm interested in other views or, or does it close you down? Those are measurable and, and really interesting ways to assess the benefits of all and, but I will tell you, it's interesting. In part animated by that question, Daniel Stato and I did a paper showing all leads you to see more humanity in your ideological adversaries and see more common ground, which is factual and true. We all want our kids to be safe, et cetera. So I think that it's a great part of this discussion is to think about what makes the emotions useful for society. [00:38:41] Sue Marriott: That's lovely and it so ties in, doesn't it? What I was thinking though is that there's not a clear group. You know, if the group, if a group is dividing and there's a fear group, and then the A group, you know, there's not like a movement specifically, it's harder to grab onto. Partly because that it's gonna be this flexible, you know, autonomous, you know, flat structure.

[00:39:03] **Dr. Dacher Keltner:** That's cool. That's really cool. Yeah, and there's new work in political science on how emotions drive. Of social movements and there are fear-based movements. You know, there's research showing conservatives feel more fear and, and you might think of it in that simplistic way, but, but I, I like your idea and I think there's a case to be made for like this emergent dynamic quality to awe of, like, it always drives discovery and mystery and new ideas. So it may be the engine of new movements rather than set movements from the past. But we don't know. It's a really interesting question.

[00:39:37] **Dr. Ann Kelley:** I'm hoping. In my little optimistic, ideal world that I try to live in, that some of the movement of your book and of the, the whole experience of just really promoting the sense of being curious, being abi connected to beauty and how important it is, rather than let's get the answers and get on the internet. It's that the use that our political leaders do of fear to get us to jump on board. Our movement is to promote like, A different standard that when our fear gets activated, it shuts us down to the amygdala. But when all gets activated, we become more generous. All the things more generative of other people like.

And so if, even if it's somebody's threatening our identity, like, oh, you know, we wanna get angry and say, don't you see? But if we could stir curiosity in ourselves, in them, they're gonna be more motivated to listen to you than if they experience shame and shut down in fear.

100:40:321 Dr. Dacher Keltner: Time will tell. but I think one of the reasons that there's been such a dynamic response to this book, educators and healthcare providers and people in prisons now teaching AAU to prisoners is, is exactly what you're talking about. And I probably would've been a New York Times bestseller had I done this, which is we are a fear-based culture in a lot of ways, and a lot of it is used to manipulate us, be it. Instagram or Donald Trump or whatever, and we need to shift out of it. You know, anybody who's parented children in this era is, is astonished. Like, God, there's so much pressure and stress on young kids. It's unbelievable. And their minds have become so narrow, even though they're brighter than any generation ever. And awe opens them up. And by the way, it makes you better at science tests as well. So that's good. But it, we need this shift to. Get out of thread and embrace mystery. But it's your clinical, you're the the ones who will solve the problem. How do you do that? [00:41:32] Sue Marriott: And what a great time to be a scientist right now. I mean, what a blast to study this kind of stuff. For sure. From the science standpoint, are there bullet points or highlights that you would want to just hit about what you all have learned that was like the most interesting? And then I was also curious about kind of what's next. [00:41:51] Dr. Dacher Keltner: I mean, the bullet points are, Awe makes you more creative, more curious, less lonely, connected to other people. And this isn't just your opinion. No. These are like replicated studies in different cultures. And then we've talked about the neurophysiology of awe. And this is why I sit, I wrote the book in some sense, in part outta the personal struggles of grief, was like, man, I teach happiness. I get s all the time. How do I, how do I make my teenager happy? And now I'm like, go find some awe, you know, whatever it is. If it's a rave or a metalhead concert or Chopin or backpacking by yourself, go do it. Our culture needs it. And then what's next in the awe world is kids. There's not a lot of work on awe on kids. We just publish one paper and that's astonishing. Like childhood is awe.

[00:42:43] Dr. Ann Kelley: I was gonna say, don't they just live in awe?

## Awe - Dr. Dacher Keltner - Episode Transcripts

[00:42:45] **Dr. Dacher Keltner:** Parenting children can be so awe inspiring. So that will be a big one. The neuroscience will get more sophisticated. Yeah, it shuts down the default mode network. But what accounts for oceanic feelings of connectivity, right? We don't know. Maybe it's oxytocin networks. So that's big. And then I think that you started with music and, and it is a mystery still, how we are so transformed by art and music. Awe is part of the answer. But that still doesn't get us close enough to how, you know, and I think that'll be a big pursuit. And I'm gonna be working on, on moral beauty, which is why are we so inspired by people's sacrifice and courage and the like and overcoming.

[00:43:28] **Sue Marriott:** Wow. That is lovely. That is incredible. That is magical. And I love the notion of going back and what you were saying, Anne, earlier about. Going into the unknown that as you get your mindset set, no matter what, political leaning or whatever, it gets very easy to just get set and moving back into wonder and like, I wonder what I'm getting wrong.

[00:43:50] **Dr. Ann Kelley:** The inspiration of Wonder doesn't have to be this major vacation. It could be 15. Like you're talking about having off for 15 minutes a day and how that came second a day even.

[00:44:01] **Dr. Dacher Keltner:** Yeah, right. Yeah. No second, like even a minute. Just like a little moment in this conversation. I've had a couple experiences of all like. Just to note that and savor it. It's powerful.

[00:44:12] **Sue Marriott**: So if people wanted to hear more your book, we absolutely, every single person listening, highly recommend, just go get it. Trust me. Doesn't mean you don't need to be a Therapist. You don't, you know, it's, it's for everybody. And if this conversation hasn't convinced you, definitely dig in and read this book.

[00:44:28] **Dr. Ann Kelley:** You're gonna love it. Let me remind you of the title. It's Awe, the New Science of Everyday Wonder and How It Can Transform Your Life. And it will be in the show notes.

[00:44:38] Sue Marriott: Uh, how would people reach you?

[00:44:38] **Dr. Dacher Keltner:** Well, I would really go to our Science of Happiness podcast. You know, we have a couple hundred thousand regular listeners, a lot of therapists and healthcare providers. We did an awe series. We've got practices related to awe indigenous practices by people like, people like Dr.

Yia Swin, who's really remarkable. So I would go there as a, a next stop in the AWE program.

[00:45:03] **Sue Marriott:** Okay. And you can find that on our show notes too. TherapistUncensored.com/shownotes. There's a little search button you can put a, it's gonna be right there.

[00:45:13] **Dr. Ann Kelley:** Thank you so much. I had such multiple awes today as well. Thank you. We've been excited about interviewing you for awhile.

[00:45:22] **Sue Marriott:** Yeah. We really appreciate you saying yes. I know that you've gotta be really busy and or you're doing a lot of stuff out there and we really appreciate it.

[00:45:30] **Dr. Dacher Keltner:** It's an honor to be with you and to reach your community. It means a lot, so thank you.

[00:45:34] Dr. Ann Kelley: All right. Thank you so much for joining us, and we'll see you around the bend.