Welcome to the Huberman Lab podcast where we discuss science and science-based tools for everyday life. I'm Andrew Huberman and I'm a professor of neurobiology and ophthalmology at Stanford School of Medicine. Today my guest is Dr. Paul Conti. Dr. Conti is a psychiatrist who did his training at Stanford School of Medicine and then went on to be chief resident at Harvard Medical School. He now runs the Pacific Premier Group which is a collection of psychiatrists and therapists focusing on solving complex human problems including trauma, addiction, personality, and psychiatric disorders. Today we discuss trauma in detail and the therapeutic process in detail. For instance we discuss what is trauma? How do you know if you have trauma? Dr. Conti shares with us for instance that not every experience that we think is traumatic is necessarily traumatic and yet many people might have trauma without even realizing it. We also talk about the therapeutic process generally for instance how to pick a therapist, how to best approach and go through therapy and how to evaluate whether or not therapy and your relationship to the therapist is working or not. We also talk about self therapies because we acknowledge that not everyone has access to or can afford therapy and we talk about drug therapies. For instance antidepressants, antipsychotics. We talk about alcohol, cannabis, ketamine, and the psychedelics including psilocybin, LSD, and we talk about the clinical use of MDMA and what the future of that looks like. The reason for bringing Dr. Conti onto this podcast is because I see him as the person who has the greatest and most holistic view of therapy, trauma, drug therapies, talk therapies, and how self therapy and work with others can be integrated for both healing and growing from difficult circumstances. Dr. Conti is also the author of an exceptional book entitled Trauma, the Invisible Epidemic, how trauma works and how we can heal from it. That book describes trauma and its many features and many tools, some of which we discuss on the podcast today. So whether or not you have trauma or not, by the end of today's episode you will have a much deeper understanding about what trauma is. In fact, I'm confident that you will gain insight into whether or not you have trauma or not, whether or not people close to you have trauma or not, and the various paths to recovering and indeed growing from trauma that we can all take. As you will soon learn, Dr. Conti is an exceptional communicator and has a unique window into the trauma and therapeutic process that I know that all of us can benefit from. Before we begin, I'd like to emphasize that this podcast is separate from my teaching and research roles at Stanford. It is, however, part of my desire and effort to bring zero cost to consumer information about science and science-related tools to the general public. And now, for my discussion with Dr. Paul Conti. Paul, thank you so much for being here today. Thank you so much for having me. I've been looking forward to this and I've received a ton of questions about trauma, about therapy, about how to assess where one is in their own arc of problems and addressing familial issues and relationship issues and so forth. We could just start off very basic and just get everyone oriented. Sure. How should we define trauma? We all have hard experiences. Some of them we might ruminate on more than others. But what is trauma? To make the definition relevant, I think we have to look at trauma as not or anything negative that happens to us. But something that overwhelms our coping skills and then leaves us different as we move forward. So it changes the way that our brains function and then that change is evident in us as we move forward through life. So how do we know if we have trauma or not? I've heard before everyone has trauma. For instance, I've heard that if we are a child or when we are a child and we request love from a parent or attention from a parent, if they dismiss us, that that's a micro-trauma. Is that overstating or unfair to the real issue of trauma? Do we all have trauma? What are micro-traumas? What are macro-traumas? I think traumas that we might categorize as disappointments or things that are negative but not deeply impactful, I think is not a helpful definition. I think the helpful definition is something that rises to the magnitude of really changing us and something that we can see both in how we behave, we can see it in mood, anxiety, behavior, sleep, physical health. So we can identify it and we can also see it in brain changes. So the fact that we become say more hyper-vigilant, more vigilant, and then we can see that different parts of the brain are more active. So that definition captures how trauma, if it rises to a certain level, like what we would say, trauma that makes a post-trauma syndrome, leaves us different, I think is the helpful definition of trauma because it's a clinical definition. It's changes in us as people and we can map those changes to identifiable shifts in our brain function. So how do we know if we've been changed by something? I mean, I can think back to childhood events where some kid on the playground or in the classroom said something I didn't like. Something negative about me, I think most people can do that. We have a great memory for the kid that said something awful or the parent or teacher that said something awful that really felt like it hurt us or at least stuck with us. So clearly one's brain, my brain in this example has been changed by that event such that I remember it. But how do we know if something has actually changed the way that we are because of course we don't know how we would be otherwise? That's difficult, it's doable, but it's difficult because the response, so if the trauma rises to the level of changing our brains, and I don't just mean we have a new memory. And I've memories of something that was negative, right? And in that sense it changes the brain because now there's something we can call to mind, but it doesn't change the functioning of the brain. If trauma rises to the level of changing the functioning of our brains, then there is almost always a reflex of guilt and shame around the trauma that can lead us and often leads us to be very, to avoid it, to feel that now there's something negative inside of me. And it feels shameful or it feels like no one else would accept it. So what happens is people tend to avoid looking at the change in them, which is exactly the opposite of what needs to be done, right? The idea of in a viral pandemic, we want to stay away from one another and isolate, right? But with the trauma epidemic, we need to communicate with other people. We need to communicate and put words to what's gone on inside of us. And very often a person knows, I mean, I've done so much clinical work over about 20 years that has focused on trauma. And a lot of the times the person knows, right, but they're not admitting it to themselves because they're afraid of it, right? They don't know what to do. But if they start talking, then they'll talk about the event or the situation could be something acute or it could be something chronic that really has been harmful to them, right? And then they feel different afterwards. Like, oh, after that I started thinking differently, feeling differently. But that doesn't always happen. Sometimes it's a process of exploration through dialogue, right? Whether it's written or whether it's spoken of the person sort of exploring the changes inside of themselves, maybe changes to their self-talk inside, changes to their thoughts about the world and whether they can navigate safely and readily in it. And, you know, and anchors as I talk about this, the example I'll use at times is the example of my own life where, you know, when I was much younger in my early 20s, my younger brother took his life by suicide. And, you know, the response of guilt and shame and hiding all of it inside of me was, was it is this very dramatic, but I wasn't acknowledging it, right? Because I didn't know what to do about it. And I felt guilty and I felt responsible and I felt ashamed. So there was an avoidance inside of me. And then I wasn't saying to myself, hey, before this, you thought that you could be effective and you could make your way in the world. And, you know, if you were a good person and you worked hard, you could make a difference, right? And then afterwards, I thought, I can't get anywhere. The world's against me. And, you know, I felt like my options are all gone. And, you know, I was like 24 years old, right? So I didn't see that the change was in me, but I was taking care of myself poorly. Like there was enough going on that was unhealthy that I couldn't avoid the realization that like, hey, I'm different now. And in these ways that are automatic, you know, my reflex to, can I make my way in the world? Can I have a good life? Can I be happy? And then I reflexes to that were all different and they were coming through the lens of heightened anxiety, heightened vigilance, a sense of guilt, a sense of shame, and a sense of non-belonging in the world. And, and was ultimately good and helpful people around me and my own realization and hey, things are not going well, right? That led me to then get some help and to be able to talk about it and realize like, oh my gosh, I need to face these things that are going on inside of me. From a psychoanalytic, psychological and maybe even a neuroscience perspective, two questions. Why do you think that when we experience trauma, these things that we call guilt and shame surface, you know, everything you're telling me is that in the end, that's not adaptive. Why would we be built that way? So that's the first question. And then the second question is, you know, how should we conceptualize guilt and shame? You know, I think that we hear guilt, we hear shame. You know, how should we think about it? I mean, those emotions must exist in us for some reason. But in this case, it seems like they don't serve us well. So maybe in that order or in reverse order, you know, what is guilt really? What is shame really? And why is it that we seem to be reflexively wired to feel guilty and feel ashamed when that's the exact opposite of what we need to do in the case of trauma? Right. Right. No, I think these are great questions. And I don't think anyone knows the answers for sure. But my read of all of that is that there's something adaptive that has happened in us through evolution that now becomes maladaptive in the way we live in the modern world. Right. So if you think of through most of human development, people weren't living that long. Right. And the idea was to survive and reproduce. So traumatic things that happened to us, it would make sense for them to stay with us. Right. So, you know, if you ate a new food and got really, really sick, you better remember that. Right. Right. You know, if you see someone from the group of people, you know, a couple miles away, right. And one of those people attacks you, right. It's like you better remember that. So, so the traumatic things that are sort of emblazoned in our brain are built to last. Right. Things that are positive will generate some emotion inside of us, but things that are profoundly negative are much more likely to stay with us. And I think that that was adaptive. Right. Right. When all of that was about survival. Right. And I think the same thing is true with, with say, shame. Right. So I think here it makes sense to talk a little bit and actually interested if you're your thoughts about this, right. That. That the limbic system, right. So the system often is called the emotion system, right. In our in our brains has actually, of course, varying function. Right. And one aspect is affect. Right. So affect is aroused in us, which, which I think the meaning of. The meaning then is it's created in us without our choice. Right. So if if we're walking down the road and someone jumps in front of us or pushes us, right. Then there's a response of fear, anger, right. Heart starts beating faster, you know, more blood to the muscles. We we're getting ready to fight, right or run. Right. And then we become aware of it. Right. So so the aroused affect in us is also about survival and it has a very deep impact upon us and shame is an aroused affect. So somewhere it can be raised in us without our choice. And it's very powerful. Which if you think about that is an extremely strong deterrent. Right. So if you had, you know, imagine a tribe or group of people, right. That are sheltered together and, you know, someone eats half the food at night or something. Right. And like there's a very negative response, right. And that person feels shame because shame is so powerful to control behavior. Right. So the way that trauma can change our brains and stay with us in a way that says be more vigilant. Look at the world in a different way act more defensively, right. And and how that links to shame and to guilt and then guilt in guilt becomes what gets called feeling technically where we relate the aroused affect to ourselves. Right. So so shame the aroused affect and guilt the next step, right. When we when the shame gets related to self are such profound behavioral interventions and deterrence. Right. That you can see, I think how evolutionarily kind of all makes sense if we're fighting for survival. You know, we're an elder statesman if we make it to 20, right. This makes sense, but it doesn't make sense in a world where we live much longer. Right. We navigate in all sorts of different ways. And there's so much coming at us that can be traumatizing me. If you think about the news, right. How many times have I written a prescription for someone that says no more news. Right. You actually written those prescriptions. Yes. Yes. So glance at the news. Like look at the news for news. Anything going on. I need to know, right. But what are people doing is looking at it and they're clicking and they're clicking and there's a there's a sense of being like enthralled in a very frightening way with the hearts that are in front of us. And it shows how yes, trauma can come through acute things that happen to us. Trauma can come through chronic things, chronic denigration, whether it's based upon socio economic status, immigrant immigration status. Race, religion, sexuality, gender identity, these chronic traumas, right, of being denigrated by the society around us or treated as less than can change the brain. But vicarious experiences can too. Right. And we know this is not theoretical. We know that the changes in the brain can come from vicarious experiences too, which is why people who are glued to the news and then feeling like, oh my goodness, like what is happening? The mother's in the Ukraine who've lost babies in the war like the things that are so terrifying that if we spend so much time with that, it has a similar effect. So our brains are built to change from trauma. But not in the way we experience trauma and not in the way that we live life in terms of the nature of living life and the duration of life in the modern world where these traumas that happen to us are often so bad for us because they they change how our brain is functioning and then our entire orientation to the world is different. And that could be for years and years and decades and decades it brings so much misery and suffering and at times it brings death of feeling about 100,000 overdose deaths in this country in a year, 100,000. I mean, where is so much of that arising from as a person who's treated addiction very intensively over many years, I think that well, I feel sure that the majority of addiction that I see and treat arises ultimately the roots of it are in trauma and are in trying to soothe something that stuck inside that the person isn't letting outside because of the guilt and shame, but it's running around in their head and is tormented by it. And now there's a pull for for these drugs or sometimes medicines to soothe the the opiates that were given after a minor surgery right are like, okay, they help the pain from the minor surgery, but what they're really helping is the pain inside right but that very quickly turns into addiction danger risk and we see that over and over again and and not in a theoretical way like I see that in people who have been in my practice with addiction, the arising from trauma who have subsequently died, so it's sort of writ large in our existence in the modern world. Incredible to me that this is the way it works. What I mean by that is this idea that I've heard about before I think it was a Freudian concept of a repetition compulsion that you know this is what boggles my mind as I'm hearing this. Something happens to us or we observe something traumatic and instead of acknowledging that and trying to distance from it, there seems to be a reflex of shame and guilt in many cases and stuffing it away and then a repetition of behaviors to continue to try and to stuff it away. Like you're trying to pack I don't know recently I was packing a home and trying to get a sleeping bag back into the bag it seems like it's always on a mushroom out the top. This kind of thing it takes a lot of ongoing effort and at the same time that if this thing really exists this repetition compulsion people will return over and over again to the kinds of scenarios or at least the kinds of emotional states that look just like the trauma or resemble it in some way. The question I have for you is is the repetition compulsion a real thing and why would we be wired that way my understanding of this concept of the repetition compulsion is that we all want to solve our traumas and it allows us to put ourselves into micro or again macro versions of that over and over again we get to run the experiment again and again in attempt to solve it. In the case of taking a drug that it's clear you certain drugs like opioids it's clear how that would not allow us to deal with it right it's just masking the emotional state. But why is it for instance that somebody who experiences sexual trauma then places themselves into circumstances of more sexual trauma why is it that somebody who is in an abusive relationship goes on to have a second and third or fourth verbally or physically abusive relationship. I mean on the face of you just go that makes no sense and yet we see this over and over and over again yes the first thing I would say about the validity of the repetition compulsion concept right is is a strong yes yes we see that over and over it's not necessarily in everyone but boy it is in a lot of people who have suffered trauma and I think there's a very good reason on the face on the surface of it it's like it makes no sense. But then if we think well how does the brain how does our brains actually function right we we're sort of trained at least in Western society I think to think of ourselves as logical creatures right that like a we're logical and ultimately everything in us can just boil down to logic and if we think about it enough we're going to we're going to understand how to make the right decisions which is completely not true right that the limbic system right the emotion system so to speak inside of us always. Trumps logic right if you think about does it ever make sense to run into a burning building I mean logic says no right but if someone you love is in the burning building do you people run right in right because the limbic system says yes so when logic and emotion come head to head emotion wins all the time if emotion is powerful enough it will always win and so the limbic system is so important and the limbic system does not care about the clock or the calendar right and that's the answer and also say why to the repetition compulsion so the limbic system doesn't know like oh it's now it's today it's May it's 2022 it just doesn't care at all right so so how I would relate that to the repetition compulsion is is when people are repeating what they're trying to do is to make things right right with the idea that if we can repeat the situation and make it right it will fix everything right which makes perfect sense if if we think well where is that concept coming from right it's coming from the emotional part of the brain that wants relief from suffering of the trauma and does not understand the clock or the calendar so if I can solve something now I will also solve something in the past right which is why I can't see how many times I've sat with someone and say we're starting to do therapy right and a person will say I know look you just can't help me right I mean you know I mean I had my last seven relationships have been abusive right and I'll say back something sometimes like well look if you tell me that you've had seven relationships that have been abusive in different ways I'll agree with you like I only say that because that's never what someone says right but I think what you're going to tell me is you've kind of had the same relationship seven times it's not seven things it's one right and that's always I don't think one time yet it is that is failed to be the case and that's how to think about it that's how we start to elucidate what's going on so the middle light bulb that goes off like I have not had seven different abusive relationships I have had one that I have repeated seven times and now we start getting to what's really going on what needs to happen that person needs to face what happened in that original abusive relationship and it always comes down to the same sort of concepts of the person feeling terrified while the abuse was going on feeling guilty feeling ashamed feeling like they brought it on themselves they deserve it they don't deserve anything better right because the brain is trying to make sense of it right or I thought I could make that okay but I couldn't right and then there's more guilt and more shame and if that stuck inside of someone like that's bundled up inside of someone you know like a medical abscess inside a person you know a walled off infection inside the body this is the same concept in the brain then of course the limbic system is going to want to fix that and and it fixes it by trying to let's recreate that situation and make it right this time and that's I mean it's I think that one of the best examples of how the right approach of how like let's look at that let's talk about that right what's really going on there wait who should feel guilty in a shame is the person who was abused or the person who was abused in right and and we can get at what's going on inside the person that's what changes that and then the eighth relationship can be entirely different than the first seven right and I see that all the time I mean this isn't esoteric or soft like I see that play out clinically over and over again and why do things get better because we go to the trauma and we unlock it it's not hidden inside where can control things right we bring it to the surface and then we can take away its power I keep hearing in this narrative that so much of our reflexive response to trauma both emotional and the repetition compulsion in terms of behaviors is about some very deep attempt to change the past yes and in fact in an offline conversation I recall you saying something about this that you know the number of people that you know the number of people that you know the number of behaviors and thoughts and avoidance of behaviors and avoidance of thoughts that human beings put into try and change the past is is remarkable and eerie and maladaptive it sounds like yes and that really stuck with me because I think we all want to feel like we're in control of our future and how we feel in the moment and to some extent it works for a brief while you know there's this thing that happened in it just it evokes some internal arousal and then you have to know what to do with that arousal and I think for many people including myself there's this this fundamental question OK the thought about the thing the event or events plural evokes this arousal this internal states make some people feel sleepy and exhausted other people feel really anxious other people feel angry I mean that arousal has all these different dimensions as you as you know and then there's this question about what to do with it and and I'd love to hear a maybe even just a top con to her prescriptive of what what what does one do I even just put myself in it what do I do I'm feeling upset about something should I feel like my options are healthy catharsis I could tell the story feel it I could I can pack it down we hear that it's bad to pack it down but of course it's not necessary functional in life and deal with things and we have responsibilities work and relational responsibilities et cetera we need to sleep at night so catharsis healthy catharsis packing it down at the other extreme telling the story and yet I think a lot of people are afraid to tell the story because it's all in that telling there's a perhaps a re-emergence of the arousal the arousal can become greater I mean yes is that what people mean when they say things are going to get worse before they get better I mean so I guess the simple version of this long winded question is it's clear we need to confront these things we can't change the past by a reflexive response isn't going to do that efficiently and so how do we deal with arousal how does one take what they feel inside about something shameful what do you do with it in a moment and does that have to be done in the presence of a skilled therapist or as I'm driving to work in the morning and something comes up I can't deal with this right now comes to mind what do I do do I deal with it right then I know this is a big multi-dimensional question but I think it's the one that a lot of people grapple with we want to deal with things how do we deal with that internal arousal yeah yeah we so often try and change the trauma of the past in order to control the future and what what that really adds up to is the trauma of the past dominates our present right and it doesn't have to be that way and remember we're talking about traumas that rise to the level of changing the brain so as you're saying that involves re experience it involves hyper vigilance increased arousal changes in mood changes in anxiety changes in sleep changes in behavior so so these are all changes that in a sense push towards dominating our present right and then we're not really living in the present right as we're trying to control the future we're not going to do a great job of controlling our future if we're not really living in the present right and so the way to come at that again in the moment if we're saying okay the moment if I need to fall asleep right I might say okay let me try and put that out of my mind let me try and thought redirect so so there's short term strategies that can let us be functional in the context of these changes but the answer is to go look directly at that thing right look at that trauma explore that trauma and sure that can be done with a professional and sometimes that's what makes sense but not always right sometimes it can be done by talking to another person right writing it down right look at what's going on inside of me that my mind is so stuck to this let's explore that because it's almost as if we're we're so afraid so often of looking at the trauma that has changed us that will look anywhere but at that right so it's like it's hidden in a closet and we'll shine the light everywhere else but we're not going to open that door and that's where you know people will say the same is ever over and over and I myself have thought this at times like oh if I talk about that I'm going to start crying and never stop right or I'm going to just fall apart right which is never what happens no one ever starts crying and never stops right what ends up happening is when the person puts words to it right I could be in writing could be talking to a trusted other or with a therapist right things start to change I mean just the fact that you can talk about it you can put words to it and other people don't recoil right I mean how many times is someone said something for the first time right and when they're telling me about the trauma there there's such an anxious like looking like as if I'm going to be I'm going to recoil from it right meaning I'm going to recoil from them right and then there's a sense of surprise if the person says well you know I was abused by you know this coach when I was a kid right or so and and there's not okay there's there's not a response of recoiling you can see the change and people will say a lot like wow like I can't believe like you can like can we say that and be okay with it right I mean so you think about what's going on inside of them like how what a sense of shame a sense of you know this is something awful about me for people to recoil from and it's just not true but but there here's where trauma is it's insidious right and it's pervasive right because if that convinces us to continually hide it away then how do we explore it like that you know that example of of the person is okay I was abused by a coach when I was a child I mean I'm thinking of a couple very real cases right people that I've taken care of and once they start talking about it then they start talking about how you know they were just innocent kids right and like they didn't know and like they really want it to be on the team where this coach was treating them as special and now they can look at themselves from the outside right they can look at themselves like they would look at someone else right you think it's so easy for us to see what's real and true if it's someone else right if you ask why don't you know what what do you think of someone who's 10 11 years old who's abused and manipulated and abused by an adult is oh my goodness I feel compassion for that person right but if it's us right then oh no it's guilt and shame and we have to hide it away and when the person starts looking at it they can see it from the outside and it starts to take the energy out of it right then well who should feel guilty about that who's done something wrong so now the conceptions come together which is often a reflexive that was my fault oh I did it I went back to it I still stayed on the team I went back next season right I let it happen again right all the guilt and shame inside the person gets juxtaposed like what really happened there and then they say right I was a terrified child right and understand at all and they can come to a place of compassion and now we are working against the guilt and shame and if the person cries about it that's great right I mean crying is one of the best coping mechanisms we have it doesn't hurt us and it lets us grieve things you know we can't grieve if there's guilt and shame inside it's just blocks grief right we have to it has to be a clean slate in a sense in order to feel sadness and then you see that it shifts from anxiety anger and frustration usually directed towards itself guilt and shame towards towards being able to process it and being able to bring to bear some compassion and being able to direct the negative emotion so to speak where they're warranted and my goodness the changes that happen it's not like it's people are miraculously cured right but it's remarkable how just getting it out there and having like one hour of talking like that like like what we're talking about now can can leave a person feeling immensely better it seems to me in hearing this that there's this weird wiring that we have because what I'm hearing is when traumas happen to us or we observe them what we need to do most is to confront those and the emotions around that directly yes but instead our system defaults to guilt shame and trying to hide it and this repetition compulsion of placing us back into things similar to those traumas or even maybe even worse traumas yes in an attempt to resolve it it's like the most maladaptive yes wiring diagram like a possibly think of emotional and presumably physiological wiring diagram yes and this notion of trying to change the past by doing things now when the exact opposite is what's going to be beneficial also seems like complete the whole system seems completely backwards and I'm I'm chuckling as I say this is not because I'm amused it's because I'm just baffled once again at how our wiring can often not serve us well but it raises a what I think is it an important and interesting question which is earlier you were talking about how you know people will seek out media that's really disturbing they'll traumatize and re-traumatize themselves on a daily basis so that could be viewed as the repetition compulsion or the person will have the same relationship with seven different same abusive relationship with seven different partners in sequence seems terrible and yet as I say this it also is becoming clear to me how this almost seems like a poor but desperate attempt to resolve it in some way and so the fork in the road if I understand correctly is to really get to the seed incident really get to the thing that started at all as opposed to repeating it all yes does that have to be done in the presence of a therapist is is there benefit to taking a walk and thinking about these things breaking down and crying if that's what's necessary or feeling angry if that's what comes up the the reason I ask it this way is because I worry I'll just speak to my own experience I worry that in reactivating or touching into the emotions around something that that is itself a form of the repetition compulsion because you're feeling it all over again is just you're not seeking out something to evoke that feeling so I realize this is a little bit of a circular argument or question but I think it's one that I really struggle with in trying to parse all the the outcome based therapies that I hear about and and the recommendations that people make I mean how should we conceptualize as something happens sounds like we need to deal with that thing directly do we need to do that with somebody else can we do that on our own if we're we don't have resources and we have to do it on our own can't hire someone can't pay someone to work with us right how do we do that in a way that isn't re traumatizing our self in a major way or in a minor way how do how do we know where we are in that landscape right again those are I think great questions and I think it starts with real introspection you know when things are bouncing around in our minds often it's very non productive right it's the same thing over and over again and that's not helpful for us right so there's an idea which sometimes gets called an observing ego right the ability to stop and look at what's going on inside of ourselves and so if we're just thinking about it and we're thinking in the same way we sort of in a sense always think about it then all we're doing is reinforcing the trauma right but if we can distance enough to be like hum it's I'm interested in what's going on inside of me right like I think of a certain person who you know who really loves music and then at some point in our therapy work I learned like she was taking long drives but the radio wasn't on and I was like what what's going on right and I asked and what was going on is she was running over and over again in her head like I'm a loser I'm a loser right and she didn't want the music on because the music would drown out what she felt she had to say to herself right and it was that like wow that's interesting right and then her ability to observe that and to think why am I doing that when it comes into her mind like what is that trace to when did I start doing that like I say you know I'm saying it for a point of exaggeration like nobody comes out of the womb you know program to think I'm a loser right so we don't we don't think that when we're born right so where does that come from then we can think in ways that allow us to have new thoughts right that we weren't having it's not just bouncing around in our minds and if we speak or write there even more mechanisms that come online in our brains right that are then sort of monitoring mechanisms we think in a different way if we're using words right and we are better able often to bring in that observing ego like what's going on inside of me so so it can be very helpful to think it can be helpful to talk to someone to a trusted other you know friend family clergy to write I mean these are things that can be done without extending any resources right and and sometimes it can make really a big difference right was a wait when did I start thinking that and like interestingly in this case okay we did it in therapy but it we became very clear what that was rooted to right and then in the therapy which was still relatively young but we've done several sessions and we we weren't talking at all about what we needed to talk about right but that's what got us to what we needed to talk about and when did that start and now we're in that same place of exploring that and what was the reflex to it and the sense of guilt and sense of shame and it's where all of that came from that just got boiled down to I'm a loser right which which this person didn't even have in their mind like I didn't think about myself that way right and it's so interesting right there are memories don't in and of themselves have meaning is like their flat or you know or color list right and and they're colored in by the emotions that we attach to them right so to them, right? So the idea that certain memories now before the trauma were changed, right, by the trauma. So I told the story sometimes a person who, like, won an award when they were in high school that they thought was, oh my gosh, like it shows, like, I can do it, right? I get out there that after trauma, they saw the award with a negative emotion attached to it that was like, oh, it was given to me and I didn't deserve it. And almost it was blocking, like, there's going to be the greatest achievement of my life. And I was 17 and I said, right, and to have someone think, like, that's not how they felt about that at the time. It's the trauma that changed the self-talk, the internal state going forward. And it's like what miraculous in a negative way also changed that going backward, right? And when we can really look at that, where did that come from? And we can start unraveling it. It changes. So in those cases, you know, often it's helpful to have a good therapist. It's not always necessary. And it's certainly, it's not always possible, right? So we need other strategies. And some of those, yeah, I write about some of those in the book of how can we sort of get at trauma without those formalized mechanisms. And sometimes if the symptoms are significant enough, like, we really do need to talk to somebody professional who can help us get to the root of the trauma. And there's so many times that's the answer to what's going on with people. People have seen about five residential stays. I'm not exaggerating this for mental health reasons, for substance reasons. And no one's ever taken a trauma history. Right? And then when you take a trauma history, you said, well, that's obviously where this is all coming from, right? Like that's when the drug you started, truly thereafter, the negative self-talk and negative feelings that led to the drug use. Then you go after the trauma and you can change things, whereas trying to change things without looking, introspecting, talking about the trauma, I think of course was futile. Do you think that people who can start to have negative fantasies? I mean, mention this woman who would take these long drives to berate herself. I'm not familiar with that, but I'll give a little bit of personal disclosure here. I've felt several times in my life that I will start to create a narrative about something that truly hasn't happened, about something terrible that somebody is going to do that's going to upset me. And for the longest time, I would wonder why am I doing this? And I have a couple ideas about why. One is that I was attempting to just avoid thinking about other things. It's just anger is such an attractive emotional force. And it's an attractint. It's not attractive. We don't like it. And yet oftentimes, anger is a great way to replace feeling something else, feeling sad, or having to come up, or to do work, or to do something useful. So it has this gravitational force to it. That was one idea. The other idea was in imagining worst outcomes, then actually that relationship could actually seem a lot better in reality. It's almost like creating this negative contrast. Yes. It's like, oh, well, then it's not that bad. And then the third possibility is I have no idea why. But it seemed like a reflex, and I spent some time thinking about it. I can't say I've resolved it completely. But why would somebody have a narrative or a default narrative when driving or when walking? I'm just going to spend some time and think about how terrible this thing is going to turn out or how someone's going to upset me or harm me or how terrible I am. It seems again, like maladaptive thinking, maladaptive wiring. And yet I have to assume that it serves some purpose. Yeah. Yeah. I mean, I think there are three factors there. And they're all bad. And I think you spoke to at least two of them, right? They're, they, I think, speak so powerfully to how insidious trauma is and how these are real brain changes inside of us. So I would say the three factors, punishment, avoidance and control, right? So, so the trauma inside of us that that makes a guilt and shame so often, so often leads to a desire to punish oneself, right? And the idea that, oh, that was my fault or I deserve that. Well, what do we do if something is someone's fault and someone now deserves punishment, right? I mean, we, we punish them, right? We send them to jail. We give them a fine, right? We punish them. And so what, what we do is punish ourselves, right? And we, if we tell ourselves we're a loser or this awful thing is going to happen, right? Then part of what we're doing is saying to ourselves, see, right? You deserve that. You're not going to have anything better, right? It's a, it's a negative. It's a very negative way that the brain tries to, to make us, in a sense, do better by hurting us more for the things that we couldn't and shouldn't have been able to weren't expected to be to control in the first place, right? The second is distraction. As you said, anger, that kind of fantasy can distract us from, from, um, affect feeling and emotion that can be much more negative. You know, anger, it can be more gratifying than, than, than certainly than guilt or shame, although guilt or, and chain conserve a punishment purpose. But if anger is directed also towards ourselves, right? Then a conserve punishment to so punishment, avoidance and the sense of control that if you think ahead to something awful that you're imagining is going to happen, well, maybe that will let you avoid it, right? I mean, you can see the brain here in a sense really confused. I mean, part of the brain wants to punish, part of the brain doesn't want to think about it at all and part of the brain wants to make it better. And, and then how all of that resolves if we're not aware that, hey, this is in the context of our brains being deeply impacted by trauma. So what's going on here is all maladaptive, right? Because these negative fantasies of the future, they may help us feel better about something in the present, but they don't help us make anything better, right? They don't help us make anything better. So this is the kind of the sequelae. This is where trauma and all this reflexive stuff that happens after trauma ultimately lead us. And you can see how we get lost, how I've seen over and over again in my own life, in the lives of other people, how man we get stuck in those situations. And that's why I see people sometimes, this has been going on for 30 years, 40 years, right? And it's just been going on over and over and over again, because there's no natural end to any of this, right? Unless we look at it in a different way that we've knowledge and information like, whoa, this isn't the way it has to be. Let me bring a novel perspective to this. It doesn't change on its own. I'm struck by your statement that these thoughts or behaviors can make us feel better, but they don't actually make anything better. In that way, this mode of imagining terrible outcomes starts to immediately seem like taking opioids. You feel better in the moment, but it doesn't actually make anything better, and it probably makes things worse. Yes. And just as a question of how much worse and in what direction? Yes. And so I just want to just pause on that concept, because I think that concept of makes us feel better, but doesn't make anything better. I think it answers an earlier question about the what seems to be a totally maladaptive wiring diagram. We need to confront the thing, but we don't want to go into the repetition compulsion. So there's a, it's a, it's a knife edge there to navigate through trauma. Yes. Working with a very skilled clinician like yourself, I think is the ideal circumstance for, for people. And of course, there are people who can't access support from somebody for whatever reason. You've talked about journaling. Yes. As a useful tool. Could you, maybe you highlight some of the other things that people can do on their own? And then I'd also like to talk about what makes for a good therapist? What should people look for for those that are seeking therapy, especially nowadays when a lot of therapy is being done remotely? But let's just start with the, the, let's just call them self-generated or zero cost, sorts of things, journaling being the first, and then what are some of the others? And what kind of structure would you recommend someone put around journaling? Terrier journal around all day and jot things down as they come up or sit down and spend an hour writing in complete sentences, for instance? Yeah. If I could add something to what you just said before the question, right? That we have these short term coping mechanisms in us, right? And in a way, it makes sense, right? We find ourselves in just terrible situations, you know, then a short term coping mechanism can get us through them, right? So our brains are built that way, and that's part of survival too, right? And whether now in the modern world, whether it's food, it's drugs, it's sex, it's alcohol, right? Or it's negative thoughts, right? This is short-term soothing, even the negative thoughts and anger, short-term soothing at the expense of long-term change, right? And that's where, you know, addictive pathways can come into play, and that's where, again, our how we're built evolutionarily for survival doesn't help us, you know, in the way humans have evolved. Like we haven't lived this way throughout, you know, 99.9 something percent of human history, right? So we're not adapted to this. So I want to just make a point of saying that about the short-term soothing at the expense of any of long-term change, you know? And then the question you had asked about, say journaling or what can we do that's outside of a professional, I think the hallmark of it has to be bringing new eyes to it, right? Like thinking about self with the curiosity instead of just a simple automaticity or repetition, right? Like why am I thinking about this? When did this start? Why is this in me? Right? It's that, that whether it's words or whether we're writing that's so important. So I think for journaling, it depends on the person, you know, I mean, we don't want somebody carrying around a journal all day. If then there's a compulsion to, I need to write about everything that's going on in my mind, right? Like that might be good to, okay, write a little bit at night, right? Or someone who might think, you know, sometimes this really comes into my mind in a strong way and it could be unpredictable, right? I want to have the the journal with me. So, ah, that thing is back in my mind now, you know, let me write about it, right? Because then putting words to it and then being able to read those words, right? And when people read, even do a little bit of journaling and they read, like, oh, I thought again about how a terrible person who can't have a good life because, ah, because I was in such a bad car accident or because that person attacked me or because when I was in school, I was bullied because I looked different than everyone else, right? Or I acted different for everyone else. Wow, you know, to actually see that written out, it's, you know, it's a little bit of that, you know, it's a little bit of that, like when you're saying it to someone as if it were someone else, right? Because now there's enough distance from it, like I'm looking at the words I wrote, right? That we get some distance and we can start to integrate some of the not just the compassion, but integrating compassion and logic, right? And I'm like, okay, I feel a sense of compassion. I wait, what does this mean? What really happened here? Right? And gosh, I did start thinking differently after that. I started, that's where this came from, right? That's why I'm saying this. It's those kind of revelations that we can have through again the written or spoken word. And I think again, that involves a trusted other, you know, or writing. And I think that those are ways we can do this where we bring some denovo perspective to something that often has been bouncing around inside of us. And it's amazing to me that, you know, I can see such intelligent and pathically attuned people who've had the same thing running over and over again in their mind for years. And it just points out that our brains don't automatically say, hey, wait a second, you know, I've been spinning wheels here for a long, long time. Like was there another way to look at this? We need something from the outside, which can just be knowledge, right? Which is why I think what we're doing here or the reason I wrote the book that I wrote was was like apprehending this like amazing surprise to me, right? Which is like, wow, like some huge percentage of everything I'm treating is rooted in trauma and the opacity of trauma, right? Which is why we don't see that, oh, the depression, the panic attacks, the life change, the addiction, the, you know, the maladaptive choices like, oh, this is all coming from trauma because it hides itself in that, in that opacity. So we need a de novo perspective if we're doing it on our own and we need that if we're doing it in therapy, which might link to like finding the right therapist, right? Which is also part of your question. Yeah, I definitely want to know about how to assess and find the right therapist before we cover that. However, something came up in the course of your answer. I can immediately relate to this idea that, you know, certain behaviors are really maladaptive and are stuffing things down or avoiding the topic is problematic and bringing a curiosity and an introspection, almost a third person of the experience that we've had in order to try and address it from a new, truly from a new perspective. It occurred to me as as we were discussing this, however, that some people and yes, maybe I'm talking a little bit about my own experience. We have a sense of our own identity and how people view us and our ability to be functional in the world and ways that we like. Effective at work or a good brother or a good mother or father human being in the world. We have relationships. And I think that one thing that I have heard and maybe I've experienced is that sometimes those maladaptive thoughts or behaviors, the things that generate a kind of a repetition of anger or of arousal or activation or sadness, that we have some internal process where we funnel that into a functionality in the world. So I'll give a more concrete example. So in thinking about things that have upset me in the past and in imagining a bad outcomes in the future, there's a certain internal state of arousal that comes about. And for many years I was able to use that not to feel angry but rather to work an extra three hours a day or to pack my schedule with work and social engagement so I could show up in a way that I, you know, hopefully was a very good brother to my sister for instance. So in a way it was a it was a transformation of something negative inside of me into a functionality in the world that was actually very rewarding and beneficial. And yet in describing it I can immediately see how it would be wonderful if I could source from something else. And yet I, you can imagine and I can imagine how one would be reluctant, maybe even terrified of giving up that source. It's a fuel. Yes. And I think in knowing some of the traumas of other people and their reluctance to work through those, obviously I'm not a therapist, I sense this over and over again that one's positive identity can often be linked to something difficult in their past. And so people are reluctant to give up this fuel because it's in that sense it's functional. The only thing that allowed me to kind of start to address this and why I'm still so curious about this because I don't think I've worked through this process completely. Again a little more self-disclosure there is that I was told that these words just imagine how much better it would be if you could source from a different fuel. A fuel that felt better. Maybe it was on the, it was on this this sentence, it was maybe you could actually be much more effective. Yes. Maybe you could be 10 times the better brother. Yes. Maybe you could have 10 times more insight or work capacity etc. So it's on that hint of a promise that at least I was inspired to start looking into these things and reading about trauma in your book and elsewhere and start to think about this. So again I realize this is a long-winded question or somewhat complex idea but I think or I hope that people will be able to resonate with this idea that sometimes we want to stay attached to this short-term soothing that the punishment distraction or control because it evokes this arousal and then we can apply that arousal. Yes. Yes. I think what you're describing maps I think clinically to what gets called sublimation. So there's something negative inside of us but we sort of transfer that energy. We transfer that into something that is adaptive or that is positive. So the idea of anger. I think of that thing and it makes anger in me. I channel that into harder work or I channel that into like I'm going to go be nicer to my brother. Something like that and there's validity to that. But it can become self-justifying if a person thinks well look at what this is doing for me. I wouldn't work as hard without it. Now we start to become attached to the trauma where as I think what you had said is absolutely true that just because we can sublimate some of the negative affect feeling emotion that comes from trauma into something productive doesn't mean that that's best. We can get to our destination by taking a very circuitous route. We might waste an hour getting there but we get there. That doesn't mean that that's best and it also doesn't look at all the negative. This example the wasted fuel, the wasted time. We get somewhere but we are not optimizing and I have yet to see one person who has addressed the trauma and become less functional. It's always either they're just as functional but they're happier or more functional because as you said just because we may be able to sublimate well maybe what's going on will be 10 times better right if we if we weren't sublimating because the sublimation limits us right it limits our perspective to only what we can see and do through the lens of the trauma and that is never better than the alternative. Thank you for that. Yeah you're welcome. Yeah. Let's discuss how one could or should go about finding a really good therapist. Typically this in my experience this is done by word of mouth. There's this person you might want to work with them and they're really great but what are some of the characteristics that one should look for and should we take into account whether or not we are a person who for instance I've heard this from listeners although I'm clear I'm definitely not talking about myself here in cloaking something. Some people will say you know I want to work with a somatic therapist because I've actually heard someone say I think in fields they you know I feel stuff in my body so I want to work with someone who can really acknowledge that or someone else will say you know I want to work with somebody who has this orientation or that orientation or is open to my particular lifestyle or isn't going to tell me that I have to leave my relationship you know I feel like people already show up to the question of who to work with with all these you know things internally some of which are voiced and some of which aren't. So I'd love for you to talk about maybe some of the core features of a really good therapist and then how to how to look for a therapist and also how to think about oneself in looking for a therapist because of these kind of predispositions. Right right well there's a lot of data about this over over the years that if you look at what are the top 10 important factors to find in a therapist just repeat rapport 10 times right I mean that's the key and if you think about that that's pretty amazing right because therapeutic modalities can be so different right and I think what what that's telling us is in a way something very obvious right like what does rapport me like you know it's somebody's paying attention right it's trust it's a back and forth it's it's like yeah even I'm doing I'm doing something difficult I'm doing it with someone who's really helping me it's someone who's in it with me right someone who's really paying attention wants me to be better that's indispensable I mean it's just indispensable right in the book is someone a therapist not making eye contact or this is the way they do it right and you know you got to fit into the box of the way they do it that is not going to be helpful and and then what I what I think about that is the different modalities it doesn't actually tell us that oh the modalities are relevant I think that's not true I think that good therapists are not pigeonholed by a certain modality they may they'll come at the world largely through a psychodynamic or a CBT or a DBT lens there's lots of different you know ways to do therapy but when you really talk to those people really good experience therapists it's all coming through the vehicle of the rapport but they're practically shifting to what the person needs you know I don't understand the idea that like I just do this right I don't do that and when people are pigeonholed that way I don't think they help their patients very well right we we have to be diverse enough to say hey I want all the arrows in the quiver right and and even though there might be one that I favor and that's the lens I see things through no I can be versatile I can shift I can adapt to what this person needs and I think if if you have that you've got to if you have that you've got a winning combination great so people should perhaps try a few therapists and maybe have a session or two or three to see if they the rapport feels like it's taking root is that yeah have that right yeah and I think that's why word of mouth is important right if someone you trust tells you hey this is a good person that says a lot right it already makes the pre-test probability it was quite high but yes it's interesting to see when like people have a therapist or they call their insurance and they're assigned a therapist this thought that like oh that's the person I have to have now and it's like no you should look at that like anyone you know you'd be interviewing right for you know for a job right but you got to bring again the right set of thoughts to that to be helped right which is like I want someone who has rapport with me I don't want someone who's going to make it easy right who's like well it's gosh it's kind of pleasant because then that means they're not talking about the difficult things right so if one brings like I know this isn't going to be easy I got to talk about difficult things right even if one doesn't recognize or I got to talk about the trauma in me right but to go to therapy thinking no it's I mean sometimes it's enjoyable but a lot of times right it's not right it's hard work it can be excruciating we can cry during it but to say right that that's how I'm going to be helped and I want someone who's going to do that with me you know who who's really looking at what's going on inside of me how do we help me and I can feel sort of the robustness of that if one brings that approach and then looks at the therapist through that lens you're you're very likely to then move on from someone who's not a good choice right and really stick with someone who is even though that doesn't mean it's always a pleasant and enjoyable I mean it has to not be that sometimes right maybe we could drill a little deeper into the mechanics of therapy I put out a few questions to audience asking what they want to know about therapy and it was amazing I got hundreds if not thousands of responses saying how should I show up to therapy so for instance should people take a five minute meditative drop in before or should they just show up cold and let it emerge during therapy is it a good idea to take notes or to not take notes and then post therapy how should clients patients as they're sometimes called one or the other I never know which how should they process that information should they take some designated time afterwards and you know an ideal world take a 30 minute walk afterwards and think about the material or should they set it aside and come back to it of course they're constraints work and family etc but you know we there's a lot of knowledge out there about how to best show up to a workout warm up for five ten minutes then do this etc and then the cool down I mean here we're talking about hard psychological work aimed at bettering oneself so to my knowledge I've not ever seen this information anywhere it'd be very useful to hear your thoughts on this yeah well I'm not trying to duck the question but but but I think it varies so much by person so if you think about the first part of your question I think was how to show up to therapy right and I think the answer would be whatever lets you be fully present when you're in therapy now for some people that's going to be I show up early you know I said I calm myself and meditate a little bit I mean that's how then they're present right for other people you know they just they will show up walk into the room they can stop another present right because whatever works for that person so that they're really there their thoughts their energy is really in what's going on and the same thing applies on the other end you know they're people who are really well served by you know going for a walk if they can are sitting quietly after therapy kind of putting that in order right otherwise they lose some of it right or like some of the ah ha's right or the oh that's an interesting thought that they really need to put it in order maybe that involves taking some notes during therapy right for other people they need to do the exact opposite they need to like leave nothing about that at all and then they can reflect on it later and learn from it so you know we're so different you know human beings is such a diversity in us that that there's no hard answer to that because like being present when it's happening and then being able to sort of consolidate and retain what's been gained is most important and then I think we have to figure that out person by person I mean I try and do that in the work of like what's serving this person best and sometimes we seem sometimes it evolves and sometimes we talk about it but it varies so much if someone were thinking about embarking on therapy or more therapy to to address trauma or just general issues of life what is the frequency that you recommend I could imagine two extreme models one is okay I'm gonna finally tackle this trauma I'm going to do therapy three times a week but for a shorter period of time you know six months you know over and out um versus this open-ended model of once a week typically for as long as it takes right right I think that also varies um and I work with people in varied ways from someone who's doing well and like we meet for a half hour every six months right to doing week-long hourly sessions to spending three intense days with someone in a row right so I think as far as like kind of guiding principles what I have found in my own life because I I value my own therapy tremendously so I found in my own life and in my own clinical work that if it's less than once a week then it's hard for us to retain really you know we we spend a lot of time kind of catching up okay what's happened let's get back to the place we were at before right which is why I think if we're really going to get somewhere we're not just trying to maintain something right then I think once a week for an hour is really kind of the minimum right um but more intensive work it's like the more intensive it is it's it's it's not linear right it's an exponential gain like we do a lot of intensive work right where where someone will come and do 30 clinical hours with us over the course of a week so five or six different clinicians 30 clinical hours and you know we've found that the benefits of doing that are immense it's like I said a year's worth of therapy consolidated and you think well 30 hours let's say you know we go almost every week maybe that's 45 or 50 hours but 30 hours with that kind of intensity um is worth by 60 hours you know done in a different way um because then it's it's it's in us in an active way right it's in the therapist in an active way it becomes very very dynamic so I think turning up the intensity if there's something that we really need to process absolutely makes sense and I do that in my own life is something now it's like whoa it's really something is really distressing me and it's linking into prior trauma and I can see what's going on in me now I start to have rheumative thoughts you know with negativity like I got to go more right because I got to do that processing so I can get to the place that I am which is not that something that trauma has no impact on me right it's that the impact is much less than it was before the therapy and that I most often more often they're not having ability to see when it's now intruding into my thoughts and it's taking me away from like what I really think and believe or being able to draw logic and emotion together and make good decisions turning up the intensity then absolutely makes sense this very deep um intensive work of 30 hours in a week what brings somebody to some the type of work um of that sort um is it a suicide risk or a severe addiction situation I mean how does one gauge how much therapy they they ought to be doing and should it always be on the therapist to decide that frequency um what would bring someone to a situation of five therapists in 30 hours a week in one week right um right right it's usually a person who is really distressed by something you know whether that's it's so negatively impacting their life their life or sometimes a person comes to realization I just can't take this anymore right I'm sick of the cyclical depression I gotta stop having panic there's like I need help right but it's usually some you know crisis point with the idea of of crisis in the meaning of okay something comes to a head and after it things are gonna be different right not all crisis and things gonna be negative afterwards but a point where where then that that cognitive flexibility comes to the fore of like way I need to do something different right so that that's often what brings us you know sometimes it's other people pointing it out or if somebody's had an intervention somewhere or yes that person's been hospitalized after a suicide attempt or they've gone back to to rehab again for the third or fourth time and their life is really in danger sometimes it's that and sometimes it's a person realizing yeah I just want to I want to look at myself and understand myself better you know I know that what's going on in me isn't as good as it can be right so so I think people can come to it for all sorts of different ways and I think yes I think a lot of times it would be the therapist to say it looks more we're you know more intensive work or can make a difference but I think the person also needs to you know take ownership right of their own therapy and say if I don't feel helped enough well I have to think about that right and and talk to the therapist about that because it maybe maybe that therapist isn't a match right or maybe you talk to the therapist and the therapist can change his or her approach right or maybe you talk to the therapist and increase the frequency right but the idea is to be aware of it right and if one's needs aren't being met to acknowledge that right because people can get into a rhythm of therapy where it's really not helping them right but they either feel sort of nihilistic about it like oh no better than I'm going to therapy right or sometimes there's a sense that well I'm in therapy so I'm kind of checking that box of doing something for myself but it's not really getting me anywhere and then the part of the brain that's controlled by the guilt and shame and avoidance thinks that's a great idea right so again this ability to observe ourselves and like what's going on am I being helped in the way I and do I feel helped right and my in some ways even even like happy that I'm not feeling helped because I don't have to face this thing I don't want to face right or am I too afraid to say I need more help right do we really need to look at ourselves and this is where the insurance systems often are very difficult because it's hard sometimes for a person to say I need more therapy because that may not be possible right so so there are sort of negative factors in the world around us but ultimately I think the answer to the question comes down to observing ourselves and taking ownership of like what's going on in us and how we're feeling and and and feeling that that commitment to self or to self-care to say I need to go change this and for those that maybe don't have the means or insurance or access to do even one day a week therapy in the journaling model could one perhaps take an entire day as awful as it might seem to do a lot of journaling and thinking and walking you know do a self-generated intensive do you think there's utility to that I mean there could be but it depends by person because there there could also be something negative about that if it's you know someone who's not at the point not ready for that right I mean we don't come at you know we don't come directly at the trauma immediately at least most of the time we don't do that right and and we often don't explore it in depth like this idea that oh that person now has to go through every second of the trauma is actually not true I mean sometimes it is but that's that's not the common situation right so more often that person has to acknowledge like the example of like I was sexually abused and if they acknowledge that and to and say okay like gosh what has that done to me that doesn't mean well let's parse out every moment of like how that was and the terror of that right so that can lead people to a worse place right so so I think the idea of biting off small pieces so to speak where a person is writing right or is talking by I think if one is writing it is good to communicate with another right another trusted person and if there's not someone in one's personal life you know they're clergy members even if one isn't affiliated with an organized religion you can probably go places and get a clergy to want to help you right I mean there are people out there who want to help other people so they say what if someone has no one I mean almost never do we have no one here right because we could probably go find someone but we we need to take that in pieces so there's some risk to trying to do the intensive thing you know on one's own and and that's where I would put it in if we've a person's having suicidal thoughts or even thoughts of death of not wanting to be alive I don't deserve to be alive I mean these are warning signs for really getting help so there are some signs it's say hey don't try and do that on your own right go go try and find a resource and it's you know things that get to that level of severity of an often a person knows that I mean am I in a place where I know I'm not healthy and I'm I'm having you know kind of scary thoughts then then we need that that's a person who really shouldn't be doing that on the road right thank you for that you're welcome so we've been talking a lot about talking and now I'd like to talk a little bit about chemistry yes um drugs yes so maybe first we could talk prescription drugs I mean you're a psychiatrist so you're approved to and presumably do prescribed medication uh where where appropriate and this is a vast landscape of course we've got ADHD and I should just tell you I get more questions about ADHD and the drugs related to ADHD and dopamine than any other topic any other topic so there's ADHD there's OCD there's depression there's antidepressants and so forth is there some way that we can you know wrap our arms around all of that as a way of waiting into this this drug question and just address you know how does one decide when medication is useful because in the end the dissection tool that the psychiatrist or therapist has is language and at some point one has to make an assessment about dopamine or serotonin or whether or not a given drug would help and most therapies I believe don't involve putting someone in a brain scanner and to my knowledge there still is not a very good blood test to assess oh is this person's dopamine low or high correct me if I'm wrong and ultimately that and I know there are companies out there so I'm not trying to undermine those companies but if I happen to do that in the statement if you take a blood test and find that your serotonin metabolites are low my understanding is it's possible that you are too low in serotonin in the brain but that's a very indirect window into what's really going on so how does how does that how do you think about prescription drugs in the context of treating trauma and other in other conditions and then maybe we'll drill into some of the more specific conditions sure I mean I would first comment that right there aren't tests for these things and I think the test for metabolites and things are so different you know by the time what we're talking that has been metabolized you know often to some very significant extent left the brain now it's in the peripheral blood that we really don't learn from that right I think that we tend to overutilize medicines in this country because we have a healthcare system that that often that's so based on throughput that we want to polish the hood when there's a problem in the engine right so we over utilize medicines often as an endpoint right oh we're going to make that person's depression better with an anti-depressant well I mean maybe right but most of the time for that person's depression to really get better and stay better they need to unravel what's driving the depression right so the first step is I think they're two steps to it right the first assessment step is is there a diagnosis that that the vast majority of the time if not sometimes all the time really warns medicine so they're bipolar disorder OCD ADD right these are diagnoses that we we understand more about them and what's going on in the brain and how medicines can treat or stabilize them which doesn't mean the medicine is necessarily it's not a substitute for therapy right but sometimes the medicine and therapy can go hand in hand so for OCD for example warrants therapy but it almost not always but it almost always warrants medicine too so that you can ease the systems that are making the rigidity and the repetition in the brain so so the first kind of branch point can be what is the diagnosis what is the level of severity right and I think that that's very very important where I think it's a little more maybe even interesting is using medicines to help the person engage in the therapy as productively as possible and and here's where I think we're so limited by how we categorize medicines and this sort of pharmaceutical insurance driven medical system we have that I think throws us off in tremendous way so you think about how medicines are categorized or anti depressants and the vast majority of people who are helped by anti depressants they're not they don't have clinically severe depression right those medicines create more distress tolerance in us right and if you think about how helpful that can be if you're going to go now you're going to do something difficult where you're going to bring that trauma or the stressors to the surface and you're going to process and you're going to try and make life change if we can make more distress tolerance in us that can be so so much better right and think about the category of medicines that are called anti-psychotics which was really puts people off right but but most of the prescriptions for anti-psychotics are not for psychosis right and there are ways in which low dosing of some of those medicines can help intervene in negative pathways right in pathways that are about distress and you know sending out those tendrils of neurons that are about hyper vigilance and avoidance right in our in our brain and we can often get at that and if you can improve someone's distress tolerance and you can use medicines that that take away what clinically is remination right not a not the standard meaning of that word but the clinical meaning of it where their distress centers in our brain that are overactive and then we get stuck in these maladaptive negative pathways where we think about something over and over and over again with no real chance of solving it because that's not what's going on inside of us so medicines can help that but we have to have some flexibility around their conception and the modern medical system of like 15 minute visits you know to a psychiatrist that are that are weeks apart I mean I don't understand how how that goes well right in the vast majority of times I think it doesn't go well because it's not enough time to do the therapy to even generate the understanding so then medicines get thrown at the person and this is how you know we use I think approximately five times as much medicine I think across the board I say the Dutch population right and think well why is five times more is a lot more medicine right and you know they they have a healthcare system and a cultural system that to the best of my understanding is more rooted in taking responsibility for oneself right so if a person comes in and cholesterol is high right the first order of business is he could take better care of yourself right like this person really needs to lose some weight exercise more right they didn't they're not just jumping to like let me give you a medicine and you know and shift shift you through the healthcare system and out the other side of the door right and the same thing is true in mental health you know and I and I'm not trying to be critical to did the psychiatrist or the nurse practitioner is the people who are practicing in that way because oftentimes there is no choice right if they're working in a healthcare system that that the standard is is is highly spaced or spaced apart 15 minute visits what alternative is there right but to look at okay I'm going to use medicines because I don't have another tool to bring to bear and so I think the healthcare system and it's focused on throughput and it's short term talk about you know we talk about short term response right short term soothing at the expense of long term health and I think that is the metaphor for that applies to our healthcare system right where if we if we are going to try and treat a symptom in a short term we're going to do it in a 15 minute visit that we're going to do it in a way that maybe it suits the symptom maybe it doesn't but it does not get at the problem we need to invest more resources to get at the problem and I think that's where a sort of protest you know if people as a society we say look we don't like the way our healthcare is going like we need more focus on what the actual problems are that yes we would spend more money you know treating people and taking care of people because it's more human time but ultimately less suffering less death right and ultimately more productivity I think as an economy we would save so much money if we spend money on the human aspects of mental healthcare because people would be more functional there's spending less time in the hospital right they're more productive when they're working there's less entry into the criminal justice system so so I think medicines get overused in part for systemic reasons in large part for systemic reasons and also for some of these categorization reasons oh that person meets some technical criteria for depression we got to give them this medicine instead of really thinking what's going on in this person and I see this over and over again I see someone is on seven medicines and they're on seven medicines to treat seven different symptoms and now they have side effects from all those seven medicines maybe two of them are to treat the side effects from the other five right and that's bad right and if you really get at what's going on in them now they're doing much better and maybe they're on two medicines right so I don't know if that's a helpful answer to that it is it's a very helpful answer I mean I think at least in the spheres that I run these days I hear a lot of negative statements about antidepressants I think you know I'm old enough to remember the book listening to prozac and I remember when prozac and and it's and things like it first started showing up in the excitement and then nowadays I hear more about the problems with all these drugs you know and and maybe that's just because I have arms in the both the scientific but also in the kind of wellness community where people think a lot about behavioral change fortunately I think that's that they do that but of course these drugs as you mentioned can have enormous utility as well yeah I'd like to just pick up on one theme that I haven't heard a lot about anywhere else which is the short term versus the long term use of these drugs because I could imagine you know someone feeling like they're finally going to tackle something that's been inside them for a long time either because they're really struggling or because they're just done with not working it through and and they decide to start a medication that would give them higher levels of distress tolerance for a short while I mean is there anything to say that someone couldn't take up properly prescribed medication for a week or for for the first three months of the work and then know that they can come off it because I think that the black and white model of okay you're really going to start this drug and stay on it forever or be taking some drugs forever or you're not going to take anything I mean that just seems to it life doesn't have does life have to work that way right is there is there short term use that can be effective yeah absolutely yes yes in American medicine we are so much better at starting medicines than we are at taking them away right and part of that I think is driven by is there's such a strong presence of the pharmaceutical industry and the pharmaceutical is pharmaceutical industry does a lot of very good things right but you know there's such thing as too much of a good thing right and then as a society when something seems positive this I think also is human nature we can over invest in it right so you think about when pro-zac and those kinds of medicines came out they were safer medicines their build is anti depressants and the thought was well they're going to fix depression right and it's not how that works right so if we look at them as tools right then we can deploy them sometimes for the longer term because sometimes that's necessary but absolutely for the shorter term mean absolutely if we thought of pro-zac and those kind of medicines not as oh they're anti depressants we thought look what they do is they they they seem to make there be more serotonin in certain circuits that are important for mood regulation anxiety regulation distress tolerance so those medicines can really help somebody if they're very severely depressed and we want to sort of get to get them feeling better they can also help someone if they could use more distress tolerance in a discrete period of time right when we think about them that way we think about them as tools that we could apply for short term or long term we don't see them as fixes right and we don't see them as then substitutes for the human to human work that needs to be done I mean I've you know been sort of in my training at times in health care systems and I've seen in many other circumstances that look at medicines as answers and this idea that oh that person is uh and a lot of times there'll be a number right right the number is the diagnosis and that number gets this medicine and like I'm not sure we could be more misguided than that and that's what leads to adding medicines adding medicines it's not working of course it's not working you know because no one's really paying attention to what's going on so add more medicines and then medicines for the medicines and I mean we know this is true we we just we know this is true but we haven't had to wear with all as a society to say like with a lot of things in society to say like this isn't okay right I mean we need more like if these people who are trying to help us they need more latitude to help us or we need more human to human contact to get it what's really going on and yes that's an investment of time and energy and money in the short term and sometimes that's money from the systems right but if we do that my goodness look at the look at the payoff of that what is your thought about anxiety and ADHD as a separate phenomena in terms of medication again ADHD is the the thing that seems to come up most in questions I can't tell you the number of especially students but also young working professionals and even people who are you know outside those categories who are interested in or taking riddle in, adderol, modaphanel, armodaphanel or vivants because they seem to struggle focusing without it or and I don't know because I'm not one of those individuals or because they seem to just like how well they can focus when they do take those compounds and so my understanding is these compounds mainly increase dopamineurgic transmission in the brain also adrenaline epinephrine in the brain so they're more or less stimulants they look a lot like at least chemically they look a lot like cocaine and emphetamine although they're they're not quite cocaine and emphetamine so should we be concerned about this is this a different sort of epidemic can these drugs be used to train the brain to focus and then people can withdraw from these drugs I mean I think this is a huge topic and one that maybe warrants its own episode entirely but as long as we're on the topic what are your thoughts about medication for ADHD? Sure, medication for ADHD can be extremely effective and the studies show show us that right they show us that if there is ADD then medication for ADD is very very helpful and that's true in youths it seems to be true if adults have adult ADHD or ADD like we kind of know that's true but all attention deficit is not attention deficit disorder right and there we go to the reflexive 15 minute visits throw medicines at things right attention deficit can come from many many places and one of them is anxiety right there there's so many other reasons depression affects attention poor sleep affects attention poor diet can affect attention stress in life can affect attention so and certainly trauma and the thing the the problems that trauma spins off can affect attention so you know this is really the this is really the truth that while teaching ones about medicines and pharmacology I was frustrated about how the answer to everything was like what medicine do we use what medicine do we use as opposed to like this is just one piece of the puzzle and I told an anecdote which I think it was a clinical anecdote like what do you think is going on and I think that if I told that to I don't know middle school students just something they would probably say you just told the story of a person with a rock in their shoe which is what I the story that I was actually telling right but several people I was talking to their physicians right ADD right it's like no that every time the person steps down the rock hurts and they're not able to maintain attention right like that's what's going on but we're so programmed to think about medicines and inappropriate use of ADD medicines as you said there's dopaminergic impact there's epinephrine or epinephrine impact we're affecting what are called prefrontal alpha 2 receptors that like really need to be helped if there's real ADD but if there isn't that is not a good thing to do which is why it is quite fascinating that when people have ADD they tolerate generally stimulants very well without the other problems that can come of stimulants and again I don't know I don't claim to know why that is but we see that phenomenon but when people are being treated for ADD and they don't have ADD which sometimes they know they don't have ADD but the stimulants make them function better so they go to somebody and get the stimulants that's that's not a good thing to do right because because stimulants when they're not needed over time they do affect our physical function they affect our judgment right there are a lot of negative things that come from that they can affect the vigilance inside of us so so yes it's a valid diagnosis but it gets made when it's not present very often which we see with a lot of diagnoses that you can throw medicine at we see the same thing with bipolar disorder true bipolar disorder is extremely important to utilize medicines effectively but how many people are diagnosed with bipolar disorder who have they absolutely don't have bipolar disorder but it's it can be a catch all diagnosis because there's in a sense something to do for it in quotes right and you can throw medicine at it right so I mean what do we expect right if we if we have a healthcare system where you have 15 minute visits with your psychiatrists of course we're going to throw medicines at everything and then the training paradigms are going to look at it through that lens and then very often again I gave the example of seeing somebody on seven medicines I mean the first thought I have is how many of those medicines are actually counterproductive and a lot of the time it's not like well every now and then one is counterproductive now that's the case that's the case a lot of the time and again I come back to if we're not putting thought into it what other result would we expect thank you for that answer I I'm very curious what constitutes negative effects of stimulants so if somebody's taking at or all are riddled in in order to work longer hours or focus because they have attention deficit but not necessarily ADHD and again I'm not recommending anyone do this I've just heard the numbers that have come back at least from surveys and discussions with colleagues at Stanford and elsewhere other college campuses that upwards of 75% of college students use semi-regurally these drugs off not by prescription just to study and to learn yes I can imagine sleep issues because people because these are stimulants what sorts of other issues can they create for people problems that you create I mean I think a touchstone maybe for that's running throughout conversation right is prioritizing the short-term benefit over solving a long-term problem right which we might say is a human tendency and we see it across the topics that we're discussing so so short-term use of stimulants or people are more alert they can stay awake more they can study more intensely and longer okay there's some short-term benefit of that over there even there there can be problems right there but we can we can say let's just say for sake of argument that in the short term there's something to be gained by doing that right but oh my goodness there's so much that is there's so much risk to that right and how many times have I seen someone who they're doing that and they're just doing that to study right and now they're addicted to the amphetamines and their behavior changes and they don't know it talk about shifting our brain towards a more defensive you know sort of suspicious outward look you know view of the world that we see a lot of that so we see judgment impairment we see heightened levels of anxiety we see more impulsivity in decision-making and and sometimes we it can get to the point of seeing Frank's psychosis now that's not common but if I seen young people who've done exactly what you're describing right they're using they're using Adderall or they're using Riddle into study and then I see them when they're coming into the hospital you know screaming about how someone's trying to hurt them boy then it's the worst case scenario but it shows like that's where that can go and how much is there between the oh I'm just using it to study and that severe you know outcome that is actually quite negative for a person that might change how they think about that friendship or that relationship right a lot negative happens when we change our brains without an ability to see like what is it actually doing to us so which is part of my whole theme about trauma right it changes our brains and we don't know it right well the same can be the same is often true of amphetamines used inappropriately it shifts our brain and and we don't realize that we're a little bit more impulsive in our decision making a little bit less trusting these are significant negative things that if we don't know it person will just say well I'm just using it to study I'm using it to work more that's not no that's not without its high level of risk what are your thoughts on cannabis I've said it many times on this podcast before I'll say again I feel fortunate that I've never really been attracted to alcohol or drugs of any kind in so much so that if all the alcohol and all the marijuana and all the cocaine amphetamine disappeared I wouldn't notice any change in my life right and I feel lucky in that way because I know a lot of people feel an attraction to these things that is almost a gravitational force from their first drink they just feel I once heard it described in this I think it was a Augustine Burrow's book dry where he used an alcoholic he said that the first drink he had it felt like this magic elixir that that meshed with the physiology of his blood in the most seamless way and as I was reading this I thought oh my goodness first of all that's the most foreign experience for me in terms of alcohol and second gosh that must be terrible and you can but at the same time you could really understand why someone would be drawn to that so cannabis nowadays is legal or decriminalized in many areas of the US a lot of people seem to use the argument it's not it's better than drinking or they only do it for sleep or anxiety management I'm not looking to demonize or support the cannabis so what are your thoughts about cannabis for anxiety management depression and maybe even for ADHD for that matter sure if I could make it an alcohol comment right the number of times I've seen alcohol like having been a good idea for coping with something approaches zero right the like the alcohol for coping is just never good and there's an additional risk factor that there's certain genetic profiles where people respond strongly to alcohol like as you're saying it's not just oh there's a little bit of short term relief of distress but there's a sort of euphoric response and those genetics we know we don't understand them completely they seem to be in northern european populations more prevalent as you had west in northern europe so we understand that where risk factors are demographically but we can't pinpoint that for any one person and there's a tremendous risk of that when a person responds so strongly to alcohol or habituates coping to alcohol cannabis is a little bit of a different story I mean how I have seen that play out and again this isn't coming from any expertise around the neuro the neuro pharmacology of it like how's this really working in the brain it comes from an observation that what it seems to do is to narrow our attentional perspective right so it's why people will say well they want to they want to use cannabis before watching a movie with friends or something right and and think okay I think why people are doing that is because a cognitive spectrum narrows and then instead of worrying about that thing at work or that relationship issue one can just be present right for for it gates out other attentional intrusions right so in some ways I mean I've absolutely seen it be helpful to people it's been legalized in Oregon which is where my I spent a lot of my time and it's not where all of my practice is but what what I have seen is it is at times helpful save around sleep right because a person can get out other intrusive thoughts and they can just relax and go to sleep but there can be another side of that too that at higher levels of distress at higher levels of tension what it can do is narrow the focus of cognition to the thing that is negative right so so the idea that oh like oh this is a treatment for you know depression anxiety trauma is not true right can it be helpful under certain circumstances like I think the answer to that is yeah I mean I know the answer to that is yes because I've seen it play out clinically that way but it can also be harmful to so there again like anything that has any power power to influence our brains we want to be thoughtful and careful about it mean do I think that it's safer than alcohol yes I mean I mean like we we so clearly see that does that mean it was just uniformly safe no right so we want to be respectful of anything that can change how our brain is working and I think that includes certainly includes alcohol and I think it certainly includes cannabis too I'd love to talk about psychedelics for two reasons one there seems to be a tremendous amount of interest in psychedelics as a therapeutic clinical tool I know there's also recreational use and I'll just preface all this by saying that my stance is we absolutely know for sure that these are controlled substances they're illegal to possess cell or use in most of the country there are a few areas where they are decriminalized and psychedelics is a broad category of course and we can touch on some of the different different ones but whereas five years or so five years ago or so I was truly afraid to say the word psychedelics in any kind of public venue there are laboratories at Stanford working on ketamine, psilocybin, MDMA mostly in animal models there's terrific work going on at Johns Hopkins School of Medicine and Matthew Johnsons lab and others looking at the clinical applications mainly of high-dose psilocybin and LSD there's the maps trials with MDMA so nowadays it's safe for an academic like me to say the word psychedelics and I'd love to approach this question of psychedelics from a place of true exploration and curiosity but with the preface that we're talking about this in a legal clinical setting and the legality is something that's now in process I don't think it's completed but that's my understanding but there are trials there you can go to clinicaltrials.gov and put in MDMA and you'll see a bunch of clinical trials that are happening in the recruiting subjects so I think it's safe to have the conversation now and I'd love your thoughts about psychedelics maybe we could start with psilocybin and LSD as a broad category of drugs that at least my understanding is they touch on mainly the serotonin systems some specific receptor activation and modulation tend to change notions of space and time adjust internal state maybe we would start there and then maybe venture into some of the other ones so what are your thoughts on these drugs for therapeutic potential also potential hazards etc. Yeah I think if we look at the true psychedelics so psilocybin and LSD because ketamine and MDMA they're different categories of medicine they're these sort of novel tools to bring to bear but if we start with psilocybin LSD true psychedelics I think why it is why they have gained so much momentum over the last several years is because the data coming from the labs and the academic centers is so powerfully positive and as someone who's I'm interested in anything that's potentially helpful right and I want to learn and understand that because a lot of things that are potentially helpful you know you go and look at the data and you see that that's not helpful or that's harmful I think what we have seen with psychedelics is that they're so helpful right and the trials are bearing that out and of course these are used in professional hands and with the right kind of guidance are extremely powerful tools but used in the right way by someone who knows how to utilize them and the right set and setting can have an immense positive impact and that's why I think that the thought is there across people and more and more people feel comfortable saying it and talking about it I mean that we're in the state of Oregon now where the where the the thought is we're moving towards legalization of psilocybin early in 2023 and it's part the new data right and how it meshes with the older data right how it meshes with data from the 60s and 70s that showed such a strong powerful impact of these medicines and I have a whole set of thoughts about what's happening there and they're just their conjectures right but but my read of you know as best I can try and understand the neuroscience and and the and the clinical applicability and the changes is you know what happens is we see less communication less chatter in the outer parts of the brain right the outer parts of the cortex and I think that as human beings we sort of glorify the parts of the brain that only we have I mean certainly in my growing up right what did I learn even if you think about like learning about the brain in high school right and learn that like wow we're great as humans because we have language and other animals don't and we can use tools and like aren't we so great because we have this part of the brain that other animals don't and it lets us function right okay there's some truth to that right that that that we can do things others can't do but we we get lost often in the outer parts of the cortex which I think are about survival right so we come back to the things you and I talked about early on of like why are these trauma mechanisms in us right so much of what's going on in our brains is about survival and I think living so to speak in the cortex right in the outer part of the brain is consistent with a focus on survival so if you think that's where language is that's where vision is that's where executive function is so planning and tax task execution so so much of that is about making our way in the world around us so we tend to glorify that and think well that's in a sense where our existence is right and I believe that is not true right and again can I say that for sure of course not right but my read of 20 years of doing clinical work and thinking about all sorts of medicines and and thinking about the psychedelics with a in a lot of depth I think that what they do is they take us out of the cortex right because that's where we run into these problems that's where we bounce things over and over again at the distress centers deep in our brain in the brain stem kind of a lie with the outer parts of the cortex and they say right we're in distress we want to stay alive you know often a lot of us have had trauma that makes these changes in the brain and then we're thinking all the time like what would I do if if there were war what would I do if there's civil war someone bombs us what will I do if the if the economy collapses right what will I do if somebody gets sick we're we're thinking all this future projection that is all coming from a place of fear right it's all coming from a desire to think about things and control the future with this part of the brain that is so uniquely human right and I think when we take the neurotransmission out of those places right and we set it in a part of the brain and say the insular cortex right the parts of the brain that are sort of in the middle right which which I think I believe is where our humanists really is so the psychedelics make there be less chatter communication these other parts of the brain and then we become seated in the part of the brain that I believe is most about our experience of true humanness which is why when you read about you know people who have experiences and I've heard about them people talk to me about this right they've they've utilized it they talk with me so whether it's someone telling me their story or it's coming from research data you know it's why people can sort of see with clarity that oh that trauma that like I think is not my fault really we feel a sense of compassion for ourselves we relieve ourselves release ourselves from guilt and he said why is this so helpful to people and I think it's because it can do what we are trying to get at in good therapy but it can really catalyze that by just putting a person in that part of the brain that can see it for what it is without all that chatter in the cortex about I gotta think it's your fault you won't avoid it again and and that makes the repetition compulsion how do I think ahead to the next thing that might happen and what else bad might happen I mean we don't get anywhere doing that and I think where we get somewhere is when we see ourselves deeper in the brain which I think we do if we're like doing really good therapy and we're you know we're in the deep parts of the brain but these these psychedelics the medicinal value I believe is putting us in that part of the brain where a person can really find truth and that's why I think that that's come so far in these few years because I think that is very clinically evident and I think we're going to see more and more the value of that and how what the psychedelics do can become I believe a heuristic for understanding like wait how are our brains really functioning and what are the parts that really matter to our experience of being human it's those parts of the brain right the deep parts of the brain the insular cortex and the and the areas around it that say light up when a person has an experience of spiritual ecstasy or an experience of connection with another person right we kind of have these tell tale markers that something is going on there that's very important and very special and I think we're more attracted to the outer parts of the brain and focus are easier to study right mean as you know better than I do we started studying the brain through lesion studies right because it's easy to or to see if hey person got hurt in this part of the brain or how to stroke in that part of the brain what changes so we look at the cortex because one it's easier to study and we tend to glorify it and I think that has been misguided and I think that we're learning about how that's been misguided through the study of these you know novel modalities from western perspectives would of course have been used for a long long time in other cultures but novel from our perspective I'm fascinated by this idea that the in these middle brain structures is where our humanity lies and as you say it I also wonder whether or not other animals experience life more from that orientation with less chatter we we can only guess but you know that the dog lover and and being in the presence of animals that seem to just be present in what's happening in their immediate environment not too much in anticipation right what you're talking about is sentience as important and extensions is extremely important right and if we're going to overvalue say language then I think we undervalue sentience right which is why I think we tend to undervalue animals right and and their suffering is well they're not saying anything about it's right and you know they're not writing about it so okay it's easy to ignore and we think about again the hubris of that right that oh because we can think and talk and write like we must be feeling more than then species that don't do that I mean I think I I think that is so true and that we're going to understand more about sentience and other species and how you know that's at the core of existence and my hope would be that we value more humans and animals right through through the evolution of that understanding the hallucinations that accompany psychedelics like LSD and psilocybin and have such an attractive force to them as as a concept and as an experience and so I think most often when people hear hallucinogens they think and psychedelics they think about hallucinating right makes sense why they would but what's so interesting to me is nothing in your answer about psychedelics psilocybin in LSD focused on hallucinations per se it was more about feeling states accessing a feeling state or a relation to an event or to a person or to oneself maybe even I I caught hints of maybe even empathy for oneself for the first time none of that had to do with seeing seeing sounds or hearing colors and you know these kind of cliche statements about hallucinations so I am aware of laboratories one at a university California Davis in particular but a few others that are trying to generate a chemical variance of psychedelics that lack the hallucinogenic properties but maintain these other properties as therapeutic tools and as I say that I realize that I people in the psychedelic community are probably thinking oh that's horrible that's a dismantling of the core thing but the simple question is do you think the hallucinations are valuable for anything and I think we're really getting into the philosophical right the ontological right there's this sort of trying to understand being right and I don't claim to know the answer to that I think that at times it seems like the hallucinations have a metaphorical or a symbolic way of being helpful right because people will come to understand things that that they hold dear and true after the experience right that that often not always come through the lens of of the hallucinations so are the hallucinations necessary are those hallucinations sometimes important sometimes not I mean I think we don't understand that and I think we want to be respectful of the of sort of mystery of that but what I think is fascinating is do you think that substance abuse and what that means is well one aspect of that is that a person has experiences thoughts conceptions of self in the world with the substance that without the substance they know are wrong right people talk about you know liquid courage right and okay I feel better about myself and I feel courageous because I've had a couple of drinks now when I and I after that I feel like normal about myself and that that was false right and and we see that like that's part of what substance intoxication means right but what we see with the psychedelic medicines is something that's incredibly different right that people are having experiences that are so delinquent from our normal experience of reality and then when they come in a sense back online with with in a normal cognitive way they realize like wow now I'm applying all those mechanisms of trying to understand truth and to to that and what what I see is that it's true and wow it's true like I mean we have that all the time which tells me hey something different is going on there and of course these are powerful tools so misused like very bad things can happen but you think about the clinical utility and what does it mean that so many people change for the healthier or even change their lives after an experience because it so resonates is like oh now I understand something that's true and it's not something bizarre is like I wasn't responsible for being raped that time or no I you know I'm not less than even though my sexuality or my gender identity is different from some silly binary concept right like people kind of can often get it and they feel differently about themselves and guilt and shame are impacted so I think we're likely to see that they are powerful anti trauma mechanisms again used clinically in the right hands and and I think that we're also going to see that they're a heuristic for understanding our brain that goes against what I see as some of the reflexive hubris of well the outer parts must be the best because that's what makes us human and other animals don't have it and we're better because we're human it means it makes a sense you know I'd like to talk about MDMA and I'll preface this by saying I was a participant actually technically I'm still a participant in a clinical trial so I have experience of doing it twice the trial involves three separate dosings of this I was reluctant to do it outside of a clinical trial most because I was aware there can be some cardiac effects and I like the idea there'd be a clinician on hand and I'll just say that I found the experiences to be profound beneficial and very different from one one session to the next the first one felt a whole collection of ideas and relational things came up that felt very powerful and transformative and I do think that I learned there I exported a number of things my particular experience is irrelevant here but the second time I expected it to be the same way and it was very mellow and relaxing and was it was deeply tied to kind of notions of acceptance so there weren't all these revelations and wow new insights it was very much about sort of grounding into a kind of a calmer state so I have the personal experience of benefiting from these in ways that I think still benefit me and was very struck by the power of MDMA and my very crude understanding of the pharmacology and the state that is being under MDMA is that it encourages or increases dopaminergic transmission but also serotonergic transmission which is to my knowledge it kind of a rare state for the brain to be in that typically it's more of a seesaw of dopaminergic drive towards external goals or more serotonergic drive towards you know more plasticity or comfort with what one already has and so with both those systems amplified the only way I can describe it subjectively is that it everything sort of funneled back in and it was almost like a pursuit of inner landscape and I can only imagine what it would be like in the context of doing this with somebody else also taking MDMA I have no idea what that's like that's my report of the experience I know that the experience can vary what are your thoughts about the chemistry and the what sorts of states do you think MDMA is creating that can explain why it's a useful therapeutic tool in some cases and what sorts of cases those might be sure decline for I think part of what we're starting with is like this is very different than the psychedelics right which are seeding our consciousness in these deep centers of the brain right whereas what MDMA is doing is sort of flooding with positive neurotransmitters right in certain parts of the brain and I think what that creates is a greater permissiveness inside to entertain or approach different things right so the so I think where we see it's tremendous my read of the data is around potentially and we're seeing in some of the trials right tremendous benefit for trauma right and you think about what we're talking about earlier how this reflexive guilt shame hyper vigilance avoidance right and when these systems are are flooded with these neurotransmitters it's more permissive to think about that right and to think about that without again all the chatter of that your fault or you're never going to get anywhere because of that or you know what that means right there they can kind of go away and then we can think about it in a way that isn't through the lens of fear right and I think that's the power there is that there is permissive of approaching something contemplating something you know a different a novelty we talk about a denovo approach and I think that's also why the experience can vary because you could also see how if you're not thinking about something right so there's not a clinical guidance to it you could you could be in a state where like I just feel good right and I'm thinking about good things and like that can feel good right but but that's not necessarily problem solving right so the clinical guidance says hey let's take that state and do something with it right let's now that you're in this state let's hey let's make hey well the sun is shining right you're in a state where we can look at things that are traumatic right we can approach them from a denovo perspective and I think it's part I think that explains why you had these different experiences from one to the other because your brain is just in a state that's conducive to something right but if there's not the the mechanism to have that thing happen like conducive to something therapeutic then you might go there on your own or you might just be in a state where you have a sense of well-being and and you sit with that would sort of seems like a waste to me I mean this is what I tell people when they ask about MDMA I said I said at least from my experience that the the potential hazard there is that in that very high dopaminergic serotonergic state there were moments where I felt like I could get excited about any one specific concept that I might even just think about for instance uh you know water and how nourishing it is and really just go down the path of water and the world and all the water and you can you know you're in a a state that is very prone to suggestion yes internal suggestion and so the guidance turned out that guidance from the clinician turned out to be immensely valuable in allowing me to go into my own heads for a bits of time but then also to resurface and and share an exchange in a way that to I'm trying really get something out of it that was useful in that I could export because of course water is wonderful but I'm not really interested in growing my relationship to water and I really felt like and I could understand for the I never went to raves or anything growing up I never did MDMA recreationally but I understood for the first time how people could get really attached to an environment and feel connected to things because I think with all that serotonin you just feel connected to everything around you so I think it's a slippery slope there and I and I don't know what the future of the clinical use of MDMA looks like but I would hope that whoever's thinking about I'm guiding these sessions is really thinking carefully also about evolving the practice to help people really move through in a sequential way so they can leave with something valuable. Yes 100% and 100% these are such powerful tools and if they're powerful tools and we're using them without respect for them right without clinical guidance we incur risk right I mean you know getting obsessed with water well on it probably isn't going to hurt you right but if someone is out using it there's around other people what one can feel positively about or becomes sort of obsessed in a short term about can be very counterproductive right there can be a lot of risk to that so I think it anchors back to these are very powerful tools we're coming to understand them much much more and we're coming to understand that they have immense potential to be helpful to us but I think and hope that that only also increases our respect for those modalities and what can come what negative can happen if we're if we're not respectful. This can be very interesting to see where all of this goes in the next few years not just in Oregon but elsewhere it's one way or another it's happening it seems to have a momentum that is not going to stop so very exciting area to be sure. I agree. I have a question about language in your book you talk about how we need to be careful about the use of language around trauma and maybe problem solving and problem describing in general. You know on one extreme you hear that your brain and your body hear every word you say and you know we have to be so careful with language and that actually frighten me for a number of years because I would hear that and I thought gosh if I just think that something is bad now it's going to hurt me worse which itself is part of that whole you know packing down of an issue very hard to avoid thoughts without distraction. So that's one extreme on the other hand you know I can say I can tell somebody I love them with a tone of hatred I can tell somebody I hate them with a tone of love. So how should we think about language in parsing trauma and in your book you talk about you give some cautionary notes about talking about depression trauma and PTSD in terms that that might diminish their real severity in some cases and I was really struck by that so maybe just touch on you know how should we talk about these things in a way that doesn't diminish them for ourselves or for other people and at the same time honors the fact that there's a lot of trauma out there and there's a lot of depression out there and we need to talk about it. Yeah I think this is a very complicated and in many ways convoluted topic like I think it's wonderful that we have language but boy language leads us astray often too. You think about how we how people define words like what what someone says a word was it does a person know what that word means and what nuance are they taking from it that we just have to be very careful what we're saying and what we're communicating and I think this doesn't mean because you know there's a sort of phenomenon now where people are trying to control language I think tumour like you can't say anything that someone else might find hurtful you have to refer to people in ways they choose to be referred to even if those are ways that others don't understand or ways they themselves have decided or ways that might be psychologically or clinically unhelpful so I think the over control of language is not good but I think the specificity of language of what are we trying to say how are we defining it or even the word trauma right we're talking about traumas we wanted to find what that means right it doesn't just mean like anything kind of negative right because then that deludes it down to meaning nothing right it also doesn't just mean you know injury and combat right like we have to talk about what that is so I think anchoring it to something that rises to the magnitude of overwhelming our coping skills and changing us like then at least I define it that way and I can communicate that to you and we can understand what we're talking about right I think that another aspect of language while again we need this middle ground and I don't think that it is okay for the over control of language to shut down expression but we also have to acknowledge you know how we're so much less distance from each other through social media and I think social media can do very very good things is hopefully we're doing now right but it can also be used to harm people from a distance right and how much hatefulness is there out there that I think comes from anger and frustration in people again back to trauma right where people just want to be angry and it's not really issues if they're talking about but then there's a target of that anger and and you know people feel beleaguered by that and the words that people use sometimes are so awful that someone reading that like if you're in the demographic that's being targeted right and you're reading that I mean how does a person not feel you not feel um be set upon a vulnerable right and then I think that also fuels you know things like we just had this is terrible shooting in Buffalo right like just hate motivated right and I think that because that kind of language becomes very real to people who may take it in it fuels their hate and then they do something to enact it which of course creates greater fuel and vote fear and vulnerability and I think there was some civility and decorum that was in our world not that long ago right I mean you know I'm in my early 50s I'm not that old right but I remember a time when when in political discourse a people were civil to one another right now so much it means not all of it right but there's an acceptance of things that are just bombastic right it's like it's a circus side show sometimes of of you know people being just angry and aggressive and and it's not really linked to anything although it's allegedly linked to something but then other people's anger can attach to it and it's not about what it's about but it's about allowing with the anger and and I think that there is so much damage that comes from that and and I think you know should we have should it be okay that people sometimes are talking communicating using language in ways that would like get us suspended from middle school right ways I don't want my eight year old to see I mean is that really okay or do we need to take a stand for rational use of language I don't want my use of language to be over controlled by someone who thinks they sort of understand better than the rest of us how to communicate with us okay I don't want that what's stereotypically a sort of idea of the left say right at least in our society but I also don't want language it can be so angry and so aggressive that it is perpetuating or spreading vulnerability and that it facilitates trauma and and I think we could set standards as a society where we say look I don't I don't want anybody in power who who's going to behave that way right I don't care if their whole agenda is like make Paul Conti's life better I'm still not going to vote for you right if you're behaving towards others in a way that's denigrating you're behaving in a way that I feel essentially ashamed of right and and I feel that a lot right see the politics you know I see things play out it's not always political of course not always political but I see things play out and I think oh my gosh I feel embarrassed like we're we're somehow okay with this where it doesn't matter which side of the political spectrum it's coming to and I think that's an indicator that what we're doing is really hurtful to us people become more angry they attach to the anger um people feel more beleaguered there's more divisions between us then it seems more and more like well we can only really identify with people who are just like us and like what does that really mean I mean the the divisions that it creates between us and and and that you know that promotes so many negative things right I mean think about ways in which it promotes white supremacy right it's just one example right and we've seen that play out that this is really bad for us and we've got to look at that I mean if we don't look at that I don't think it's always something is going to happen like something is happening right it's happening now yeah and I'm it really to my mind it really seeps down into the soil of everything that we're talking about on all sides yes people are activated people are are upset about one thing or the other right no one is immune from upset regardless of political affiliation right everybody seems to be upset now days and um as I was hearing you talk about this I I feel a lot of resonance with what what you said and I also am hoping you run for office thank you so I don't think I have the gumption for that but thank you for all that would be wonderful thank you I'd like to talk about a concept of taking care of oneself this comes up in the book yes and this is something we talk a lot about on this podcast I mean I think people have heard me blab endlessly and I'll probably go into the grave telling people to get sunlight in their eyes when they can and to try and get proper sleep and to have a few tools for reducing their anxiety in real time and and on and on and on um you know we hear about this concept of taking care of oneself and and I think at a surf level it can sound a little bit light you know oh take care take care take good care you know we um but to me it's a deep and powerful concept and I was very happy to see it in your book and also to learn a lot of um of ideas about what that really looks like um because whether or not somebody is in the early stages of considering whether or not they have trauma or is in the deep stages of working that through or has made it through the tunnel some distance taking one care of oneself as an ongoing process um I'd love for you to just describe what taking care of oneself means to you as a clinician and of course the practices and things that you encourage people to do but but how we should how should we think about taking care of oneself because on one extreme you could imagine a massage as retreats vacations and um uh chefs for hire that take care of everything for ourselves um and on the other extreme you could say um you know leaning into life in a way that you're paying attention to small things while working very very hard um so it's such a big concept uh but how do you think about taking care of oneself how should I take care of myself how should people take care of themselves sure I see here what I think is a very fascinating dichotomy right that in some ways I think about how complex our brains are right how complex our psyches our unconscious minds are there so much complexity there but on the other hand psychological concepts that are consistent with health are often very simple right which but which I don't mean light right but but simple straight forward right and and I think self care is absolutely one of them I mean how much is talked about how to take care of oneself that just skips over the basics that are necessary as a building block for all else or it doesn't matter how many chefs or vacations or whatever a person has if the basics of self care aren't squared away and it's not a light concept to say like look are you sleeping enough right are you eating well are you getting natural light are you interacting with people who are good to interact with right are you accepting negative interactions in your life are you living in circumstances that make you feel okay or not the they're very very basic premises but so often we're not looking at them at all right we're not looking at them at all because we tend to skip over them and we tend to skip over them either because again in some automatic way that sometimes is trauma driven or we're not going to look at that right and often not taking care of ourselves can have the punishment distraction right there's so much that can come into that or our sense of power is is tied to not taking care of ourselves I mean I give you an example is I tend to for whatever reason do reasonably well with very poor self care right and like that was very adaptive when I was in some medical training right and I'm like okay I can I can eat a lot today I can not eat right I can sleep two hours I can sleep eight right I mean overall that's not good and it hasn't been good for me as I've aged but then I realize some people I'm doing all these things that make myself healthier but like what I ignore that right and why am I ignoring that was a key question why am I ignoring it because somewhere inside of me is it was and still to some extent is this idea that my ability to be really functional right to generate success in the world around me is tied to my ability to do that right that off I but if I stop doing that and now I'm like I'm eating and sleeping regularly then I'm going to lose some edge and so so even I think about this all the time but I've I realize hey I'm also I'm not doing it inside you know and and I think it's really grounding to the basics that really help us of like what are the basics of what I'm doing and not doing in my life diet exercise lead people circumstances leisure activities I mean sunlight I think immensely important and dramatically undervalued I want to thank you for that and I want to thank you for today's discussion I found it to be incredibly informative and I know our listeners will also I also want to thank you for the work you do I mean you obviously run an incredibly robust clinical practice that I'm aware that you're constantly trying to improve even though it's operating at the highest levels already and I really the reason why you're here today is because I I've done a wide and deep search for people in these areas and there are so few who have the background in medical training and physiology in the psychoanalytic and psychiatric realm and also have grounding toward the future you know of what's coming and who can encapsulate so many different orientations and bring them together into a coherent piece so I really thank you yeah and for your book which is incredible I will go on record saying I think this is the definitive book on trauma and I really encourage people to read it and we'll continue to encourage people to read it it's so many valuable takeaways and insights and tools there so on behalf of the listeners and myself thank you so much for joining us today you're very welcome and I take that to heart and I'm very appreciative of being here so you're very welcome and thank you as well thank you thank you for joining me for my discussion with Dr. Paul Conti I also highly recommend that you explore his new book which is trauma the invisible epidemic how trauma works and how we can heal from it it's an exceptional resource both for those that have trauma and those that don't have trauma or those that suspect they might have trauma again it's a deep dive into what trauma is and offers many simple tools that anyone can apply with a therapist or not in order to heal from trauma and if you'd like to learn more about Dr. Conti and the work he does directly with patients please check out his website pacificpremiergroup.com we've also provided a link to both the book and pacificpremiergroup.com in the show note captions if you're learning from and are enjoying this podcast please subscribe to our YouTube channel that's a terrific zero cost way to support us in addition please subscribe to the podcast on both Spotify and Apple and on both Spotify and Apple you can also leave us up to a five star review on YouTube you can leave us comments or suggestions about content that you'd like us to cover as well as suggestions of future guests that you'd like us to host on the podcast we do read all those comments please also check out the sponsors mentioned at the beginning of today's episode that is the best way to support this podcast not so much in today's episode but in many previous episodes of the human lab podcast we discuss supplements while supplements aren't necessary for everybody many people derive tremendous benefit from them for things like improving the transition time and the depth of sleep each night for improving focus for managing anxiety and for many other aspects of mental health physical health and performance for that reason the human lab podcast has partnered with momentous supplements because first off they are of the very highest quality they also ship internationally which many other supplement companies do not and we wanted to have a one stop location where people could find and access the supplements that are discussed on the human lab podcast so if you go to live momentous.com slash huberman you will find many of the supplements that are commonly discussed on the human lab podcast I should just mention that the catalog of supplements there will be expanding in the weeks and months to follow but already a number of them for sleep and focus and other aspects of mental health physical health and performance are already there at live momentous.com slash huberman if you're not already following huberman lab on instagram and twitter please do so there I cover science and science based tools some of which overlaps with the content of the human lab podcast but much of which is distinct from the information covered on the huberman lab podcast. We also have a newsletter called the neural network newsletter where we offer distilled information so lists of protocols and key takeaways from podcast episodes. If you want to sign up for the newsletter all it requires is your email please know that we do not share your email with anybody we have a very clear privacy policy you can find all that by going to hubermanlab.com there's a menu there where you can sign up for the neural network newsletter you can also immediately get access to some example newsletters so you know what the newsletter is all about. So thank you once again for joining me for my discussion with Dr. Paul Conti and last but certainly not least thank you for your interest in science.