

## How Trauma Lodges in the Body

by Krista Tippett

The following is the audio and transcript of an [onbeing.org](http://onbeing.org) interview between Krista Tippett and Bessel van der Kolk.

KRISTA TIPPETT, HOST: The psychiatrist Bessel van der Kolk is an innovator in treating the effects of overwhelming experiences on people and society. We call this “trauma” when we encounter it in life and news, and we tend to leap to address it by talking. But Bessel van der Kolk knows how some experiences imprint themselves beyond where language can reach. He explores state-of-the-art therapeutic treatments, including body work like yoga and eye movement therapy.

He’s been a leading researcher of traumatic stress since it first became a diagnosis in the wake of the Vietnam War, and from there, was applied to other populations. A conversation with this psychiatrist is a surprisingly joyful thing. He shares what he and others are learning on this edge of humanity about the complexity of memory, our need for others, and how our brains take care of our bodies.

DR. BESSEL VAN DER KOLK: I think trauma really does confront you with the best and the worst. You see the horrendous things that people do to each other, but you also see resiliency, the power of love, the power of caring, the power of commitment, the power of commitment to oneself, the knowledge that there are things that are larger than our individual survival. And in some ways, I don’t think you can appreciate the glory of life unless you also know the dark side of life.

MS. TIPPETT: I’m Krista Tippett, and this is On Being.

[music: “Seven League Boots” by Zoe Keating]

MS. TIPPETT: Bessel van der Kolk is a professor of psychiatry at Boston University Medical School, and he helped found a community-based trauma center in Brookline, Massachusetts. As medical director there, he works with people affected by trauma and adversity to re-establish a sense of safety and predictability in the world, and to reclaim their lives. Bessel van der Kolk was born in the Netherlands. His own father spent time as religious prisoner in a German concentration camp during World War II. I spoke with him in 2013.

MS. TIPPETT: I always start my conversations with this question, whoever I’m speaking with. I’m just wondering, was there a religious or spiritual background to your childhood?

DR. VAN DER KOLK: Yeah, multiplicity. My parents were fundamentalist Christians in some good and some not so good ways. As an adolescent, I spent a fair amount of time in a

monastery in France called Taizé.

MS. TIPPETT: Oh, you did? Oh, interesting. So you went to Taizé just...

DR. VAN DER KOLK: Because I loved the music.

MS. TIPPETT: Yeah. This field you're in of trauma, traumatic stress, nowadays, this language is everywhere, right? This language of "trauma" and "traumatic stress" has made its way into culture, movie, TV scripts, the news, public policy discussions. I've read a few different accounts of how you stumbled into this field. How do you trace the beginnings of your research into traumatic stress?

DR. VAN DER KOLK: Well, it starts in a very pedestrian way. I mean, as characters from a generation that it was generally recommended that people have their own heads examined, which, I think, is sort of a good idea if you try to help other people. So psychoanalysis was the way to do that back then. And the only program that paid for that was the VA. So I went to work for the VA for the same reason that soldiers go to the VA, namely, to get their benefits package.

MS. TIPPETT: This was in the 1970s? Is that right?

DR. VAN DER KOLK: It was in the 1970s, yeah. And like many of my colleagues, I was just there to — as a step in my career. And then the very first person I saw was a Vietnam veteran who had terrible nightmares. I happened to have studied nightmares up to that point and some sleep studies, and I knew a little bit how to treat it, so I gave him some medicines to make the nightmares go away.

Two weeks later, he came back, and I said, "So how did the medicines work?" And he said, "I did not take your medicines because I realized I need to have my nightmares because I need to be a living memorial to my friends who died in Vietnam." And that statement was the opening of my fascination about how people become living testimonials for things that no longer exist, but they need to hold it in their hearts and minds and bodies and brains. The loyalty to the dead, the loyalty to what was just blew me away.

And the veterans really touched me very deeply both for what they had done, how ashamed they were about what they had done, how they went in idealistically, how they came back broken, how they relied on their comrades. And they reminded me, I think, of the uncles and my father, who I grew up with in the Netherlands after the Second World War. So it resonated with me.

MS. TIPPETT: At that time, I believe there was no formal connection made between military service and problems after discharge, right? This diagnosis hadn't happened?

DR. VAN DER KOLK: Well, it comes and goes. I became quite interested in history of how Western culture has looked at trauma. And people were very aware of it in the 1880s, and after the Civil War, and during the First World War, and during the Second World War. And then, in between, it gets forgotten. And so, the way — the time that I got into the field, happened to be a time of ignorance again. It was come and go.

MS. TIPPETT: After the Vietnam War.

DR. VAN DER KOLK: Yeah.

MS. TIPPETT: And my understanding from your writing that this diagnosis of PTSD, the term we use now, came about because of post-Vietnam War advocacy.

DR. VAN DER KOLK: Yeah, absolutely. And so later on, I became aware of all sorts of colleagues who had been working with abused kids and rape victims. And they had been trying to get a diagnosis in. And that group was too small to have any political clout. And it's really the Vietnam veterans that brought this in and the power of the large numbers of psychiatrists and patients at the VA. That was strong enough to make it an issue and a diagnosis.

MS. TIPPETT: So I think that language you used a moment ago about that first veteran you spoke with, that he was a living testimonial to his memories and to something that had happened, which no longer was happening but utterly defined him, is a good way in to how you define trauma. So I'd like to spend a moment on that. I mean, start with me. How do you describe what this is, trauma, as you deal with it, as you study it, as you treat it?

DR. VAN DER KOLK: Well, what I think happens is that people have terrible experiences and — we all do. And we are a very resilient species. So if we are around people who love us, trust us, take care of us, nurture us when we are down, most people do pretty well with even very horrendous events. But particularly traumas that occur at the hands of people who are supposed to take care of you, if you're not allowed to feel what you feel, know what you know, your mind cannot integrate what goes on, and you can get stuck on the situation. So the social context in which it occurs is fantastically important.

MS. TIPPETT: Something that's very interesting to me in how you talk about trauma, the experience of trauma, what it is, is how the nature of memory is distorted, that memories are never precise recollections, but that in general, as we move through the world, memories become integrated and transformed into stories that help us make sense. But in the case of traumatic memories, they're not integrated, and they're not even really remembered as much as they're relived.

DR. VAN DER KOLK: That's correct. There's actually a very old observation, and it was made extensively in the 1890s already by various people, including Freud. That's really what you see when you see traumatized people. Now, these days, the trauma is a popular subject. People say, "Tell me about your trauma." But the nature of our trauma is that you actually have no recollection for it as a story in a way.

Many victims, over time, get to tell a story to explain why they are so messed up. But the nature of a traumatic experience is that the brain doesn't allow a story to be created. And here, you have an interesting paradox that it's normal to distort your memories. Like, I'm one out of five kids. When we have a family reunion, we all tell stories about our own childhood, and everybody always listens to everybody else's stories — says, "Did you grow up in the same family as I did?"

MS. TIPPETT: Right. There are five versions of every story.

DR. VAN DER KOLK: Yeah. There's all these very, very different versions, and they barely ever overlap. So, people create their own realities in a way. What is so extraordinary about trauma, is that these images or sounds or physical sensations don't change over time. So people who have been molested as kids continue to see the wallpaper of the room in which they were molested. Or when they examine all these priest-abuse victims, they keep seeing the silhouette of the priest standing in the door of the bathroom and

stuff like that. So it's these images, these sounds that don't get changed. So it's normal to change.

My old teacher, George Vaillant, did a study that you may have heard about. It's called the Grant Study. And from 1939 to 1942, they followed the classes at Harvard every five years, and it's going on to this day. Most of them went off to war in 1942, and almost all of them came back in 1945, and they were interviewed. And then they have interviews in 1989, 1990, 1991. It turns out that the people who did not develop PTSD, which was the vast majority, tell very different stories, let's say, in 1990 than back in 1945. So now it was a glorious experience, it was a growth experience, and how good it was, how close they were to people, and how patriotic they felt. And it's all sort of cleaned up.

MS. TIPPETT: Right. But it's become a coherent narrative.

DR. VAN DER KOLK: But it's very coherent, and it's a nice story, and it's good to listen to it, and relatives have all heard it a million times, but — because we make happy stories in our mind. People who got traumatized continue to have the same story in 1990 as they told back in 1945, so they cannot transform it. When we treat people, you see the narrative change, and people start introducing new elements.

I compare it very much to what happens when people dream. Maybe dreaming is very central here, actually, in that the natural way in which we deal with difficult stuff is we go to sleep and we dream, and next day we feel better. It's very striking how we get upset and say, "I'm going to move to Florida, bummed day in Boston in the winter." And the next morning, you wake up, and you shovel out your car, and everything's fine.

And so sleep is a very important way in which we restore ourselves. And that process of that restoration that occurs during REM sleep — dream sleep — is probably an important factor in why traumatic memories do not get integrated.

MS. TIPPETT: And also, that gets at the fact that it's not just cognitive, right? It's not just a story that you could tell. I mean, it may eventually become a story, but that it's body memory. It's a neural net of memory. It's not just about words that you can formulate.

DR. VAN DER KOLK: Yeah. It's amazing to me what a hard time many people I know have with that. This is not about something you think or something you figure out. This is about your body, your organism, having been reset to interpret the world as a terrifying place and yourself as being unsafe. And it has nothing to do with cognition, with — you can say to people, "You shouldn't feel that way," or, "You're not a bad person," or, "It wasn't your fault." And people say, "I know that, but I feel that it is."

It was very striking in our yoga study because we see yoga as one important thing that helps people who've been traumatized because they get back into their bodies. How hard it was for people to even during the most blissful part of the yoga practice called Shavasana, what a hard time traumatized people had at that moment to just feel relaxed and safe and feel totally enveloped with goodness, how the sense of goodness and safety disappears out of your body, basically.

MS. TIPPETT: I want to talk about yoga in a minute. That's really — I mean, as you said, people were talking about this in the late 19th century. Freud talked about it and I guess his phrase was "hysteria." But something that you seemed to have noticed early on is that traditional therapy was ignoring this sensate dimension of these experiences in trying to reduce it to talk therapy, which absolutely didn't fit with the experience.

DR. VAN DER KOLK: Right, right. There's a few people here and there in the last 150 years who do it. The great Frenchman Pierre Janet did, Wilhelm Reich, of course, who then went crazy afterwards. Here and there, people noticed the somatic dimension of it, but by and large, I think psychology training really breeds the tensions of body out of people. It's a medical training. It's amazing. Psychiatrists just don't pay much attention to sensate experience at all.

Antonio Damasio, in his books, *The Feeling of What Happens*, in books like this, really talks about a core experience of ourselves is a somatic experience, and that the function of the brain is to take care of the body. But it's a minority voice. It's a small voice.

MS. TIPPETT: But it seems to me that what we're learning from brain imaging is bearing out these kinds of observations. I mean, what are we learning? Is any of this surprising to you?

DR. VAN DER KOLK: What we see is that the parts of the brain that help people to see clearly and to observe things clearly really get interfered with by trauma and the imprint of trauma is in areas to the brain that really have no access to cognition. So it's in an area called the periaqueductal gray, which has something to do with the sort of total safety of the body. The amygdala, of course, which is the smoke detector, alarm bell system of the brain — that's where the trauma lands, and trauma makes that part of the brain hypersensitive or renders it totally insensitive.

MS. TIPPETT: And the Broca's area?

DR. VAN DER KOLK: Well, in our study and some others, I mean, for me that was really the great finding early on, is that when people are into their trauma, Broca's area shuts down. That is something that almost everybody has experienced. You get really upset with your partner or your kid, suddenly you take leave of your senses and you say horrible things to that person. And afterwards, you say, "Oh, I didn't mean to say that."

The reason why you said it is because Broca's area, which is sort of the part of your brain that helps you to say reasonable things and to understand things and articulate them, shuts down. So when people really become very upset, that whole capacity to put things into words in an articulate way disappears. And for me, that is a very important finding because it helped me to realize that, if people need to overcome the trauma, we need to also find methods to bypass what they call the tyranny of language.

MS. TIPPETT: Don't ask to be verbal, to verbalize it.

DR. VAN DER KOLK: Or to be reasonable. [laughs]

MS. TIPPETT: Right. [laughs]

DR. VAN DER KOLK: The trauma is not about being reasonable or to be verbal or to be articulate.

[music: "Third" by Hiatus]

MS. TIPPETT: I'm Krista Tippett, and this is *On Being*. Today, with psychiatrist Bessel van der Kolk. He's a leading innovator in the treatment of traumatic stress.

[music: "Third" by Hiatus]

MS. TIPPETT: So it seems like there are all these impulses that we have that we're working with all the time that get so out of whack with trauma, and so, I mean, I've understood that it's not just that we have memories and that we process them in different ways, but also that we are constantly rationalizing, that we have this impulse to rationalize. But then when people are traumatized, they are actually — they also have this impulse to rationalize and then become unable to grasp the irrelevance of that memory and that feeling to the present moment.

DR. VAN DER KOLK: Yeah. So we have these two different parts of our brain, and they're really quite separate. So we have our animal brain that makes you go to sleep, and makes us hungry, and makes us turned on to other human beings in a sexual way, stuff like that. And then we have our rational brain that makes you get along with other people in a civilized way. These two are not all that connected to each other. So the more upset you are, you shut down your rational part of your brain.

When you look at the political discourse, everybody can rationalize what they believe in and talk endlessly about why what they believe is the right thing to do while your emotional responses are totally at variance with seemingly rational behaviors. We can talk till we're blue in the face, but if our primitive part of our brain perceives something in a particular way, it's almost impossible to talk ourselves out of it, which, of course, makes sort of verbal psychotherapy also extremely difficult because that part of the brain is so very hard to access.

MS. TIPPETT: Yeah. We're pretty fascinating creatures, aren't we? [laughs]

DR. VAN DER KOLK: Fascinating, disturbing, glorious, all those things. [laughs]

MS. TIPPETT: All those things all at once. So I do want to talk about yoga now, which is something very important to me as well, something I've discovered in the last five or six years. How did you get interested — how did you discover yoga and then make that part of this kind of work?

DR. VAN DER KOLK: We actually got into yoga in a very strange way. We learned that there is a way of measuring the integrity of your reptilian brain, i.e., how the very most primitive part of your brain deals with arousal. And you measure that with something called heart rate variability, and it tells you something about how your breath and your heart are in sync with each other.

It turns out that the calmer people are, and the more mindful people are, the higher their heart rate variability is. And then we were doing that on some traumatized people, and we noticed that they had lousy heart rate variability. Then I thought, so how can we change peoples' heart rate variability?

MS. TIPPETT: And is this something you'd naturally be aware of or not? You wouldn't know if it was in sync or out of sync?

DR. VAN DER KOLK: No, but you can measure it and it's fairly easy to measure it. There are like apps for your iPhone on which you can measure them. But, of course, we do it in a more sophisticated way. So we found this very abnormal heart rate variability in traumatized people. And then we heard that there were 17,000 yoga sites that claimed that yoga changed heart rate variability.

A few days later, some yoga teachers walked by our clinic and said, “Hey, do you think you can use this for some project?” And I said, “We sure can. We’d love to see if yoga changes heart rate variability.” This whole yoga thing also fits very well with the increasing recognition that traumatized people cut off their relationship to their bodies.

And I have to give a little bit of background here. Way back already in 1872, Charles Darwin wrote a book about emotions in which he talks about how emotions are expressed in things like heartbreak and gut-wrenching experience. So you feel things in your body. And then it became obvious that, if people are in a constant state of heartbreak and gut-wrench, they do everything to shut down those feelings to their body.

One way of doing it is taking drugs and alcohol, and the other thing is that you can just shut down your emotional awareness of your body. And so a very large number of traumatized people who we see — I’d say the majority of the people we treat at the trauma center and in my practice — have very cut off relationships to their bodies. They may not feel what’s happening in their bodies. They may not register what goes on with them. And so what became very clear is that we needed to help people for them to feel safe feeling the sensations in their bodies, to start having a relationship with the life of their organism, as I like to call it.

And so a combination of events really led us into exploring yoga for them. And yoga turned out to be a very wonderful method for traumatized people to activate exactly the areas of cautiousness, areas of the brain, the areas of your mind that you need in order to regain ownership over yourself. I don’t think that yoga would be the only way to do it, or I think if you only do yoga, that you can totally take care of it.

But yoga, to my mind, is an important component of an overall healing program and, again, not only yoga. You could do maybe martial arts or qigong, but something that engages your body in a very mindful and purposeful way — with a lot of attention to breathing in particular — resets some critical brain areas that get very disturbed by trauma.

MS. TIPPETT: Do you also have a yoga practice?

DR. VAN DER KOLK: I also have a yoga practice. I do. Not enough, of course. None of us ever does enough. But I try to start every day with a yoga practice.

MS. TIPPETT: Now, did I read somewhere that you also found that your heart rate variability was not in sync and was not robust enough?

DR. VAN DER KOLK: [laughs] I like to keep quiet about it. That’s true, that’s true.

MS. TIPPETT: And do you know if yoga has helped your...?

DR. VAN DER KOLK: Yeah, I have a nice, even heart rate variability now.

MS. TIPPETT: I wonder if you have ever heard of somebody named Matthew Sanford, who I’ve had on my program. He’s actually...

DR. VAN DER KOLK: No.

MS. TIPPETT: He’s a very renowned yoga teacher. He’s been paraplegic since he was 13,

and he had no memory of the accident in which he was disabled, and his body remembered it. He talks about body memory. It's the same thing you say, this imprint that trauma has not just on your mind. The other thing that he's doing recently is actually working with veterans and also working with young women suffering from anorexia and understanding also that, although that seems to be so much an obsession with the body, they are really in a traumatic relationship with their own bodies.

DR. VAN DER KOLK: Absolutely, yes.

MS. TIPPETT: Some of the things he's doing, which he actually did for me — I did a class with him, like just putting these very comforting weights on certain muscles, so you feel sunk into your body in a way. And I don't know I just was thinking — I've been thinking about this as I've been reading about your research.

DR. VAN DER KOLK: Huh. It sounds very sympathetic and very right. The sense of the experiences, of feeling weight and feeling your substance...

MS. TIPPETT: Yes, feeling your substance which is bigger than just feeling a weight on your muscles, isn't it?

DR. VAN DER KOLK: Yeah. Really feeling your body move and the life inside of yourself is critical. Personally, for example, when people ask me, "So what sort of treatments have you explored?" — I always explore every treatment that I explore for other people — what's been most helpful for me has been rolfing.

MS. TIPPETT: Has been what?

DR. VAN DER KOLK: Rolfing. Rolfing is called after Ida Rolf. It's a very deep tissue work where people tear your muscles from your fascia with the idea that, at a certain moment, your body comes to be contracted in a way that you habitually hold yourself. So your body sort of takes on a certain posture. And the idea of rolfing is to really open up all these connections and make the body flexible again in a very deep way.

I had asthma as a kid. I was very sickly as a kid because I was part of this group in the Netherlands. Finally, after the war in the Netherlands, during which I was born, about 100,000 kids died from starvation, and I was a very sickly kid. I think I carried it in my body for a long time, and rolfing helped me to overcome that, actually. So now I became flexible and multipotential again.

And for my patients, I always recommend that they see somebody who helps them to really feel their body, experience their body, open up to their bodies. And I refer people always to craniosacral work or Feldenkrais. I think those are all very important components about becoming a healthy person.

MS. TIPPETT: But they're not that easy to find. They're still kind of around the edges, Feldenkrais and craniosacral. Isn't it strange how, in Western culture, in a field like psychotherapy — or even I see this a lot in religion — in Western culture, we turn these things into these chin-up experiences. We separated ourselves; we divided ourselves. I see this — I mean, yoga is everywhere now, right? And people are discovering all kinds of ways, as you say. There are all kinds of other ways to reunite ourselves, but...

DR. VAN DER KOLK: But it's true. Western culture is astoundingly disembodied and uniquely so. Because of my work, I've been to South Africa quite a few times and China



and Japan and India. You see that we are much more disembodied. And the way I like to say is that we basically come from a post-alcoholic culture. People whose origins are in Northern Europe had only one way of treating distress. That's namely with a bottle of alcohol.

North American culture continues to continue that notion. If you feel bad, just take a swig or take a pill. And the notion that you can do things to change the harmony inside of yourself is just not something that we teach in schools and in our culture, in our churches, in our religious practices. And of course, if you look at religions around the world, they always start with dancing, moving, singing...

MS. TIPPETT: Yeah. Crying, laughing.

DR. VAN DER KOLK: Physical experiences. And then the more respectable people become, the more stiff they become somehow.

[music: "Scene of the Sunrise" by Miaou]

MS. TIPPETT: You can listen again and share this conversation with Bessel van der Kolk through our website, [onbeing.org](http://onbeing.org).

I'm Krista Tippett. On Being continues in a moment.

[music: "Scene of the Sunrise" by Miaou]

MS. TIPPETT: I'm Krista Tippett, and this is On Being. Today, with psychiatrist Bessel van der Kolk. He investigates state-of-the-art therapeutic treatments, including body work like yoga and eye movement desensitization and reprocessing therapy — or EMDR.

MS. TIPPETT: I also would like to ask you just about this EMDR because I had not heard of this before.

DR. VAN DER KOLK: Oh, really?

MS. TIPPETT: No, I hadn't.

DR. VAN DER KOLK: Well, EMDR is a bizarre and wondrous treatment. And anybody who first hears about it, myself included, thinks this is pretty hokey and strange. It's something invented by Francine Shapiro, who found that, if you move your eyes from side to side as you think about distressing memories, that the memories lose their power.

And because of some experiences, both with myself, but even more with the patients of mine who told me about their experiences, I took a training in it. It turned out to be incredibly helpful. Then I did what's probably the largest NIH-funded study on EMDR. And we found that, of people with adult-onset traumas, a one-time trauma as an adult, that it had the best outcome of any treatment that has been published.

What's intriguing about EMDR is both how well it works and then the question is how it works, and that got me into this dream stuff that I talked about earlier, and how it does not work through figuring things out and understanding things. But it activates some natural processes in the brain that helps you to integrate these past memories.

MS. TIPPETT: I mean, it sounds so simple. And even when I was reading about it, moving

your eyes back and forth — I mean, is this something that you can do for yourself? Or is there something more complex going on?

DR. VAN DER KOLK: I imagine it can be done, but it's usually better if you do it with somebody else who sort of stays with you, helps you to focus, makes eye movement for you by having somebody else follow your fingers. But it is astoundingly effective treatment. And it's interesting that, even in the most biased studies, EMDR keeps coming up as this very effective treatment. It's been very difficult to get funding to find out the very intriguing underlying mechanisms of it. And I think if we really find out the mechanism for EMDR, we'll understand how the mind works much better. It's an outstandingly effective treatment.

So if people have had one terrible thing that they cannot get out of their minds, that, for me, is the treatment of choice. Of course, the people who come to see me in my practice oftentimes have had multiple traumas at the hands of their intimates also, so then it gets much more complicated than just a memory issue. But if it's just a car accident or a simple assault, it's astoundingly effective.

MS. TIPPETT: That's fascinating. Something else I read is you were reflecting on Hurricane Hugo, hurricanes in general or natural disasters, this phenomenon we see of people helping each other, of getting out there and helping each other — and you also look at that and see that it's not just that people are helping each other; they're moving their bodies. Again, there's this physical involvement kind of as antidote to the helplessness of the situation, which is so manifest.

DR. VAN DER KOLK: Good. I'm really glad you read it because people talk a lot about stress hormones. Our stress hormones are sort of the source of all evil. That's definitely not true. The stress hormones are good for you. You secrete stress hormones in order to give you the energy to cope under extreme situations. So it gives you that energy to stay up all night with your sick kid or to shovel snow in Minnesota and Boston and stuff like that.

What goes wrong is, if you're kept from using your stress hormones, if somebody ties you down, if somebody holds you down, if somebody keeps you imprisoned, the stress hormones keep going up, but you cannot discharge it with action. Then the stress hormones really start wreaking havoc with your own internal system. But as long as you move, you are going to be fine. As we know, after these hurricanes and these terrible things, people get very active, and they like to help, and they like to do things, and they enjoy doing it because it discharges their energy.

MS. TIPPETT: So we are healing ourselves. We don't realize that, but we know how to...

DR. VAN DER KOLK: We are using our natural system, basically. We're not only healing; we're coping. We're just dealing with what we need to cope with. That's why you have that stuff. That's why we survive as a species. What was disturbing in Hurricane Hugo, which was my first encounter quite a long time, and what we saw again in New Orleans, is how these victimized populations were prevented from doing something, and that's really what the observation was.

MS. TIPPETT: Right. And that that compounded the trauma.

DR. VAN DER KOLK: Yeah. So I get flown into Puerto Rico after Hurricane Hugo because I've written a book about trauma. I knew nothing about disasters, but nobody else knew

anything either, so they flew me in. And what struck me — I landed in Puerto Rico, and everybody is busy doing stuff and building things, and everybody's too busy to talk to me because they're trying to do stuff. But on the same plane that I flew in with, officials from FEMA came in, who then made announcements, "Stop your work until FEMA decides what you're going to get reimbursed for."

And that was the worst thing that could have happened because now these people were using the energy to fight with each other and to pick war with each other instead of rebuilding their houses. That's, of course, similar what happened in New Orleans, where people also were kept from being agents in their own recovery.

MS. TIPPETT: I wonder how you look at this world we live in now where it feels like there's an acceleration of what you might call collective traumatic events or tragedies. It seems to be more and more predictable that around the corner there will be a bombing or a school shooting or a terrible event that's involved with the weather. How does what you know about trauma help you think about this or...?

DR. VAN DER KOLK: I'm not sure if I share that view with you. I think there's so much more news, so we're much more aware of whatever happens at any particular moment. And of course, the news media, when you wake up in the morning, find the worst thing that happens somewhere in the world to serve it to you for breakfast. So we get served much more. I don't think there's more trauma, actually.

MS. TIPPETT: You don't think more bad things happen? You just think that...?

DR. VAN DER KOLK: When I read about how Abe Lincoln grew up — he'd lost his mother, and they moved to houses all the time, and they were starving, and he had nothing. I mean, you read the stories about all the immigrants, all those people who died, and the number of assaults in New York City and around the country. I don't think we live in the worst world. And I think people are also much more conscious today than they were, let's say, 100 years ago.

No, I really have studied the history of trauma. My favorite human folly is the First World War. If you think the world is bad right now, think about the First World War. Unbelievable. So I don't think things are necessarily worse, and I think — when I go around the country, and I see the number of programs that very goodhearted people have for school kids, etc., I'm continuously astounded by the amount of integrity and creativity and good will that I see everywhere around me.

At the same time that you see something as horrendous as in Philadelphia — the school system of the public schools in Philadelphia abolished arts programs, gymnastics, counseling, and music programs. I go, "Where have these people been in order to have a minded focuses?" You need to move your body. You need to sing with other people. And if you think that your kids are going to do better if you keep them stock-still in a classroom taking tests, you don't know anything about human beings.

So you still hear about horrendous things all the time, but I see a great deal of consciousness at the same time. And I see that people are really trying to carve out more consciousness and more democracy in various places around the world.

MS. TIPPETT: I mean, you're right. It's all these things at once. But let's say — something I'm aware of is how — and this would be different from the First World War era where we get these pictures, these vivid images with this immediacy brought to us, right? And I

personally — and I think this is true collectively too — I don't know what to do with those images. And what I often — it's so disturbing, and then there's also this impulse that you just have to cut yourself off from that feeling because I can't do anything for that particular picture. And then there's this guilt and this feeling that that's not a satisfactory reaction. I mean, it's altogether...

DR. VAN DER KOLK: See, there's a very dark side to this also and that is that there's a certain tropism, a movement towards misery in our lives so that, if things become too quiet, it becomes boring. When you see the preview of coming attractions in the movie theater, you go like, "Oh my god. What are these people watching?" People are drawn towards horrendous stuff all the time. So it is part of that dark side of human nature to want to live on that edge. It's very hard. It's hard to deal with.

MS. TIPPETT: It's very hopeful that you spend your life working with trauma, with victims in this research. But you have a pretty refreshingly, hopeful feeling about us as a species.

DR. VAN DER KOLK: Well, you see, part of that I get from my patients. What is so gratifying about this work is that you get to see the life force. People go through horrendous stuff everywhere all the time, and yet, people go on with their lives.

MS. TIPPETT: And you see that, you experience that again and again.

DR. VAN DER KOLK: I see it all the time. I see kids who grew up under terrible circumstances, and some of them do terribly. But then last week, we had our conference here, our annual conference in Boston, and somebody presented her work on doing meditation in maximum security jails. And you see these really bad-ass guys come to life because of this meditation program.

And I see people getting better with another program that I'm involved with is a Shakespeare program for juvenile delinquents here in Brookshire County where the judge gives kids a choice between going to prison or being condemned to be a Shakespeare actor.

And, I go to the Shakespeare program, and these actors do a beautiful job with these kids, and you see these kids come to life as they're being valued as an actor and a person who is able to talk. What I see is the huge potential that people have to crawl out of their holes.

[music: "Frontiers" by Floratone]

MS. TIPPETT: I'm Krista Tippett, and this is On Being. Today, with psychiatrist Bessel van der Kolk.

[music: "Frontiers" by Floratone]

MS. TIPPETT: I read your research, and I think about this whole picture that we've been discussing of all the different ways people are reaching out for methods to become more self-aware — yoga, meditation, using these insights of neuroscience. Sometimes I wonder if, 50 years from now or 100 years from now, people might look back on therapy, the way we've done it for 50 years or whatever, and see it as a really rudimentary step towards a much more profound, reaching for awareness and consciousness, mindfulness.

DR. VAN DER KOLK: Well, I think people have always done good therapy, and our culture

and our insurance structure is not really geared towards really very good therapy nor is our psychological training, which is there to fix people and get rid of their disorder as fast as possible. But therapy as in people really getting to know themselves very well and examining themselves and being seen and being heard and being understood has always been around. And I think it will always be around.

And I don't think we'll ever talk about it as necessarily primitive because the intimate interchange of people really talking about their deepest feelings and their deepest pain and having persons listen to it has always been, and I think it always will be, a very powerful human experience.

MS. TIPPETT: So the language people sometimes use about trauma would be — there's a lot of spiritual language that we intuitively grasp for, "soul stealing." I wonder how you think about the human spirit in the context of what you know about trauma and resilience and healing.

DR. VAN DER KOLK: That's a very tough question.

MS. TIPPETT: I know. [laughs] I think you're up to it, though.

DR. VAN DER KOLK: Something that I tended to stay away from. But, I think trauma really does confront you with the best and the worst. You see the horrendous things that people do to each other, but you also see resiliency, the power of love, the power of caring, the power of commitment, the power of commitment to oneself, to the knowledge that there are things that are larger than our individual survival.

And some of the most spiritual people I know are exactly traumatized people, because they have seen the dark side. And in some ways, I don't think you can appreciate the glory of life unless you also know the dark side of life. And I think the traumatized people certainly know about the dark side of life, but they also, because of that, see the other side better.

MS. TIPPETT: You said somewhere that PTSD has opened the door to scientific investigation of the nature of human suffering. That's a profound step, right? I mean, to me, that's the spiritual way to talk about this field with a profound understanding of what the word "spiritual" means.

DR. VAN DER KOLK: Yeah. Well, I think this field has opened up two areas. One is the area of trauma and survival and suffering, but the other one is also — people are studying the nature of human connections and the connection between us, also, from a scientific point of view.

As much as trauma has opened up things, I think the other very important arm of scientific discovery is how the human connection is being looked at scientifically now and what really happens when two people see each other, when two people respond to each other, when people mirror each other, when two bodies move together in dancing and smiling and talking.

There's a whole new field of interpersonal neurobiology that is studying how we are connected with each other and how a lack of connection, particularly early in life, has devastating consequences on the development of mind and brain.

MS. TIPPETT: And it's true isn't it from your study that, that if people learn to inhabit their

bodies, to be more self-aware, that these qualities and habits can serve, can create resilience, can serve when trauma hits. Is that right?

DR. VAN DER KOLK: Absolutely. So if you particularly — there's two factors here. One is how your reptilian brain — if you breathe quietly in your body and you feel your bodily experience, and stuff happens to you, you notice that something is happening out there, and you say, "Oh, this really sucks. This is really unpleasant." But it's something that is not you. So you don't necessarily get hijacked by unpleasant experiences.

The big issue for traumatized people is that they don't own themselves anymore. Any loud sound, anybody insulting them, hurting them, saying bad things, can hijack them away from themselves. And so what we have learned is that what makes you resilient to trauma is to own yourself fully. And if somebody says hurtful or insulting things, you can say, "Hmm, interesting. That person is saying hurtful and insulting things."

MS. TIPPETT: But you can separate your sense of yourself from them.

DR. VAN DER KOLK: Yeah, but you can separate yourself from it. I think we are really beginning to seriously understand how human beings can learn how to do that, to observe and not react.

MS. TIPPETT: I think I just want to come back as we close to this idea that somehow, the point of all of this, the take-home for you, and I'm not finding the quote, is that we have to feel safe, that we have to feel safe and that we have to feel safe in our — that has to be a bodily perception, not just a cognitive perception. And that somehow everything comes back to that.

DR. VAN DER KOLK: It is the foundation, but you need to actually feel that feeling. You need to know what is happening in your body. You need to know where your right toe is and where your pinkie is. Your body — you need to sort of be aware of what it's doing.

MS. TIPPETT: It's very nitty-gritty. Is that what you're saying?

DR. VAN DER KOLK: It's very, very basic but sorely lacking in our diagnostic system is simple things like eating and peeing and pooping because they're the foundation of everything, and breathing. These are foundational things, all of which go wrong when you get traumatized. The most elementary body functions go awry when you are terrified.

So trauma treatment starts at the foundation of a body that can sleep, a body that can rest, a body that feels safe, a body that can move. And I love the example of your guy who's paraplegic and who does yoga because, even when your body is impaired, he can still learn to own it and to have it.

MS. TIPPETT: Yes. he says he's not cured, but he's healed. And here's a striking statement you've made that "victims are members of society whose problems represent the memory of suffering, rage, and pain in a world that longs to forget."

DR. VAN DER KOLK: Did I say that?

MS. TIPPETT: You did.

DR. VAN DER KOLK: That's brilliant. [laughs]

MS. TIPPETT: [laughs] And I find that so worthy of reflection.

DR. VAN DER KOLK: Well, that's the literature we read, that's the movies we watch, and that's what we want to be inspired by. That's what we observe is that spirit. Toni Morrison and Maya Angelou and these people can talk very articulately about having dealt with and stared adversity in the face and still maintain that humanity and faith. That's what's it all about.

[music: "Enjoy the Calm" by Drew Barefoot]

MS. TIPPETT: Bessel van der Kolk is medical director of the Trauma Center at the Justice Resource Institute in Brookline, Massachusetts. He's also a professor of psychiatry at Boston University Medical School. His books include Traumatic Stress: The Effects of Overwhelming Experience on the Mind, Body, and Society and The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma.

[music: "Trifle (Consoles Because A Trifle Troubles)" by Infradig]

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MS. TIPPETT: Our lovely theme music is provided and composed by Zoe Keating. And the last voice that you hear singing our final credits in each show is hip-hop artist Lizzo.

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