

Dave Asprey ([00:00:01](#)):

You are listening to the Human Upgrade with Dave Asprey.

([00:00:07](#)):

You are listening to the Human Upgrade with Dave Asprey. Today we're going to talk about something that you might not think is in the world of biohacking, but it is, that is heartbreak. Heartbreak, from my perspective, is actually an injury. It's just not a physical injury, and it's something that we do need to recover from, and it's something that you can study. And if you ignore the effects of that as a part of your universe of things outside of you and inside of you that you can change in order to change your biology so that you're more in charge of yourself, then maybe you're missing an important variable and by sort of thinking, you just have to walk it off or you don't have to acknowledge it. You may be shortchanging yourself or maybe someone around you is dealing with it. So you're going to learn by the end of this episode how heartbreak affects human health and how you or people you care about can recover from it and be stronger than they were before.

([00:01:13](#)):

And our guest today is Florence Williams, who's an award-winning author, a journalist, and has studied this after going through her own painful divorce. And she's like, well, what's going on with this? So she looked at the physiological things that happen after loss and separation. And if you're listening to this saying, I'm in a great relationship, this isn't for me. I promise to you that in the people around you, there are quite a few people who are dealing with the effects of heartbreak. And if you don't think that that relationship with little Susie back in 11th grade, which is usually around the time, a lot of people experience their first heartbreak. If you think that's not still affecting you at some way in your relationship, you might be surprised to learn that it can leave deep marks. And I know this from more than 1500 people who've come through 40 years of Zen. I have yet to find someone who doesn't run the reset process on something. Maybe that happened 20 or 30 years ago, I'm going, oh wow, that left a mark. Just like a surgery or an injury can leave a scar. I think a heartbreak can as well. With that said, Florence Williams, welcome to the Human Upgrade.

Florence Williams ([00:02:26](#)):

Thank you so much, Dave. It's great to be here.

Dave Asprey ([00:02:28](#)):

Tell me about what happened with you, what led you to go down this path?

Florence Williams ([00:02:32](#)):

Well, I've been a science journalist for a long time. An environmental journalist I've long been interested in how it's going on in our environment affects our bodies psychologically and physically. And I had always written loosely in the first person, just in a casual way as sort of a guide to the material, but not in a very personal way. But my marriage of 25 years came to a rather sudden end, not by my choice. And I had been with the man who was my husband since I was 18. Wow. So many decades together. My entire adult life had never really lived on my own or felt like I was marching through the world on my own. So when the marriage ended, it really threw me for a loop. And I guess when my friends had gone through heartbreak before, I had kind of thought, oh, just get over it.

([00:03:32](#)):

What's the big deal? Obviously that person wasn't right for you, stop being so melodramatic. But then what had happened to me, I was like, oh my God. All of those metaphors that you hear about that you

feel like you've lost a limb or you're floating alone in a deep sea by yourself, there's so much poetry and there's so much drama and there's so much philosophy and literature about heartbreak. All of a sudden it all seemed incredibly relevant and it felt like it wasn't just an emotional event, but that it was actually affecting my body. And that's when the journalist in me was like, why am I feeling this all over my body? Why do I feel like I've been plugged into an amplifier? Why do I feel like I'm getting sick? Why am I losing weight? Why am I unable to sleep? What's going on in my cells and in my brain? And why isn't the science of heartbreak more talked about?

Dave Asprey ([00:04:38](#)):

Science journalists are some of my favorite people. And it's because this weird scientific method thing where you observe something which is the start of the scientific method and oh, here's a hypothesis. And then you go out and you do this broad search to find meaning in something. So some of the most interesting books I've read come from science journalists who dealt with something and said, well, let me apply my craft to myself. That kind of sounds a lot like biohacking and the deep understanding and the way of explaining it to others is also an art. So I appreciate that you focused your professional work on a question that just came to mind. And I would like for all of us, whether or not we're going to be journalists about it to take, just take a little bit of, that's the word I'm looking for.

([00:05:28](#)):

Take a little bit of inspiration from this. And by the way, guys, this is a little side note I just had to grasp for a word that doesn't happen very often to me. And every time it happens now I ask myself a question, why did I have to pause to think of that word? And I do this because as another science, I dunno if I'm a journalist, I just write science books. Not I guess 3000 articles makes me a journalist, but they're all blogs. But that's something else that I noticed in my own divorce is my working memory. My memory recall went down and as someone who had chronic fatigue syndrome, I used to forget words a hundred times a day. And now once a week even stands out, so I don't have to go into explanations for why, but I know why I couldn't find that word. And I'm like, dammit. Anyway, back to your story. This is why science journalism is so interesting, just constant curiosity about ourselves. What happened? Tell me a little bit more about your separation. You mentioned physiological things. You mentioned that you were losing weight. I'm guessing your sleep went to hell.

Florence Williams ([00:06:35](#)):

My sleep absolutely went to hell. My stomach went to hell. Some months after the separation, I was actually diagnosed with an autoimmune disease, which was type one diabetes is typically diagnosed in children. And weirdly, as I went through my reporting, I ran into other people who were divorced and were diagnosed with type one diabetes in the wake of their divorce. I talked to a researcher at Stanford who said that typically a lot of these autoimmune diseases do have a trigger as well as probably a genetic predisposition and other things going on, but a stress trigger is often there. So someone mentioned the term divorce diabetes. Was that a thing? Again, I was very interested in that. There's a psychologist at the University of Arizona who said to me, divorce is a story of inflammation. So I thought that was absolutely fascinating.

Dave Asprey ([00:07:42](#)):

Is that just for heartbreak of divorce or a broken relationship or is this also just for grieving in general loss of a parent?

Florence Williams ([00:07:50](#)):

I think any kind of big emotional distress is going to affect a lot of cellular processes in our body. So I worked pretty closely with Dr. Steve Cole at UCLA. He's a psycho neuro immunologist. He studies, the way he put it is our cells listen for loneliness that cells in our immune system are keeping an eye out on how we are feeling about the world. How do we feel about our place in the world? Do we feel safe? Do we feel secure? Do we feel abandoned by primary attachment partners? Do we feel abandoned by our kin group? Which is kind of what happens when you've lost someone in a divorce. And it can also happen when you feel bereft, when you've lost someone, you're very close to death. When we feel alone in the world, we feel threatened. And that goes back to our deep evolutionary past and our cells become more hypervigilant to danger, more vigilant to threat in a social situation like that, which was I thought, unexpected and strange. And we went in and in the spirit of self-experimentation, Steve Cole measured my own blood cells at various time points past the divorce as I tried different interventions to see if those genetic transcription factors and genetic markers were changing as time went by. After the separation,

Dave Asprey ([00:09:27](#)):

Did they change?

Florence Williams ([00:09:28](#)):

They did change, which was the good news. They changed pretty slowly. So I think a lot of us, maybe after we have some kind of emotional earthquake, we think we can fight through it. We can get over it quickly. We try to biohack it fast. Doesn't feel good to be in that state of grief and anxiety. But as with many things related to the human heart and related to grief, there is no standard time process for treatment or for cure. It's going to go at its own pace. I felt like I did speed it up and I felt like my transcription factors did change and my genetic expression changed. But it took a while, took a couple of years actually. And research shows that on average it takes our bodies about four years to return to baseline after divorce, which is a lot longer I think, than most people would like to hear.

Dave Asprey ([00:10:32](#)):

I feel like that's something you can pretty rapidly accelerate and a couple different techniques come to mind, partly because my next book includes this technique as a central core. But the first one is Joe Dispenza's work. You go, you do profound breath work and meditation for a week, and you go into these altered states where you can go in and almost talk to the cells in your body and change their state. And just like the research you did, he has thousands of data points actually. He has millions of data points from thousands of people now that are very rigorous around cytokines and saliva and tears and gut bacteria and blood work showing, huh a profound transformational process seems to have really big physiological effects. And then the second one would be this reset process, which is a gratitude and forgiveness process That's at the core of the first half of people who come to my 40 years of Zen neuroscience brain upgrade program. I did my divorce and a couple other just big betrayals in business. I ran that process on myself and had a really profound shift of physiologically in a week. And it feels like there be old religious things, old spiritual traditions or old ways that we must know how to do this faster than four years. What is the fastest way that someone could get over heartbreak?

Florence Williams ([00:12:06](#)):

I kind of divide the sort of treatment into three big buckets. The first is that we really need, as you say, to get into a different head space, but really it's a different nervous system shift. We have to get out of that state of threat and into a state of calm. So the first bucket is calm. It sounds like you were able to

do it with breath work. I think for me the most effective way is to be in nature. I had written a lot about the psychological benefits of being in the natural world, how that helps lower our heart rate. It helps shift our HRV into a different nervous system state. So that's the first one is calming down and the second one is connection. So I feel like that also helps us feel safe. It helps us feel like we're not alone in the world.

[\(00:13:00\)](#):

It helps us feel like we're connected to the world around us, which is a terrific psychological state to be in. I also partly found that by connecting to nature, but also connecting to good friends, good family members. And then the third piece was really the sense of meaning. How do you take the tragedy? It feels like a trauma and find meaning in it as you move forward with your life. And that's the post-traumatic growth. So how can I take this information, explain it in a way that helps other people? How can I find some purpose in that? Meaning?

Dave Asprey [\(00:13:43\)](#):

It's interesting that you talk about connection. Our current surgeon general came on the show a few years ago and talked about the only book he's ever written, which was that we're suffering from an epidemic of a lack of connection from our community. But what you're dealing with is a lack of connection from your primary love relationship and your community at the same time. How do you reconnect with your community after you end a relationship? Because usually your relationship is entwined in your community.

Florence Williams [\(00:14:20\)](#):

And the other thing that happens is when you go through something like this, you become very self-absorbed. This is your pain, it's your personal pain. Heartbreak maybe only happens a couple of times in a lifetime. And so at the time you're going through it, your friends are not, I was really the only person I knew going through divorce at that time of my close friends.

Dave Asprey [\(00:14:43\)](#):

How old were you?

Florence Williams [\(00:14:44\)](#):

I was just on the cusp of 50.

Dave Asprey [\(00:14:47\)](#):

And you were the only one of your friends getting divorced. It feels like it's divorce

Florence Williams [\(00:14:50\)](#):

Season around then. I think it was just a little bit ahead of the curve. But I think there's this that sort of misconception that, and in fact, my ex-husband said this to me. He's like, oh, 50% of marriages end in divorce. What's the big deal? Get over it. But actually in my demographic, which is college educated professional white woman who's been married for 20 years, 14% divorce rate. Really? It's that low. Yes, 14%. So that's why it felt lonely. It was like, how come I'm the only one I know going through this? You're right now, in the last few years, I feel like I know a lot more people going through it. Divorce season is upon us anyway. So you feel very separate from your community when you're going through

something like this. I found that it was, I had this incredibly life-changing conversation with a psychologist at the University of Utah.

[\(00:15:49\)](#):

Her name's Paula Williams. She studies the factors that make individuals more resilient to stressful events. And this was very important because already there's a lot of data about how just people who go through divorce are 26% more likely to die young. They're more likely to have heart attacks, they're more likely to suffer from chronic illness. So that data was terrible. So it was very comforting to talk to a woman who said, no, no, there are some factors that make individuals more resilient. She said, what my lab is studying is, and this was totally unexpected to me, the power of beauty and the power of awe to help us get over it and we can actually learn to become more open to beauty, more open to awe. She had been a dancer in a previous life. She was very interested in the way arts affect us emotionally and psychologically as someone who was already very connected to the natural world.

[\(00:16:55\)](#):

I found talking to her wildly hopeful because I thought, okay, I want to learn how to become more open to experiencing awe through nature. And if I was going to sort of claw my way through heartbreak, I was going to awe my way through heartbreak. And you asked about community, which is why I'm bringing this up, because there's a lot of research on the science of awe and the psychological effects we get from experiencing op. One of the things it does is it does reduce our cortisol levels. It can shift our nervous system, but it makes us feel more connected to the world around us. It makes us more likely to get along with people around us more likely to engage in community. Lots of experiments show this, that when we're looking at a picture of a jumping whale or a waterfall, we donate more money, we'll give away more lottery tickets, we'll perform better on teams. We act more socially and at the same time we start thinking less about our own personal dramas.

Dave Asprey [\(00:18:02\)](#):

That's one of the reasons I go to Burning Man.

Florence Williams [\(00:18:04\)](#):

Yeah, exactly.

Dave Asprey [\(00:18:05\)](#):

I get a sense of awe just riding my bike around in the middle of the night going, I think I'm in Star Wars. It's hard to put words to it, but I think you did a great job. Yeah,

Florence Williams [\(00:18:15\)](#):

I, so there are many different ways to experience awe. Nature is one of them, but being part of those collective sort of cultural events like Burning Man or a symphony or a flash mob, we know it gives us the goosebumps and it makes us feel tingly and it makes us look around. And just watching the eclipse recently, you just feel suddenly very friendly and benign towards your neighbors.

Dave Asprey [\(00:18:44\)](#):

I decided to make it more of an awe inspiring experience in Austin, which is right in the center of it. So I was out in nature with about 200 people at an event, and we had a well-known spiritual musician playing during the eclipse and just turned it into as awe inspiring of an event as possible in community because well, why not? In order to deepen that? Well,

Florence Williams ([00:19:11](#)):

There's one of my favorite studies actually out of the University of California during the eclipse in 2017, researchers analyzed, I think it was about a million tweets, and put them through a word algorithm and found that people in the zone of totality used more pronouns like we and us compared to people outside the zone of totality who were using more words like I or mine. And I think that really illustrates the way when we're confronted with this incredible awe, we suddenly feel like we're part of something.

Dave Asprey ([00:19:47](#)):

You talked about beauty as being an antidote for grief, and what I've found is the first step of just truly letting go of anything like this is gratitude. And the neuroscience states of experiencing beauty and experiencing gratitude, I believe are about 99% the same. There's specific shifts in the brain that happen. And so for me, turning on gratitude more profoundly in people's brains as I'm helping them through a process at 40 years of Zen or just in my own, it feels like there's visualization practices that I teach, but there are also some compounds that really accelerate gratitude. We just are in the very late stages of launching ketamine experiences at 40 years of Zen as a small part of the program, as an add-on for people who want to use a medicine like that. The brainwaves that come out of that, the amount of power behind the gratitude states is meaningfully enhanced. Do you look at any of the plant medicines as a way of dealing with the problem of grief or the problem of heartbreak?

Florence Williams ([00:21:01](#)):

Yeah, absolutely. I underwent a number of interventions during the course of the two years. I was writing the book and we were testing those transcription factors in my immune system before and after, and one of them was psychedelics. So I talk a lot about awe. And in fact, one of the mechanisms for transformation that's hypothesized for why these psychedelics are so effective in helping people is that they make us see God or we feel this unity with the universe. And so I really wanted to try it. It's like awe on steroids. It's like big awe

Dave Asprey ([00:21:47](#)):

Psychedelics are like awe on steroids. That's a great quote.

Florence Williams ([00:21:50](#)):

Yeah, absolutely. So I worked with a therapist and I actually did what they sometimes call a hippie flip dosing. My favorite. Oh, okay.

Dave Asprey ([00:22:01](#)):

What is it? Say it

Florence Williams ([00:22:02](#)):

Again. Yeah, I started with a dose of MDMA, which I had never done before. And then about 30 minutes later, I took a full dose of psilocybin. And I think because of the MDMA, the theory was that I would be more open to the medicine of the psilocybin and feel like it was a more benign experience. I was a little bit afraid of it. I was afraid of losing control of myself. And I'm a very cognitive person, generally science journalist. I didn't really want to lose my sense of self. I mean, I did, but I was afraid to. So the MDMA helped and then yeah, I mean I had about a six hour experience with the psilocybin, and I honestly think of all the things I tried to recover from heartbreak, that that was maybe the most effective one. And I

think the reason I had the guts to do it was I was interviewing Dr. Dacker Keltner at uc Berkeley, who is really, really influential in the studies around awe. And he's a child of the sixties as well. And I said to him, do you think I should try psilocybin for heartbreak? And he sort of closed his door and he said, yeah, absolutely.

Dave Asprey ([00:23:22](#)):

There are now two studies showing that taking MDMA with either LSD or psilocybin reduces the chances of retraumatizing yourself. So when people talk about having a bad trip, it's not really a bad trip. It's that you went back to a painful place and you maybe because you didn't have the skills or the knowledge or the safe setting, you instead of doing the work on the space, you just re-experienced it. But MDMA in combination with those dramatically reduces the chances of that happening so people can get more healing experiences.

Florence Williams ([00:24:00](#)):

I think that's right. I think you're going to see potentially scary things while you're tripping. But I think that the advice you hear from people is if you see a door open it, if there's something dark happening, there's probably a message for you in that darkness. And I think taking the MDMA makes you go, yeah, okay, I'm feeling comfortable with this darkness a little bit

Dave Asprey ([00:24:26](#)):

More. It feels to me like MDA or MDMA similar compounds, MDA is a little bit less energizing and aggressive than MDMA, but both of those dramatically enhance your feelings of connectedness.

Florence Williams ([00:24:42](#)):

Absolutely.

Dave Asprey ([00:24:42](#)):

And now you're in an altered state, and if you look at Stan Goff's work, I had the honor of having him on the show in his mid nineties. This is the guy who pioneered LSD therapy and then holotropic breath work. He talks about how in particular LSD, but probably also psilocybin, take you back to actually experiences that you would've had during your birth process or in the womb. These are very, very deep subcellular states and that combination, oh, now I re-experienced that and I felt connected. And you can create the connection without any drugs. This is not a call for listeners to go just randomly experiment with stuff. It's just saying that if you're working with someone who's certified or trained in facilitating, you might find that there's really deep healing that comes. It's not about going to Burning Man and doing LSD to have a sense of awe. This is about going in and it feels like editing your own operating system at some levels. Does that resonate with you?

Florence Williams ([00:25:44](#)):

Yeah, it absolutely does. And again, I think the mechanism is still awe, and I don't think you need psychedelics to find it. I think as people say, it's a little bit of a shortcut perhaps, or it's a very dramatic handing over of that emotion. But I think the key principles are that you kind of feel like your own self and your own problems are really not as big a deal that they are. I had this very clear vision while I was tripping, but people get this who meditate. People also get it in the face of incredible beauty that our emotions are molecules. They chemical reactions in our brains that we are molecules, the universe is molecules, we share molecules. And it's kind of like, I mean, I had this very clear message during my own

experience that these are molecules. It's not that big a deal. We all experience them, they're universal. Suffering is universal. We're all in this together. And your own sense of your own ego is maybe not as important as you think it is.

Dave Asprey ([00:27:07](#)):

What's the role of ego when you're going through a heartbreak?

Florence Williams ([00:27:13](#)):

I think it takes on an outsized proportion. All you can think about is yourself and your pain and your friends get tired of you because you're just talking about it on and on. I mean, my friends were very nice. They didn't tell me they were getting sick of me, but I know that you just end up talking about yourself and your pain all the time, and even you get tired of it. So I think it's really important for us to remember that this is a human emotion and it's okay. It's okay to experience the full range of human emotions. I think as someone who was a science journalist and felt like things should be logical all the time, that I probably was not very comfortable feeling difficult emotions as many of us in the western world are not right. We try so hard not to feel discomfort. And I think heartbreak really taught me that to feel alive, you need to feel some pain sometimes and you need to connect with suffering. And that there's actually a beauty in just embracing the full spectrum of human emotions.

Dave Asprey ([00:28:33](#)):

There's pretty good evidence that humans have been intentionally seeking out brief intentional pain for thousands of years because of what you just said. And the latest incarnation of that would be ice baths

Florence Williams ([00:28:49](#)):

And ultra marathons as well.

Dave Asprey ([00:28:51](#)):

That's totally true. Or even a CrossFit workout, right? You're right. And there's neurochemical reasons for that because if you experience pain and acknowledge it, your dopamine sensitivity gets reset. But if you wallow in pain for a long time, it has negative effects.

Florence Williams ([00:29:05](#)):

So here's actually a really interesting thing about that that you just reminded me of with awe. One of the theories about why awe can help make us resilient is that awe makes us a little bit uncomfortable when we're seeing something we don't fully expect to see. There's a surprise element of awe. If you think about our ancestors didn't know there was an eclipse coming, all of a sudden the sky would turn dark and cold and the birds would freak out. That's a little bit terrifying for a moment. There's something in awe that we don't really understand. So when we experience it, it's kind of like the ice bath. It's an inoculation against a little bit of stress and a little bit of discomfort so that when emotional earthquakes happen, we're better at kind of returning to baseline.

Dave Asprey ([00:29:56](#)):

That makes a lot of sense. You talked about ego a little while ago. I have come to view ego as the force that keeps your body alive as if you're not in there. And I believe it emerges from individual cells all acting together in a distributed consciousness. And that's a different consciousness from my

consciousness, and that came to me over years. But the idea started when I got divorced. I was briefly married in my twenties and it was a really not healthy relationship, and I owned my part of that. And so I went to my first personal development retreat at the end of that one. I just kind of hit rock bottom. I probably could have benefited greatly from your book. And I went because I didn't know what to do. And a friend said, go to this thing. And I did and a bunch of other stuff over 10 days, and I was very rational.

[\(00:30:55\)](#):

And I remember sitting with this very, very wise woman who'd spent 30 years in the field of transpersonal psychology almost since it was invented. And she looked at me when I was just really out of sorts and she said, well, are you feeling anything? I said, yeah, I'm feeling pissed off. All this stuff is stupid. Why do you want me to breathe or hit pillows and all this stuff that people do with those kind of retreats, all of which by the way, can work. And she said, well, are you feeling anything else? I said, no, there's no reason to feel anything else. And she said, do you feel it in your body? I said, well, yeah, I feel something in my stomach. She goes, yeah, there's a name for that. She goes, it's fear. I looked around, I said, there's nothing here to be afraid of, therefore, it's not fear.

[\(00:31:43\)](#):

She just laughed and she said, Dave, fear is an emotion. It doesn't have to be rational. That was the moment when I realized that I can simultaneously be rational and irrational and that's okay. And that eventually led to this understanding of the role of the ego and where it comes from and that it's actually just not me, but it's in there with me. And that's brought me great peace. And it's also allowed some of the more advanced biohacking techniques around letting go of things because instead of thinking, I'm this mishmash of rational and irrational I am, or at least this body is, but it allowed me to delineate where certain emotions were coming from and to acknowledge them instead of pretending like they weren't real. Did you have to do something like that?

Florence Williams [\(00:32:33\)](#):

Yeah, absolutely. I feel like fear in some ways was a really overriding part of my experience with heartbreak. There was the grief over a lost loved one, but so much of it was that I was honestly a little bit afraid of what was going to happen to me now, what was my future going to be like and this totally unexpected future that I didn't think I was going to have? How was I going to move through the world now? Was I ever going to find love again? Was I capable of finding love? Was I going to be able to afford health insurance? I mean, there are a lot of deep fears that come up from an event like this, an experience like this. And I wasn't used to feeling those things, wasn't used to feeling insecure. And so I had to acknowledge that a lot of this drama and upset and probably what was happening to my body was fear-based and threat based.

[\(00:33:34\)](#):

And you're right, I think at some point you have to sort of move through it. You can't just pretend it's not there. The only way to I think work on resolving it is to accept it and kind of have a conversation with it a little bit. And I think that's partly what can happen through some of these therapeutic experiences. I certainly did a lot of therapy of various sorts, but I think fear is a normal part of being human. It's scary to be a human alive in the world, and our ego is there to keep us afraid because without it, we don't have the motivation to do what we need to do to stay alive. So I think rather than thinking of it as something other, we need to accept that it is part of our human experience. And then as you say, figure out ways to at least not sit in that nervous system state all the time.

Dave Asprey [\(00:34:33\)](#):

In the world of biohacking, I teach that there's four or five F-words that drive our bodies and they're all egoic based, but they happen in order before we can really think. And the first one you might guess is fear because it's the strongest one and something might kill me, therefore I should be reactive. And then the body goes into all these inflammatory things. A lot of the physiological stuff that you talk about there is because, well, you felt fear, then there's food because being hungry is a bit of a problem for most species over thousands of years. And then it's, well, it's another F word, and you can probably imagine what it is. I'm thinking of fertility, but I know what you're imagining, but I wasn't going to trick you understanding it. And then the fourth one is friend, which is community and connection. And the fifth one is actually forgiveness because that lets you go back and reduce fear. And that's sort of the order of operations for what our body will do if it can allocate resources in the right way. But I want to ask you about that third F word because in some of the articles I've written, I've found research about 20% of people talk about meeting God during a profound orgasmic experience. And when we go through a heartbreak, we probably aren't with a lover at least for a period of time. How important is reconnecting intimately with people for the healing process around heartbreak?

Florence Williams ([00:36:05](#)):

Well, there are so many directions to go with this question, and there are so many things I can say. I will say that part of the conventional wisdom after a big heartbreak is don't jump into another relationship too soon. You need to learn to love yourself first or you blah blah. Okay. I was not interested in that honestly. I just felt actually very compelled to connect romantically and sexually right away. And I don't really know where they came from except that it was part of my drive, I think to feel alive and to feel validated and to feel worthwhile, all of those things.

([00:36:52](#)):

But interestingly, there is science to back up the idea that having a rebound relationship can be very good for recovering from heartbreak. It can help you regain your self-esteem more quickly. It can help you regain your self confidence. It can help you get over your lost relationship more quickly. And so I was thrilled to find out that there was science there and that the science behind the don't get involved too quickly wasn't necessarily valid. I will say that I would never recommend that people jump out and jump into a rebound relationship. I think that can be risky. You have to do what feels comfortable. So I think it's a very individual kind of decision for me. I think it was actually very helpful. And then I'll also say there's a lot of science around the soothing effects and the stress reducing effects of touch. So we know that oxytocin is a direct counterpoint to cortisol.

([00:38:04](#)):

It doesn't have to come from sex, it can come from pet a dog. It can come from holding hands with a child. It can come from making eye contact with people you're close to. So I do think that human connection that tend and befriend kind of instinct that we have, and women have it more than men, maybe one of the reasons women recover more quickly from heartbreak than men, that human connection I think is a huge part of getting over any kind of stress. I mean, I think the human organism, we live stressful lives. We are kind of designed to feel stress, but we're also designed to recover from it. And that's where I think a lot of us go wrong in modern life. We don't have the ways to recover from stress as part of our sort of culture, the sort of dancing under the Milky Way, sitting by the fire, singing songs together. These are ways we used to recover from the daily drift of stress. And a lot of us just don't do that anymore.

Dave Asprey ([00:39:07](#)):

So much wisdom in that there's two ways you can go after a heartbreak. One is a rebound relationship, and the other one is rebound. We'll call the third F word. So basically you can have sex or you can have a new relationship. And are there benefits to one path versus the other?

Florence Williams ([00:39:27](#)):

Again, I think it's very individual. I was very, I think, aware of not wanting to be in a long-term relationship again really quickly. I mean, heartbreak in some ways provides a fantastic opportunity to rediscover who you are in the absence of a partner. And I had been with the same partner for decades, and suddenly here was this opportunity to be like, oh, I actually really like going to bed early, or I like sleeping in, or I like watching this kind of movie, but you never like that kind of movie. So I never did it. And so I think it's really a gift to be able to take that time to sort of get to know yourself, rediscover who you are and what you like. I mean, here's one example is that my partner actually didn't really physical touch in terms of PDA or holding hands. And so since I was with him since I was 18, I didn't really know if I liked that either. And it wasn't until I had some shorter term or medium term relationships where I really rediscovered these whole new ways to be with a partner that I just loved.

Dave Asprey ([00:40:43](#)):

There's a sense of safety that you have when you're in a relationship, even if it's not a great relationship, at least you have a partner there with you. And you talked about fear and safety is one of the opposites of fear. It's not the only one. In fact, peace is probably a better description of the true opposite of fear. But I have found that men and women are fully capable of generating a state of safety from within themselves that creates profound resilience. And working through a divorce or a breakup or any kind of heartbreak or grief, it teaches you if you do the work that you're not going to die, even though it felt like you were going to die. And I've had this conversation with both of my teenage kids. I'm like, look, there's going to come a time where you meet someone you really like.

([00:41:38](#)):

And almost certainly within a few months there will be a breakup and it's going to feel like you're going to die. And when that happens, let's talk. Because even though it feels that way, that's not true. And this is something that almost all humans go through. I mean, it's just part of being here and when it happens, just know it's a process and you'll overcome it, and that's what friends are for. If you could go back and talk to yourself as a teenager, now that you've wrote a book on heartbreak, what advice would you share with yourself?

Florence Williams ([00:42:18](#)):

That's a really interesting question. I had a therapist who said to me at one point that being alone is a muscle. It's good to practice it even if you're someone who likes being in relationships. It's really good to practice being alone. And I think that would be great advice for a teenager too. There's so much cultural pressure to have a special person in your life and put them on Instagram or whatever it is now. We consider that sort of a success if a person has a sort of visible loved one in their life, and I think that we've really overplayed that. I think that it would be really great if we can also sort of valorize the joys and the generativity and the creativity and the comforts that come from sometimes being on your own.

Dave Asprey ([00:43:18](#)):

It feels like you can have the highest and best quality relationship when you're perfectly comfortable being alone, because then there's nothing pushing you into the relationship and there's nothing making you stay in a relationship other than free choice versus fear. And so I would double down on that. You

have to be perfectly safe being single and having your community and having a connection in nature and awe on beauty and all the things that single people can do. I think before you really step into a new relationship that's likely to be healthier. And if you skip those steps because you have a rebound relationship and you let it become a long-term relationship instead of doing the healing, that seems like a double-edged sword. The rebound relationship is your judgment is clouded when you've just gone through a heartbreak. So it's not what you feel might not be necessarily reflective of what you're going to feel when you're healed, which is why I think your approach is really healthy. So I'll have some shorter medium term relationships with people and see what you like and reconnect and experience the benefits of intimacy. But knowing that, okay, these are probably going to end and just being okay with it. How did you get to be just okay with it given that you just experienced heartbreak and now you're getting some level of physical and emotional intimacy with someone. But this is not a long-term thing.

Florence Williams ([00:44:42](#)):

Yeah, I was totally okay with it. I would've been more afraid of a long-term relationship at that point.

Dave Asprey ([00:44:50](#)):

Amen. Yeah.

Florence Williams ([00:44:51](#)):

Yeah. I think there was such room for a short term and longer and medium term relationships. That said, I think that even in those relationships, you can have a very beautiful and intense connection with another person. And even though you're suffering maybe, and you're still grieving and you're still working on all these things in yourself, you can do that in the context of being in a relationship. So I don't think waiting until you have figured everything out is necessarily the right step either. I think that sometimes it takes relating to another person to push that growth and to help you.

([00:45:35](#)):

I guess I'm a fan of whatever feels right, and I think you should honor that feeling. So sometimes I think you may feel pressured to staying in a relationship longer than you want. And I think you can give yourself permission not to do that. And maybe it's where I am in my life, my kids are raised. I feel like I have different expectations from a relationship now I have a stronger sense of myself. And frankly, as a woman born in the generation Gen X, I'm kind of sick of all the cultural instructions and pressure about what a relationship's supposed to look like. I'm just over it.

Dave Asprey ([00:46:22](#)):

Do you think that some of the newer relationships dynamics that are maybe more public now, things like poly or monogamous or non-monogamy or ethical non-monogamy, and there's like 50,000 words, all of which I don't even remember, are those an antidote to heartbreak? Are they a way of dealing with it? Just talk to me about new relationship styles and what you know about heartbreak.

Florence Williams ([00:46:45](#)):

Yeah, interesting question. I don't have a lot of experience of being in those kinds of relationships, and I'm reluctant to be judgy about

Dave Asprey ([00:46:53](#)):

Them. You're a science journalist, you're judgy by definition, come on.

Florence Williams ([00:46:57](#)):

But it's science based. So after talking to physical anthropologist or I guess she's an anthropologist, Helen Fisher, she's written all these books about the neuroscience of love. She has really convinced me that most of us are in fact wired for partnership and that most of us do get pretty jealous if we have to share kind of a love personally, I think, I believe that I think would have a hard time with Polly. But apparently there are people out there who really make it work and they grow from it and learn from it as well. I

Dave Asprey ([00:47:46](#)):

Feel like jealousy is just unhealed trauma. It's people not feeling safe. And the reason I say this is a while ago, I had two, well-published, well-respected leaders in the field of personal development come through 40 years of Zen with me and with his long-term wife sitting there, he said, well, I have this problem with jealousy. And it almost broke us up years ago. He said, I don't know why it happens, but when I see another guy look at my wife or flirt with her or something, I just lose it. And I've had to do a lot of breathing and calming down, and I still have this angst about it. And one of the techniques that we teach there at 40 years is Zen specifically deals with this. And I said, well, you've learned a new state. This is the state of awe beauty and ultimately letting go, and you have to do it in order with the right neuroscience states to do this.

([00:48:53](#)):

So I said, well, why don't you just go, imagine while you're in the pod doing this altered states work, why don't you just go imagine that she's cheating on you actually doing it. And oh, with a soccer player like a professional athlete, and you could see he kind of turns red in the face and he's like, I don't know if I could do that. And I said, let's just go all the way, the whole soccer team. And she's rolling on the floor laughing, and he's like, oh my God, I think I'm having a panic attack. So we went and he did a process, and when he was done and he did all the steps of the reset process there, he came out going, oh my God, it's gone. I realized I didn't die when I felt into my feelings with that. So now I don't feel like I'm going to die when someone is flirting with her. And it made a meaningful difference because when the body thinks it's going to die, when something happens and it's wrong, that just seems to cause pain. So I feel like jealousy and manifestation of fear. Does that sound accurate?

Florence Williams ([00:50:04](#)):

It does sound accurate. I think I would challenge the idea that it's only a result of unhealed trauma. I think that again, that the way our neuro endocrines on our peptides work in our brain, that we do sometimes feel unsafe and we long for safety. And I think that's even in the absence of unhealed trauma. Yeah,

Dave Asprey ([00:50:32](#)):

That's a very fair point.

Florence Williams ([00:50:33](#)):

I think that people have different thresholds for feeling unsafe. Absolutely. And I think also there's a lot of individual variation, and they've shown this actually in voles that there are some prairie voles are generally monogamous, but there are some prairie voles who aren't. And I think that that is true in humans, that we have different receptors in different parts of our brains that encode for attachment. And so again, I think rather than just being judgy about each other, we should just sort of understand

that there's some variation out there and this is going to work really well for some people and probably not so well for most of us.

Dave Asprey ([00:51:16](#)):

I have some friends who are very unhappy and stressed in Polly because of what we just talked about, and I know a smaller number of friends who have secure attachment and are and are happy as clams. It feels to me like it's secure attachment more so than monogamy that's most important for creating that sense of safety. Talk to me about what a heartbreak does for your sense of attachment.

Florence Williams ([00:51:43](#)):

Well, I think it really questions it and it undermines it, and that's what causes the trauma partly is this broken attachment bond, which is one of the most difficult kinds of pain we are wired to feel. So humans aren't just social animals, but we are hyper social animals. We are designed to take these attachment bonds very, very seriously. When they're broken, we are kind of wired to freak out about it. So the question is repair. How do we regain that sense of trust that these bonds can reappear with a new person? The sad thing is that there's a percentage of people, I think it's about 15% of people who are heartbroken, who really don't get over it. They are not able to form deep new romantic attachments. In that case, there probably is some unhealed trauma. And we know that unfortunately, that's a sizable statistic, 15%. And I think that that's really driving the statistics you see about longevity and morbidity, that these are the people driving the statistics behind early death and disease and this continued feelings of loneliness. So I think that's part of the urgency behind why we need to work hard to recover from heartbreak, to rebuild our trust in each other and why when we have friends going through this, it's important to help them.

Dave Asprey ([00:53:27](#)):

How do you best help a friend who's going through heartbreak?

Florence Williams ([00:53:30](#)):

I think anything we can do to help facilitate those three buckets I mentioned earlier, the calm, the connection, and the sense of meaning and purpose. So for some friends it might be the connection piece, encourage them to talk about it with you, be vulnerable about your own suffering and heartbreak. It was so helpful to me when I would talk to these scientists who were studying the voles or studying even bird song. I mean, there were all kinds of lab animals that I ended up learning about. And in almost every case, I would say to the scientists, I'm interested in this because I'm going through a divorce. And they would say, oh my God, let me tell you about my divorce or lemme tell you about my heartbreak. And that was so helpful to me because as I say, I didn't necessarily have really close friends who were going through it at the time. Take your friend on a hike, drag them to your meditation class or your breathing workshop, help them feel like they are in a safe place.

Dave Asprey ([00:54:38](#)):

I've noticed that the most important thing I can do with heartbroken friends, even if it's not that recent of a heartbreak, is if you know how to really give someone a hug, but a safe hug where you're actually transmitting safety with your field, with your cells, sometimes that can just be magical. You don't even have to say anything just like, Hey, just lemme give you a hug. And you have the eight second hug that releases oxytocin. I've done a couple podcasts on that with Dr. Love, who's done lot of oxytocin research, Paul Zach, and it feels like that can be good, but it has to have intention behind it. And it can't

be a sexually tinged hug. It just has to be just an open-hearted kind of thing. And you can feel someone else's nervous system relax in that like, oh, I just had a taste of safety, like a reminder that that's where they're from and that that's where they're going on their healing journey.

Florence Williams ([00:55:40](#)):

So is 80 seconds the magic number there,

Dave Asprey ([00:55:43](#)):

Just eight seconds or more? Oh

Florence Williams ([00:55:44](#)):

Eight seconds.

Dave Asprey ([00:55:46](#)):

And the HeartMath Institute people, I was an advisor there years ago who have a lot of wisdom. They'll tell you, hug heart to heart, so that you basically put your face over their right shoulder instead of their left shoulder so that the fields of the heart are more closely aligned. And there is a field of the heart that we can measure with a magnetometer. This is real science and physics, not just the area fairy stuff, which also has value. Not saying that just because we believe something, because it's worked a long time and we don't know why, it probably still works. I don't have any issue with that. And so that's the safety part. I've also heard actually from a friend recently who's going through heartbreak who said, well, every time I try to talk about it, everyone else ends up telling me all their stories. And then they start crying and it feels like it's never really about me. I just wanted to share. And then everyone's kind of dumping theirs because there's so much unhealed relationship trauma. Is it better or was it better for you when someone would share that they had a common experience or was it better when they just listened?

Florence Williams ([00:56:53](#)):

I think there's a place for both of those, I guess if you're going to share about your own experience with your friend, make it short. Make it mostly about them, but help them feel like they're not alone in this experience. This reminds me of another sort of antidote to heartbreak, which is the idea of ritual. We don't really, in our culture have rituals for heartbreak. We have so many rituals for marriage and not necessarily for the end of it. And one of the places I traveled for the book was Croatia, because there is a museum of broken relationships. Wow. And I loved this experience. People from all over the world have sent in objects representing their broken relationship, and some of them are very funny. And then they'll write one paragraph about how this object describes their broken relationship. And it's really a beautiful experience because you see how universal this is, that this is a shared human experience, but you also see how just the act of sending in an object, writing a paragraph, and then seeing it under glass in this beautifully lit display helps encapsulate the whole process, provides a little bit of detachment that you're able to now tell a story about it.

([00:58:29](#)):

I think that that idea of being able to write about this in a paragraph, it's almost like how I felt when I wrote the last page of my book, that there's a little bit of closure and you're never going to get full closure from a big heartbreak, as you said in your introduction. That kind of becomes a part of this. But I

think it's very important to be able to have a little bit of that distancing. And sometimes that can come from just the act of narrative.

Dave Asprey ([00:58:58](#)):

I've seen two other things that people do that can be really effective. A while ago, I climbed to the top of Mount Shasta, which is a challenging climb. You've got to spend the night halfway up the mountain, you go at three in the morning with crampons and an ice ax, and it's real mountain climbing. It's not Himalayas, but it's substantial. And you get to the very, very top and there's this metal box that's affixed to the rock, and it's got a heavy lid and you can open it. And you realize how incredibly difficult it was for anyone to carry something that heavy up there. A lot of climbing, every ounce matters. And in there you'll see notes or photos from broken relationships where people are letting go. But the thing that gave me just kind of goosebumps, not just because it was cold, was someone had worn a railroad spike on a necklace that weighs a couple pounds, include worn it for a long time.

([01:00:01](#)):

They were carrying a burden from a relationship and they decided to leave it there in a sacred spot. And so that's one thing is sort of telling the story, doing, then doing a hero's journey to let go of something. And the other one that's more common is Burning Man. There's a temple there. And by the time you're at the seventh day of Burning Man, there's at least 10,000 stories of heartbreak written on the walls. And love notes are photos both for people who are grieving over, people who've passed or grieving over relationships. And you write it there and they burn it at the end, you physically burn it, you let it go. And in my shamanic training, they teach a similar thing where you have a sacred fire or even just a candle and you write down, I'm letting it go. And something in your cells I think knows when you do something like that because the fire is such a primordial thing that it feels like that can be a part of letting go and healing. Did you do ceremonial stuff like that? Little voodoo dolls or anything? What was your preface?

Florence Williams ([01:01:10](#)):

Yeah, I did actually. At one point I, pretty early on, I kind of wrote a letter, I think it was to my ex about why I was ready to say goodbye and then I burned it. But this was at the sort of request of a woman I was doing a workshop with and I wasn't ready to do it. It was too early. It didn't make me feel better. It made me feel worse because at that point I was still sort of trying to grasp on the memories of the relationship. I wasn't totally ready to let go of it yet. And then I did it again about a year later. I was on a 30 day river trip. This was part of my own kind of hero's journey. 14 days of it was solo because I felt like I needed to really embrace this metaphor of learning how to row my own boat now.

([01:02:08](#)):

And I wanted to be comfortable being alone. I wanted to access my bravery, stuff like that. And on one of the last nights of that trip, I did it again and I burned it again. And it felt so right. And at that point it was very cathartic. And then also another thing I did was I took my wedding ring and I put it in a little boat made out of lettuce and I released it. It was not an expensive wedding. I released it down the Potomac River and I did it with of my best girlfriends. And that also just felt really powerful and I was releasing it to the force of the waters. Also, for me, a very beautiful experience. Similar.

Dave Asprey ([01:03:02](#)):

So the role of ceremonial release is I think, underappreciated in western culture, but it sure does make a difference. It sure

Florence Williams ([01:03:12](#)):

Does.

Dave Asprey ([01:03:13](#)):

And part of being able to generate your own feeling of safety comes from understanding you won't die when you're alone. I recognized that I had a fear of being alone. So I ended up asking a shaman to drop me off in a cave for four days all by myself with no food. I also had noticed that if I was feeling lonely, I'd probably eat more. So I said, well, let's just face fear of hunger and fear of loneliness all at the same time. I dunno how else I could have made it worse, fear of a nuclear war or zombies or something. But I did that just to experience it, that brief, intentional pain, and it was a really important moment for me. I wrote my book fast this way about the psychological side of fasting and loneliness and emotional eating and all that. But what it did is it helped me understand that that just deep ceiling, that deep feeling of safety and that it's something you can generate.

[\(01:04:15\)](#):

And it even inspired a Danger Coffee, which is my new post Bulletproof brand, and it's called Danger because who knows what you might do. It's that sense that you know what? I can handle anything. Even being alone, even the fear of rejection of asking someone out or starting something new just to understand I've got this. It's a different kind of piece than the kind of piece where I'm so tired and I'm safe in a jail. It's like the polar opposite of that. And there's some nuance there around teaching your nervous system to feel safe. Now, when you went down that path, did your type one diabetes get better?

Florence Williams ([01:04:55](#)):

So that's the really interesting thing is that we did a blood test before the 30 day river trip, and we did one after, right after that 14 day solo. My transcription factors did not change, even though I felt more comfortable being alone and I felt like I had learned how to row my own boat and I felt how to, I sort of embraced the metaphor of journeying down this river by myself, but that was a little bit of a story I was telling myself. It may have been a helpful story, but it wasn't actually helpful to my cells. So I think it would be really interesting, Dave, if you had checked your cytokine levels after that fast because here's what's going on. We're still our primitive primate selves and we are still actually not that safe when we're alone according to our DNA and our wiring and our nervous system. And it's true that I was, I think a little bit on alert because I was literally in the wilderness by myself. So I really had to be paying attention to am I going to light the beach on fire? Am I going to tie my boat incorrectly? Am I going to lose a critical piece of gear? Am I going to injure myself? You have to be extra careful when you're alone in the wilderness and your cells know that and they are on alert. Actually, it turns out

Dave Asprey ([01:06:38](#)):

To me, it feels like you're not really being extra careful. You're being extra connected because your awareness has expanded and things that you would've never considered before, and you can be aware of them without being afraid of them and just learning that I've got, this is what happens over a week or two in the wilderness.

Florence Williams ([01:06:57](#)):

It may have helped that you weren't eating and that you were sitting in one place, right? I was actually traveling through the wilderness, so I really did have to tie my knots correctly and stuff like that.

Dave Asprey ([01:07:10](#)):

Did you tie them out of wisdom and a knowingness of your competency, or did you tie them out of fear?

Florence Williams ([01:07:16](#)):

I was just double checking them because if you lose your boat, you're fucked, right? So that's what I mean by you're a little bit paying attention and your cells were paying attention. But I loved the feelings of connection I got from, I was talking to a great blue heron every day. There was this bird that was sort of following me down the river. I was noticing so many more animals. I was smelling more smells, my senses really came alive. And I think that that actually helps put your nervous system in a good place,

Dave Asprey ([01:07:52](#)):

A hundred percent. I remember by the time I was done with that experience, I was just being tormented by these things called sweat bees. And they're bees that don't sting you, but they love the smell of sweat. I'm in the desert, so they just come into the cave and just buzz around you. Way worse than flies because they never land on you. They're in your face all the time. And I finally just reached this weird meditative state where they would leave if I went into that state, and then if I would stop, say they'd come back, I'm like, oh my God, I'm remote controlling bees. Now maybe I was really hungry, but I didn't feel like that. And there's a connectedness to nature that we're capable of for sure.

Florence Williams ([01:08:34](#)):

I recommend solo time in the wilderness regardless of what it's doing to your immune cells. I do recommend it for everyone because I think it's an incredible experience.

Dave Asprey ([01:08:44](#)):

You've given that experience, meaning how do people who've gone through heartbreak find meaning in it?

Florence Williams ([01:08:52](#)):

Well, I think one of the most interesting things that happens is that you become better able to listen to other people's pain. And that alone is an incredible gift. This acknowledgement that we are all suffering beings. Now that I've been through this, I can recognize it more easily in someone else. I can identify with it more easily in someone else. I feel this kind of innate instinct to want to attend and befriend and do that. I know it's made, the experience has made me a better friend. I feel like it's actually opened my heart and made me more capable of love. I think if there's a way to intentionally look for those kinds of openings in your own experience, however fleeting they may seem at first, to have the confidence that your heart may end up a little bit softer, a little bit more permeable, a little bit less armored after this event, you'll be a better person in the lives of the people that you care about.

Dave Asprey ([01:10:05](#)):

Something I experienced when I was divorced around age 30 was that about half my community was supportive. I remember when my friend Lance called up and just said, Dave, I dunno if anyone said this to you, but I think the way you're being treated right now is bullshit, and I just wanted to let you know you're not all crazy here. And it was just this sense where I was like, maybe I am crazy. I dunno what's going on. A lot of people feel that as they're going through, especially if there's codependency, and that was just so meaningful. But about half of my friends, they looked at my heartbreak like it might be contagious. And so they would pull away. And a lot of divorced friends have told me that they lost some

of their friends because it just shined a light on weaknesses in their own relationships. What was your experience of going through heartbreak? Did you lose friends who were threatened by it?

Florence Williams ([01:11:05](#)):

Yeah, I think it's similar. I think you kind of learn who your friends are. There are some people who really show up for you, and then there are some people who really don't, and it's hard to know what's behind that. But I think the contagion theory is real. I have a friend whose husband died really young, and she told me the same thing that her friends didn't really want to be around her anymore, that she kind of represented the possibility that this could happen to them. And it wasn't a possibility. Some of them wanted to sit with and spend time with. But I think again, it probably reflects the fact that those friends hadn't themselves become empathetic through some kind of reckoning with their own life events and difficulties. And in a way, if we're all heartbroken and we own up to it, I think we can be there for each other a little bit better.

Dave Asprey ([01:12:03](#)):

You mentioned empathy when a friend of yours is going through a new heartbreak and you're feeling empathetic, how do you stop that from reactivating your own experience?

Florence Williams ([01:12:17](#)):

I'm not really afraid of that. I think if my friend is going through a hard time for any reason, I often do start crying with them. That doesn't worry me. I'm not afraid of that kind of suffering of my own for a little while. I don't know if it's helpful to them. It's just what naturally comes up because I'm no longer, I think trying to control my emotions as much as I used to.

Dave Asprey ([01:12:43](#)):

It may come down to the fact that you've done enough healing so that you know you're safe, even if you briefly experience your friends' suffering, that it's not yours.

Florence Williams ([01:12:53](#)):

I think that's true. I think I have enough distance now from the pain that I'm able to go back into the cave for a little while.

Dave Asprey ([01:13:02](#)):

One of the chapters in your book is called Your Cells Know Everything, which is totally core to the way I see biohacking today, and that's your explanation for how the autoimmune type one diabetes happened. Can you talk about some of the other physiological manifestations of heartbreak? Just give me a list.

Florence Williams ([01:13:24](#)):

Yes. Well, one of the most fascinating is what's sometimes called, well, it's takotsubo cardiomyopathy, also known as heartbreak syndrome. This is a literal cardiac event that happens to people who have experienced a big emotional blow. So it represents about 4% of all cardiac events in the hospital. Fortunately, it has a relatively low fatality rate, but I think about 20% of people go on to have some heart damage afterwards. And it's not a conventional heart attack. It's not caused by a blockage in the artery. It's really caused by these stress hormones freaking out the left ventricle of the heart, causing it

to balloon out in the presence of these stress hormones and stop beating. And so people feel like they're having a heart attack, and in fact, their heart is not working correctly. But when they get imaged in the er, there's no blockage. So it often happens, especially in postmenopausal women. So there seems to be some protective effect of estrogen, and sometimes it will happen after the death of a loved one. Sometimes it happens after the death of a pet, for example. I've talked to some women who have experienced it when they get sued by someone, there's a very stressful kind of sudden event that's happened. And we know that when one partner dies, the remaining partner has a much higher rate of death in the subsequent year following. So the immune system absolutely records this emotional weather going on in our hearts and shows up.

Dave Asprey ([01:15:17](#)):

I've had myocarditis a couple times before it became popular in the last three years for some mysterious reason, and this is as a younger person, and there's a feeling around your heart and there's a reason we call this heartbreak. It feels like that. And one of the times it was probably related to mold or toxic mold exposure. The other time I did some really just profound deep healing work, probably healing anyway, and it was like I almost got to a heart opening, but I didn't. So it felt like there was this shell. I mean, the heart was beating differently and there was inflammation around the heart, and I would attribute that to having gone to some very deep shamanic type of places and not quite emerged all the way. We'll call it the cardiac equivalent of blue balls for if that's not too crass. You're like, man, there's a lot of pressure in there and if the pressure can't go anywhere, it creates just this sense of unease.

([01:16:33](#)):

And it took about almost a year for that to subside just from intense spiritual or meditative practices. I don't think I've ever talked about that on the show. And that's maybe the downside of meditation or doing spiritual work with people who aren't fully qualified for the states that you're going to go into. And I think that risk is also present, especially with ayahuasca, but some of the other psychedelics, the same thing could happen. How do you stop it mean? Could we just take rapamycin, which is an anti-aging immunosuppressant for the year after we go through a heartbreak to make sure we don't get it? Give me some hacks here.

Florence Williams ([01:17:09](#)):

I think the best hack is to try to get out of a state of threat. So however it is again that we sort of find these states of calm.

Dave Asprey ([01:17:21](#)):

So electing different politicians is that question,

Florence Williams ([01:17:26](#)):

Not reading the news, maybe not scrolling through Instagram first thing in the morning.

Dave Asprey ([01:17:30](#)):

Yeah, getting rid of your social media or taking a break and certainly watching the news. It's hard to heal from a heartbreak if you're watching CNN or Fox or whoever the counts to you. I can't even list all the news networks anymore. I don't care.

Florence Williams ([01:17:41](#)):

That's a great point. I mean, there's so much anxiety and depression going around everywhere now, even without the heartbreak. But ultimately, I believe that we need to be engaged with our community. We can't just totally turn it off forever. I talk to young people all the time who are devastated by climate grief, for example, and they're so devastated that they feel defeated. They don't necessarily have the health and the energy to get out of bed in the morning and fight the fights. And so I think that's really sad. And I worry very much about their future immune systems because we know this kind of stress and anxiety they're looking through now in 30 years is going to manifest as autoimmune disease. And so what I tell everyone, these young people, but also anyone going through heartbreak, is this is why it's all the more important to be able to access the gratitude, access the joy, find the beauty, because these are things that are going to kind of refill the tank, help you sleep better, help you be able to wake up and do the hard work that we all need to do in this crazy world,

Dave Asprey ([01:19:00](#)):

I look at climate stress as entirely immediate generated phenomena. It's traumatizing. And it's not to say that we don't have a problem with especially chemical pollution that's disrupting your endocrine system, that lowers your testosterone, that lowers your dopamine levels. So you're more susceptible to stress. That's all absolutely happening. But if you're in an existential crisis and you're 18 because you're worried about what is a 60 year problem, look at what happened over the last 60 years. You have no idea. But I have met personally with people who look me straight in the eye. These are the most competent people who know what's going on and said, oh no, we have the fusion thing solved. We're three years from rolling it out. And I wrote the first small check that eventually became Elon Musk's, hundred million dollars carbon capture. There are so many things you don't know about and to focus on doom and gloom, it just means that you are programmable instead of free.

[\(01:20:06\)](#):

And the biggest thing about biohack is that you're in charge of your own biology, including the state of your nervous system. And you can deal with climate stress, you can deal with relationship stress or heartbreak if you know how to generate safety in your own self. So, okay, there's a problem. I'm safe. I'm going to deal with this problem versus there's a problem. It's the end of the world. People get stuck on rumination according to a recent expert on memory who was on the show, a guy from uc Davis who runs the memory lab there. And we had a fantastic conversation about the toxicity of ruminating on a trauma or a stress. So how do people have gone through heartbreak, stop ruminating about it?

Florence Williams ([01:20:53](#)):

I think that, again, some of us are, there's a lot of variability in how we're wired. Some of us tend to be ruminators more than others. I don't think we can necessarily say to ourselves, just stop ruminating.

Dave Asprey ([01:21:06](#)):

No, it's like saying stop feeling. It doesn't work.

Florence Williams ([01:21:09](#)):

Exactly. Exactly. I mean, some of us are just ruminators. We just are. And there are a lot of gifts that actually associated with that. We tend to think things really deeply, and we tend to think through problems really deeply, and we tend to be more empathetic. And in some ways we're the ones who really do try to work very hard to make the world better because we feel the pain. But again, I think it's not so much a question of avoiding the stress or avoiding the rumination, it's letting that happen, but then resolving it, working to find some relief, we're going to feel stressed, but we also have to figure out

ways to de-stress at the end of the day. And that's where I think the magic can really happen. And again, it's going to be different for different people. For me, I know if I go out and I look at the sunset, if I am paying attention to what the moon is doing, if I can hang out with my dog, find these, and I love this phase microdosing stress, or sorry, microdosing, awe. If we can learn how to microdose awe, then we can help resolve these daily kind of miseries that we put ourselves in.

Dave Asprey ([01:22:22](#)):

I think I'm already awe inspired. I just got my microdose by that idea.

Florence Williams ([01:22:27](#)):

Yeah, I love that term microdose. We're not going to find an eclipse right every day, but maybe we can find a beautiful blossom down the street or a beautiful plum in our fruit bowl.

Dave Asprey ([01:22:40](#)):

Would it be a reasonable approach to just take mushrooms every Friday night?

Florence Williams ([01:22:46](#)):

I think you're the expert on that more than I am. I know a lot of people who love the idea of microdosing psilocybin. Maybe you're aware of this. I'm not aware of a lot of science showing that that's a great idea.

Dave Asprey ([01:22:59](#)):

There's a meaningful amount of science for microdosing LSD and psilocybin because it increases neuroplasticity via a compound called BDNF and likely NGF nerve growth factor. If you are dealing with heartbreak and you're going through a process, would having a younger more neuroplastic brain make it easier to re-pattern your nervous system? Well, yeah, it would. But most people who think they're microdosing are not doing it right. I'm in Austin and it feels like there's microdose chocolate bars all over the place. That's not a microdose man. That's a quarter of a dose. A microdose is 5% of a dose, and you can barely feel it. You don't feel trippy at all. You might feel slightly more creative or energized, but it's very subtle, less subtle than coffee. Understand though, even a full dose or a microdose does make change easier in the brain. That's why we're using ketamine at 40 years in because for 72 hours afterwards, there's a profound increase in BDNF and nerve growth factor when people are doing their deepest work maybe of their entire life. So it provides an unfair advantage for personal transformation. So that'd be the argument for it.

Florence Williams ([01:24:15](#)):

We can get a lot of those BDNF effects and sort of plasticity effects from experiencing exercise from experiencing as well.

Dave Asprey ([01:24:27](#)):

I absolutely agree. Nature also can raise BDNF. There's lots of things because I'm, the algorithm I learned is I'm going to do everything at once that brings about an effect, because the most important thing for me is knowing I got the effect, not which of the five things I did created the effect. I just realized, even if I live for 180 years minimum, which is my current goal, if I tried a different single variable every month for the rest of my life, I wouldn't try everything much less the combinations of two or three things. So to get the results you want, like, well, why don't you do wilderness, do some

microdosing, do some neurofeedback, and do everything else that might work all at once and just go deep. But that may be a personality defect.

Florence Williams ([01:25:17](#)):

No, I think that's great advice because there is an urgency to recover quickly, and if you can speed up your recovery process by a third or by a half, by all means, it's worth trying.

Dave Asprey ([01:25:28](#)):

We've also both relied on a technology called EMDR at various phases. Walk me through what it is and how you used it.

Florence Williams ([01:25:40](#)):

EMDR has become quite popular lately as a treatment for trauma, and it stands for eye movement desensitization reprocessing. And the idea behind it is that if we can engage in some kind of bilateral motion, for example, moving our eyes back and forth, that's kind of how it was originally used in therapy that we can help take some of the storm energy out of our trauma memories. A lot of people who are going through PTSD kind of feel like they're still living in the traumatic memory. And if we can take that memory and just make it kind of a memory that's decoupled from the huge emotionality, decouple it from our nervous state reaction, then we can help resolve the trauma. So I did undergo, I participated in a workshop for people going through divorce, and it was kind of neat because there were maybe 10 of us in a room together. And what we did instead of the eye motion back and forth, we did tapping. We sort of crossed our arms over our torso and did this tapping on our collarbone,

Dave Asprey ([01:27:04](#)):

EFT

Florence Williams ([01:27:05](#)):

Right after we had recalled a painful memory from the relationship or from the divorce. And we did this for I guess all day really. And there were a lot of tears.

Dave Asprey ([01:27:21](#)):

Did you feel stupid as a science journalist tapping your collarbones for a whole day? A

Florence Williams ([01:27:25](#)):

Little bit. Yeah. You're like, really? What? Really? But there are studies, right? There are some studies out there showing that it's more effective than a lot of other kinds of therapy.

Dave Asprey ([01:27:37](#)):

I don't like it that tapping works. And I've had a couple big experts, Nick Orner was on the show who wrote the Tapping Solution, Dawson Church, who's a leader in epigenetics. And I've worked with therapists and I've just come to understand my cells listen to tapping a lot more than my logical brain. So I use tapping regularly when it's called for either in myself or others. And I've seen profound effects from it, just like, come on, is my body really that dumb? Yeah, it kind of is it a lot of good stuff too. So tapping is independent of V mdr though, with the eye movement stuff that you did. I found it to be really effective in some situations almost for any trauma. But when you're dealing with heartbreak,

there's two associated emotions where I've seen EMDR or the reset process at 40 years Zen, which is a different vibe, but it ends up in the same neighborhood, and they are injustice and betrayal, and they're independent traumas that oftentimes are layered on heartbreak. What's your experience with the sense of betrayal and the sense of injustice?

Florence Williams ([01:28:49](#)):

Well, I've certainly felt those both acutely.

Dave Asprey ([01:28:53](#)):

We all do In

Florence Williams ([01:28:54](#)):

My own divorce experience, the cool thing about EMDR is that the underlying concept is the bilateral motion. And I am someone who walks all the time. And then when I was on my 30 day river trip, I was paddling. And so I really took a lot of comfort in knowing that this kind of bilateral motion is also really good at taking some of that storm energy out of these painful memories. There's a reason why a lot of veterans with PTSD are walking the Appalachian Trail or they're walking the Pacific Crest Trail. These long walks help us heal. And I think the bilateral motion may be sort of an under-recognized mechanism for why it can be so effective.

Dave Asprey ([01:29:46](#)):

Oh, wow. So you think walking just because you're activating right, left, right, left, yes. In addition to lymphatic drainage and the meditative aspects that it might actually just be working of that. That's interesting. I've never heard anyone say that before.

Florence Williams ([01:30:01](#)):

And I feel it paddling too. And probably bicycling cross country skiing,

Dave Asprey ([01:30:06](#)):

And it's also rhythmic, which is different. One of the ways of increasing connectivity across the brain is almost any exercise that causes you to cross over the midline of your body, which is why my dear friend, Dr. Daniel Amen from Amen Clinics who wrote one of the mini books that's profoundly changed me, he said, Dave, get a ping pong table. You want to live a long time, just do that. It's going to activate your brain. So when I had space for it in my barn in Canada, probably from my son was five till 12. We played many times a week, and I think it really did help my brain. And I never thought about whether that crossing over the midline also had trauma effects, like trauma official effects, but it wouldn't surprise me. That's cool thinking. See, this is why science journalists are fun to talk to.

Florence Williams ([01:30:57](#)):

Glad I told you something you hadn't thought about. That's hard to do with you, but no,

Dave Asprey ([01:31:04](#)):

Well, thank you. It feels like sometimes injustice or betrayal can create heartbreak even if you're still okay in your primary relationship. Yes. If there's someone you trusted who steals from you, embezzles

money tries to steal one of your companies, fires you from the company, you've found it. I'm just going through my own list here. But all those things are,

Florence Williams ([01:31:31](#)):

That's just last week

Dave Asprey ([01:31:33](#)):

Or if Joe Rogan for no good reason other than financial considerations tries to come after you for a year. By the way, I did the reset process and the MDR to figure out the reason that pushed my buttons. Instead of just laughing, be like, Joe, could you say my name again? What I realized was it was pushing an unresolved trauma from first grade. It was pushing that button. It's a bullying type of behavior, and so many people were bullied. Usually girls are bullied emotionally more so than boys who are bullied physically. But we both experience it in different ways. And sometimes it can be emotional or physical in either direction, but if people went through that adult situations, that could be a relationship or it could be some other trusted relationship that's not your primary relationship. It can also cause something similar to heartbreak. And sometimes that first button is injustice or betrayal, similar to someone cheating on you. If someone trusted, steals a bunch of money, like, well, how could they do that? To me, it feels like your spouse treated on you even though they weren't your spouse. Any insights from your book on heartbreak around what people can do when their heart's broken, maybe not by their primary partner?

Florence Williams ([01:32:46](#)):

Well, I think there are some interesting insights. I'm not sure how much I totally believe them, but there are some interesting insights into how betrayal affects men and women differently. So for example, if there's cheating in a relationship, women tend to be more upset by emotional betrayal. So if there's the sense that your partner has really fallen in love with someone else, whereas with men, there is more of a reaction to sexual betrayal and the emotion isn't as important. And there are sort of perhaps evolutionary reasons for both of those. So I think that if you're in a relationship where there has been cheating, that it's important to sort of recognize that because your partner may be like, Hey, I didn't sleep with her. What's the big deal? Or it was just sex. And yet men and women may really experience that very differently. So I think there needs to be a little bit of respect and understanding there. And then I think you have to work really hard to rebuild the trust, whether your relationship remains intact or not. Betrayal sort of gets it cuts to core values, right? About trust and safety. And so there's a lot of rebuilding that has to happen after that. And I know certainly a lot of people who've gone through painful breakups and they have never really gotten over it. And I think that that's also a problem.

Dave Asprey ([01:34:18](#)):

It really is a problem. And you brought up something that we haven't talked about much and it's trust versus safety. You can feel safe, but not trusting. But not trusting is also a sense of not being safe, right?

Florence Williams ([01:34:32](#)):

Absolutely.

Dave Asprey ([01:34:33](#)):

How do you go about rebuilding trust if your heart was broken

Florence Williams ([01:34:38](#)):

Very slowly? I think part of it is that post-traumatic growth, it's like this bad thing happened and I will never really forget it, but I don't need to experience it every moment of my waking life. It's something that happened in the past. It's not something that is ongoing. It's not something that every partner is going to inflict upon me going forward. I think a lot of it has to do with just exactly that, getting over the trauma and whatever way you need to do it.

Dave Asprey ([01:35:16](#)):

It's too expensive not to trust.

Florence Williams ([01:35:19](#)):

Yes,

Dave Asprey ([01:35:20](#)):

Just like it's expensive to hold on to hate or resentment or bitterness or any of the things that oftentimes are a side effect of even a relatively good breakup because they cost you every single day. And that's why forgiveness is the final F word in the hierarchy that I use. Because for me, that's the easiest, although it's hard, but the easiest way to permanently reestablish your ability to trust the world and to trust yourself and then to feel safe in the world and even to generate safety in yourself.

Florence Williams ([01:35:52](#)):

I think that's a really good point.

Dave Asprey ([01:35:54](#)):

Thank you. Is there some technology or technique we haven't talked about that helped you do that?

Florence Williams ([01:35:59](#)):

Again, a lot of it had to do with journaling.

Dave Asprey ([01:36:02](#)):

Journaling. We haven't talked about that so much. Okay. How much did you journal?

Florence Williams ([01:36:05](#)):

I journaled a lot, but in terms of these just very discreet exercises, we know the writing, the letter to my ex about the things that I am grateful to him for and also the things that I am sort of mad at him for. And I guess ultimately, ideally you would switch that, right? First, write about the ways in which this person hurt you, but then write about the ways in which this person helped you grow or helped you, the things you loved about that person, as well as the things that you are sort of happy to let go of. I think it's perspective. You may still be sort of mad about the pain that was inflicted, but you can also recognize the gifts and that's okay. I don't think it has to be this unqualified. Your ex is actually a great person. It's not like your ex was a complicated person. You had a complicated dynamic. Both of you are responsible for that dynamic. It's this kind of understanding that there's room, I think for a lot of different emotions, including the ones that enable you to be more optimistic.

Dave Asprey ([01:37:16](#)):

I've got two more questions for you coming up on the end of the interview. The first one is, other than your own book, which is called Heartbreak, a personal and scientific journey, what is the other single best resource you've found or book to read about heartbreak?

Florence Williams ([01:37:34](#)):

Good question. Well, I love music. So for me, I already mentioned I'm Gen X and there's just certain music that I really loved listening to.

Dave Asprey ([01:37:51](#)):

Smells like Teen Spirit, huh?

Florence Williams ([01:37:54](#)):

Exactly. I mean, we all have our favorites and a lot of music is based on big emotions. A lot of it's based on love and broken hearts. I would encourage you to go for it. Listen to that music. Do it Up for me. It was Liz pH and she actually made an album. I think she's got a song called The Divorce Song. I don't know why that became the soundtrack to my divorce, but it really did also a lot of REM. Oh

Dave Asprey ([01:38:24](#)):

Yeah, that's a neat piece of advice. Make a soundtrack for your heartbreak or for your separation or divorce. I like that a lot. Great. Final question here. If you could feel and look as good or better than you do now, how long would you want to live?

Florence Williams ([01:38:45](#)):

I think I'd go a little bit against the grain right now in, I'm not so much interested in longevity. I'm more interested in health span, and maybe that's because I have a chronic illness. The priority for me is in feeling great.

Dave Asprey ([01:39:00](#)):

That was the precondition to feel as good or better than you do now. And health span is kind of like, well, duh. No one wants to be sick before they die. But if you don't have to get sick, how long would you want to live?

Florence Williams ([01:39:13](#)):

I would love to live long enough to get to know my grandchildren.

Dave Asprey ([01:39:16](#)):

That's a good answer. I

Florence Williams ([01:39:17](#)):

Do not know that I will have grandchildren and it's too early to tell, but of course I hope I would and I would love to live long enough to get to Nan.

Dave Asprey ([01:39:28](#)):

Beautiful. Thank you Florence for writing a really interesting mix of emotion in science. And that's right where science is right now in the world of biohacking is let's study emotions and figure out what's going on in there, including at the cellular level, the genetic level, the inflammation level. I think you've done original thinking in the space, and I appreciate you.

Florence Williams ([01:39:48](#)):

Well, thank you so much for having me. It's really been a pleasure.

Dave Asprey ([01:39:51](#)):

Again, guys, the book is Heartbreak, A Personal and Scientific Journey, and you can buy that anywhere you like to buy books. And you can listen to the show anywhere you like to listen to shows. Make sure you click subscribe on YouTube or that you're following this on whatever the heck podcast platform you're using right now. And as a bonus, if you come to the Biohacking Conference, which is happening at the end of May, beginning of June in Dallas, Texas, go to biohackingconference.com. We will have one of the leaders in the field showing what meditation, breath work and visualization does to your genetics. And that's Dr. Joe Dispenza who will be on stage along with other leaders in the field of longevity and biohacking, and of course, me sharing the latest and greatest. I hope to see you there. And by then, I hope you've read Florence's book because it's really good.

Announcer ([01:40:46](#)):

You are listening to the

Dave Asprey ([01:40:47](#)):

Human Upgrade with Dave.