

## 23. Steve McDonald on Closure Optional

Closure Optional: True stories from good people who do hard stuff, is a podcast hosted by Lorna Bremner (https://lornabremner.com)

Recorded on 16 December 2018 on the Gold Coast, Australia. Published 29th April 2019 in Byron Bay, Australia.

Future Sense is a podcast edited from the radio show of the same name, broadcast on BayFM in Byron Bay, Australia, at <a href="www.bayfm.org">www.bayfm.org</a>. Hosted by Nyck Jeanes and well-known international futurist, Steve McDonald, Future Sense provides a fresh, deep analysis of global trends and emerging technologies. How can we identify the layers of growth personally, socially and globally? What are the signs missed; the truths being denied? Political science, history, politics, psychology, ancient civilisations, alien contact, the new psychedelic revolution, cryptocurrency and other disruptive and distributed technologies, and much more.

This is Future Sense.

Lorna Bremner: Hi!

Steve: Hi!

Lorna Bremner: How are you?

**Steve:** Really good thanks.

**Lorna Bremner:** Thank you so much for coming down to do this ... or up, really, from where you are.

**Steve:** Up from Byron way, yeah.

**Lorna Bremner:** Yeah, good place down there, man. It is such a nice place to live.

**Steve:** It's lovely. I've been there for I think about nine years now and I love it. It's great.

1

**Lorna Bremner:** It's so good. There's something really cool about the landscape of the Gold Coast, well, from Burleigh downwards—I don't go any further than Broadbeach to the north because I don't know what Surfers Paradise is but it's bullshit; but coming down this way there's beautiful beaches and then you go inside to the hinterland, you've got farmland, you've got hills, you've got mountains, you've got the rainforest.

**Steve:** You know it's an old massive volcano, don't you?

Lorna Bremner: Really?

**Steve:** Yeah, if you look at the satellite photo on *Google Maps*, you'll see the Border Ranges are like the northern edge of the caldera and it hooks around the back of the Byron, Uki, Mount Warning/Wollumbin area.

**Lorna Bremner:** Oh, my God.

**Steve:** That's part of the reason why the energy is so interesting.

**Lorna Bremner:** Yeah, what do you think about that? When you say energy is interesting here, what do you mean by that?

**Steve:** Well, it's known that this area was an important healing place for the Indigenous people and that trend seems to be continuing to the present day. So many people come to Byron Bay for healing—personal healing—and there's an oversupply of healers there, you know? So there seems to be something to it. I don't know if this is true or not, but I've heard talk that there's a lot of black obsidian crystal underneath the ground due to the volcanic history of the area.

**Lorna Bremner:** Oh wow. What is black obsidian supposed to do?

**Steve:** I don't know to be honest with you, I'm not a crystal expert, but, you know, crystals have a frequency. We use crystals in our radios to pick up radio broadcasts and those sorts of things, so they play some sort of communication role and they have an impact on us in various ways.

**Lorna Bremner:** Because essentially we are a being that's created out of frequency, more or less.

**Steve:** I think it's useful to look at it that way, yes.

**Lorna Bremner:** OK, because I was watching the lecture that you gave about these kind of different phases of consciousness, more or less, and it's a scary thing to start talking about because you can end up in this like sort of 'woo-woo world' where it's like, 'oh, consciousness, they're just raising it.'

Steve: I know.

**Lorna Bremner:** You know, lay a crystal on your chest and save the world or whatever, and maybe you are! That's the funny thing about it is I don't fucking know! As if you would know.

I heard you say something great on a podcast just before; you were talking on this martial arts podcast that you do and you said that as soon as we stop being able to question science, it becomes dogma. Would you mind talking about that a little bit?

**Steve:** Sure. It seems to be a common thing these days that people latch on to some scientific finding and then it becomes dogma for them and it can't be questioned, but science itself is the practice of enquiry. At its purest level, science is about coming up with an idea about something and then experimenting and testing the idea to see what results you get, and then whatever results you get ought to be repeatable if you go through the same process again. That's really the essence of traditional science—it's about being open and discovering knowledge.

Science came historically after the Agricultural era of humanity where we were mainly looking to some higher authority to find out what was true and find out the nature of the world, and usually that was some kind of religious god. Then, with the Scientific and Industrial Revolutions, we went through this big shift where we started to realise that actually, no, we can find information out for ourselves if we go through this process of enquiry and testing and experimenting. But these days, some science is becoming dogma, as you say, and I think one of the biggest examples of that is the whole climate change issue where people say 'the science is in, this can't be questioned, this is the way it is', and effectively, that's not science.

**Lorna Bremner:** Yeah, man. Because it has to be questioned—that's the whole point of science. Science is an enquiry: enquiry, proof, enquiry, proof. That's all it is, right?

Steve: Yeah, never finished.

**Lorna Bremner:** Wow. What kind of dangers do you see of us not being able to question science?

**Steve:** Well, I think one of the biggest dangers that I see at the moment on a global scale is the climate change debate, where so many people are convinced that they know how our climate works, but actually we don't have a computer powerful enough to simulate or model the climate accurately. That's obvious because we can't predict short-term weather changes and our long-term predictions that we've been making over the last few decades about climate are generally wrong, right? No-one's been accurate with their predictions, and if we start to build plans to do things on false assumptions, then we're setting ourselves up for a massive fall.

Lorna Bremner: Fuck, yeah.

**Steve:** I just read an article in the last couple of days in the media about some university in the US that's going to do this experiment where they're going to put a massive balloon up and block out the Sun and they're doing it as an experiment to see whether that could be done large-scale to cool the planet because of this global warming idea. What if we're wrong about that? What if we actually introduce technology that starts to cool the planet down and we find out that all our assumptions about the long-term global warming trend are wrong and we're actually accelerating the cooling trend into a mini ice age. Those sorts of things will be, I think, massively disruptive because this is something that's already got some momentum so it's an area that we need to watch very carefully.

**Lorna Bremner:** What do you think is actually happening?

**Steve:** I think that we're in a long-term cooling trend. I've spent a lot of my life, particularly my adult life, studying the dynamics of complex adaptive systems and how they change and particularly applying that to human consciousness, but of course, you can apply it to any complex adaptive system and our climate is a complex adaptive system. When these systems go through change, they don't take a linear trajectory, but the thinking around climate change at the moment is that it's getting warmer and it's going to keep getting warmer in a linear way. Complex systems don't change that way. When complex systems start to change, they spike in different directions, so you'll get increases in heat, but also increases in cold and that's pretty much what we're seeing at

the moment. If you really look at what is being reported, just in the last few days, there's been record cold in Asia and also in North America as the winter comes on.

I think there's no doubt that the climate is changing—the climate never stops changing, it's always changing and we can look back and see these huge cycles of warming and cooling that have been going on for a long time—but to think that there's going to be a linear trend of warming until we all fry like eggs in a frying pan is just ignoring the actual evidence. The evidence is not pointing to that.

It's a very complex topic, but it's also a product of the Modern era where our scientific bent that we've been on for the last 300 years has caused people to look very deeply into very narrow topics. This is played out in society through things like the medical profession where you've got specialist doctors now that actually know next-to-nothing about certain parts of the body, but they'll have massively deep specialist knowledge about one particular system in the body, right? And this applies across the board, even to our climate scientists. Our climate scientists have looked very specifically at what they think is connected to climate dynamics but there are things outside of the climate science field which are really, really important, which are just not looked at, like for example, space weather and solar activity. It's not normally something that a climate scientist would look at, but in fact, it's probably the major driver of climate dynamics.

**Lorna Bremner:** It's what our climate is in.

**Steve:** Totally, so the reason that I am thinking that there's a long-term cooling trend happening at the moment is I'm looking at evidence from a number of different sources and most of them are outside the climate science field, like astrophysicists, for example, who are looking at solar dynamics, what's happening on the Sun, how the Sun's activity as it goes through these roughly 11-year year solar cycles changes the solar wind which blows over the planet. When the solar wind is strong and protects us from the impact of cosmic radiation, and as the wind dies back when the Sun is going in a solar minimum, we get bombarded by lot more cosmic radiation than we normally do, and we're actually just about to reach a solar minimum, probably next year now on the current cycle.

Lorna Bremner: Yeah, wow.

**Steve:** There's a study which was done by a Danish guy. I guess it was probably 10 or 15 years ago now that he did this research but he found that as cosmic radiation increases, cloud cover increases on the planet because the little ionised particles which are flying in from space, they create seeds for water droplets to form and create clouds.

**Lorna Bremner:** That kind of makes sense, I suppose, because it's more protection.

**Steve:** Yeah, so during these periods of solar minima where there's higher cosmic radiation, the planet generally cools down, not just because the Sun's quiet, but also because there is more cloud forming around the planet to cool us down.

**Lorna Bremner:** So would you say that it's become a bit like we've lost a bit of nuance in this conversation because it's been polarised a little bit? You've got climate change supporters, climate change deniers and if you're a climate denier, you're an idiot and you don't love the planet and climate change is all about helping the planet out. You strike me as a person that really cares about the environment.

Steve: I do.

**Lorna Bremner:** So I wouldn't look at you and be like, 'oh, he's a climate denier, he wants to get more oil out of the Earth.' I don't get that impression from you at all.

**Steve:** No. It's a complex situation. Part of it is the result of the Modern Scientific-Industrial era and this narrow specialisation of professions, but part of it is also due to the way that human consciousness is changing. We're actually in the middle of, according to my assessment, a shift in human consciousness right now and it's taking us beyond the Modern era, beyond that Scientific-Industrial kind of thinking, to a more humanistic, network-centric way of being human.

**Lorna Bremner:** Yeah, I really wanted to ask you about this, because that was a super interesting talk that you gave, but one question that I wanted to get out of the way first before I even let you get on a roll was, where has this research come from? Because most people, when you hear our consciousness is shifting again, you start going, 'oh, God, here's a bearded hippy trying to tell me some weird shit again', and a lot of people are just not introduced to this idea at all. I've heard about it over the past few years in passing, and a lot of it, actually, from people in the psychedelic world. I read this great book called *Breaking Open the Head*. Have you ever read that?

Steve: Yeah, I've read that.

**Lorna Bremner:** Daniel Pinchbeck, and it's a great book. He does this a really incredible journalistic work and then he kind of goes off the rails—totally off the rails after that. It's sad because it takes away from the good work he did with *Breaking Open the Head*.

**Steve:** It's boundary-pushing stuff and I think whenever we're pushing the boundaries of our knowledge, we'll get to the point where we've put all this information together and come up with something useful but then the further we push the boundaries, the more we get loose and we don't have any structure.

**Lorna Bremner:** Yeah, it can get lost. You cite a bunch of references in your talk of people that are saying this, so when you said that we're entering this new phase, we're entering this new shift, what's the evidence to support that? Where are you getting that information from?

**Steve:** I guess the core evidence comes from some research by an American Professor of Psychology called Dr. Clare W. Graves. He was around in the 1950s and 60s as a professor teaching psychology in upstate New York. He was a contemporary of Abraham Maslow, who's quite a well-known psychologist, of course, and his *Hierarchy of Human Needs* is well known. Graves used to teach at that time about five different theories of human psychology, which all had different angles on how our minds work, and inevitably at the end of the course, one of his students would kind of stick up their hand and say, 'Dr. Graves, you've taught us these five different theories. Which one's right?' He had trouble with that and he couldn't answer it so he decided to do his own research. His research was very interesting in that he didn't start with a hypothesis and then try and prove it, so he didn't have a fixed idea of what the nature of human consciousness was. He started with a question, and the question was: What is the nature of a psychologically mature adult?

**Lorna Bremner:** So he kind of went at it with a philosophical approach.

**Steve:** Yes, very much so and he was way ahead of his time. I think of him as like the Einstein of psychology, but he's not well-known because he actually died before he published his work academically.

Lorna Bremner: Damn.

**Steve:** He spent nine years studying over 1,000 people, not just looking at their opinions on what a psychologically mature adult was like and how they behaved, but also

watching their behaviour and watching how those things changed over the course of nine years, and gathered an amazing amount of very interesting data. He used all sorts of different data-gathering techniques, like he would get students at the university to write essays on this, he would actually watch their behaviour—in fact, I think it's on record that he set up a two-way mirror somewhere inside the university and stood behind it sometimes and watched people's behaviour without their knowledge, which these days probably wouldn't be ethical—and he also did things like reaction time testing where he would put symbols and words and things up on a TV screen and then ask somebody to react in a particular way and see how long it took them to react to different things, so he was a guy well ahead of his time. He started to write a couple of articles here and there and do some public speaking towards the later years. He was, as I understand it, not really accepted by his peers because there was this fixed idea of human psychology back then.

Lorna Bremner: Fruedian, Jungian.

**Steve:** Yeah and he was pushing the limits and saying things that didn't fit with the accepted viewpoint, and so I think he came under a lot of criticism. Eventually, in 1986, he passed away from a heart attack. He had started writing a book, which I guess was his thesis, some of which has survived. I've been able to study that, but because he didn't get published academically, his work is not accepted by the academic world because it hasn't been peer-reviewed properly, and yet it's pure gold, I think.

**Lorna Bremner:** Can't it go through that process now?

**Steve:** I'm not an academic, so I'm not probably the right person to be asking that question, but I don't think so. I think someone else would have to pick up where he left off and then submit it.

**Lorna Bremner:** That's so interesting. Isn't that a shame? It's so funny that people that have to break the mould for new ideas are always the ones that get shit on.

**Steve:** It's usually the case. I think historically, if you look at the pathfinders--I mean, look at Tesla as an example. He was a guy way, way ahead of his time and he got canned for it, basically. It's often the case.

**Lorna Bremner:** And so what's the theory then on this shift of consciousness? How much time have we got?

**Steve:** I know. In simple terms, one of his central findings was that we grow through these layers or stages of consciousness. He really didn't use the word consciousness, he was coming from a developmental psychology perspective and consciousness is a very big word anyway so I think we need to qualify that. There are lots of different facets to consciousness so let's stick to exactly what he was writing and he was writing about developmental stages.

**Lorna Bremner:** Of the human psyche?

**Steve:** Of the human psyche, yes. What he found was that there was this correlation between the complexity of our life conditions and the dynamic adaptive nature of our consciousness, and whatever level of complexity existed within our life conditions, our consciousness, or our psyche, would adapt to match that—adapt to be able to solve the complexity of the problems that were being thrown at us. When we have that balance between our own capacity and the challenges that life is throwing at us, then things are stable and life is good and we feel like we're on top of things, but inevitably our life conditions trend towards greater complexity. This seems to be a trend that's pretty consistent across the Universe, is that everything is slowly getting more complex since the Big Bang.

**Lorna Bremner:** Do you think that that's an inspiration and exhalation, that things will get more complex and then they'll simplify again and then get more complex and simplify? Or are we infinitely going to complexity?

**Steve:** I tend towards what you just described. I think in a very, very long-term sense, it is a polarity, like an inhale-exhale kind of a pattern here, and a lot of other philosophers, people like Ken Wilbur, for example, do say that also. It's not the kind of thing that we can necessarily prove in this physical universe right now. It would take a long time, but I think it's quite likely because when you look at the wisdom traditions that have been running as was longest recorded history, which are put together by people who make serious enquiry into these things, they go by the adage 'as above, so below', so whatever pattern you see in the bigger picture, it also applies right down to the smallest picture.

**Lorna Bremner:** I had a lady on here a while ago who's an artist that works with fractals and it's just such a beautiful concept but it's a hard thing to get your head around. It took me talking to her three times or so to really start to see, 'oh, I get what you mean by fractals'.

I had this gross experience where I did something embarrassing on the podcast and then and to kind of take it back or whatever, and what I realised made me feel so gross about it was that if any random person had stumbled across my podcast and listened to that episode only and didn't know me and didn't know anything else and they just listened to that episode, I would feel uncomfortable with the way that that represented me as a person in the podcast as a whole. So that's why I didn't like it, and I was trying to understand what that meant.

What I realised was, that each episode of this podcast is a fractal of the purpose of the podcast and the meaning of the podcast and then that's all a fractal of a meaning of my life, and that's a fractal of the meaning of my development or growth in terms of the human race and general consciousness and whatever the fuck we're trying to do here—like what is the purpose of life? So as silly as it seems, each episode of the podcast, or even me just sitting down to think to have a podcast, these are all little tiny fractals in the greater grand scheme of things, so if one of those little fractals is off or the wrong colour or points in the wrong direction, it makes me feel uncomfortable because it's not aligned overall to my general purpose.

That kind of just hit me like a stone, like, 'oh, that's what we mean by fractals'. If each piece is in more-or-less alignment with a general thing that we're trying to do, things feel relatively good—you feel like you're on track and you feel like it's going well—but when you get off track, it's because either you don't have this kind of general alignment to something greater than you or you don't really know where you're going.

**Steve:** I kind of come from the angle that everything is perfect and even when things feel like they're not perfect, they actually are just a matter of perspective, right? And a fractal is simply a pattern that repeats at different scales. It doesn't matter whether you look at the tiniest piece of the pattern, you're going to see the same shape as you would if you stood back and looked at a larger aspect of the pattern, it just repeats. So if you take that podcast as an example of a little kind of gnarly bit of the pattern, then it's a true representation of what the pattern is—the pattern being you in this case—but we have the capacity to change these patterns and that's the beauty of human consciousness—it's ultimately creative. Depending on what kind of feedback we're aware of and our capacity to process and act on that, then if we want to change that fractal pattern, we can change it.

**Lorna Bremner:** And so in simplistic terms, when you think of evolution as the animal's ability to adapt to their environment, often the sentence stops there—adapt to the environment, full stop—but nobody's really wondering how the environment is changing and then how the species is adapting to it. It's not how the species adapts to that immediate environment, it's that the environment is constantly changing, as we well know it is because we're not only bits of the environment, we *are* the environment. So our influence on the environment and vice versa is going to be changing us in a

symbiotic way. We're not exclusive to that. It's not that I need to adapt to this environment I'm in, it's like whatever I'm doing is going to have a feedback loop.

**Steve:** Yeah, that's true. One of the aspects of Clare Graves's theory that he came up with was that we grow through these layers or stages, and they're not discrete items, they're actually nested inside each other, just like the skin is layered on an onion. So the lower stages or layers are wrapped—each higher layer or stage that emerges wraps around what's already there, so it becomes a composite of the whole piece.

Each one of these layers or stages comes with a certain perspective and as we grow to higher layers or stages, our perspective gets bigger and bigger and bigger with each different step up. Whoever came up with that idea about us being organisms that are evolving and in an environment was looking at it from a particular perspective at a particular scale, and the further up you go, the broader your perspective becomes, and then you might start to see the environment and the organism is one thing.

**Lorna Bremner:** Mm hmm. Yeah, it's a beautiful idea and it makes a lot of sense. I wonder about this perspective, because it happens in me, that as your life moves on, you can kind of look back at moments. When you're say 1-6 years old, your perspective of the experience of life is only 6 years old, so 6 minutes in a 6-year lifespan is massive compared to 6 minutes and a 30-year lifespan or 6 minutes in a 90-year lifespan. So percentage wise, each significant moment to you becomes less significant as you have experienced more moments, or whatever, and so that kind of makes sense. The more recorded history we can reflect on and look back for, we can develop perspectives all around that as we get further and further away from those moments.

**Steve:** Yeah. Interestingly, though, the way that we process those perspectives changes, and again, it's not a linear pattern. In the earlier stages of our life, we're primarily living according to our urges and instincts and emotions, so that's our primary information input system and how we respond is through those same things.

**Lorna Bremner:** And this is your monkey brain, is it? Or is it the reptilian brain?

**Steve:** Well, ultimately at the lowest level, it's the reptilian brain, but as humans, we're born with a brain that also has an emotional system in it as well and I guess in the very early stages as a newborn, we would be primarily just living from instinct. We're not really thinking about how we feel about something, we just cry if we're hungry, we sleep if we're tired, that kind of stuff. As we grow and our brains develop, we do develop this capacity for emotion, and in what I call the pre-rational zone of our growth, which is the first three layers in Graves's model, we're driven by those things—basically, our urges,

instincts, needs, emotions and responses. So that's why, with a young child, if you ask them to reason, they generally can't reason at an early age. You can't say to them, 'okay, here's a chocolate, I'm going to put it on the table here, but don't eat it now because then you won't be hungry when it's dinner time. What's the kid going to do? Most kids are just going to eat the chocolate because they can't think about that cause-and-effect process—that's a rational-minded activity and the rational mind kicks in later on in life.

Lorna Bremner: And did the rational mind also evolve later inside our heads?

**Steve:** It did. One of the things about Graves's model, which is amazing, is it's like a fractal pattern.

**Lorna Bremner:** Right. That's what I was just thinking, yeah. Wow.

**Steve:** So you can look at your growth to your present age and then you can also look at the evolution of humanity and see the same patterns playing out. In our early stages, when we were hunter-gatherers, when we were traditional-tribal people, and then moving into being warlike people like Genghis-Khan-type folks who just travelled the land conquering other people, we were primarily driven by those basic things—by our basic needs, urges and instincts—and if we wanted to do something, then we'd do it now, right? It was only really the Agricultural Revolution, roughly around 10-12,000 years ago when we figured out how to farm on a large scale, that allowed us to live in larger groups than we could before, so we started to get towns and cities, and that increased the complexity. That there is our life conditions increasing in complexity and throwing up more complex problems.

Graves's theory is that the complexity drives our development, so if he's right, then it was that increasing complexity that caused our rational mind to kick in and take charge, and that really gave us the capacity to think about cause-and-effect and to rationalise things and rationalise our fears away, for example. When we're in that pre-rational zone, our fears are quite powerful.

Lorna Bremner: Yeah, they guided everything, like: 'I see a tiger! Run!'

**Steve:** Yes, and so it takes the rational mind to step in and say, 'okay, now I know this feels scary, but actually it's not, so just put that feeling back in the box and let's go ahead and do it', right?

**Lorna Bremner:** And that was quite a big jump in brain development around that time, wasn't it? Like no evolutionary biologist really has come up yet with a provable theory as to why our brain doubled in size, or was it tripled in size at that point in time?

**Steve:** I'm not on top of the brain size development, so I can't comment on that, but what I can say is that around that same time that we're talking about here—around the Agricultural Revolution and the kicking in of the rational mind as dominant—that coincided with the development of the frontal lobes of the brain, which are pivotal in this rational process of moderating.

**Lorna Bremner:** Yeah, it does absolutely make sense now that we understand what we know about neuroplasticity. I talked about this a little bit a couple of podcasts ago, but it's the idea generally that your brain can rewrite itself with new information. When we get new experiences, we have to deal with them some way, and through repetitive exposure to this thing, we will create new brain channels for it, so it's so interesting. We're literally growing our brain to deal with a problem.

**Steve:** That's right and in Graves's time is this term, 'neuroplasticity', didn't exist, but basically he was writing about that same process. We are ultimately adaptive.

**Lorna Bremner:** Yeah. The Stoned Ape theory is the idea that as we moved out of the trees and into the plains and became more agricultural, we were following cows around or having cows nearby us more often, and psychedelic mushrooms grow in cow shit so the hunter-gatherers were starting to eat mushrooms and that's what developed language. I think that's Terence McKenna's theory, isn't it?

**Steve:** That's Terence's idea, yeah, and who knows whether that's true or not? There's another idea which is pretty radical: that we had intervention by extraterrestrial races which impacted our evolution also.

**Lorna Bremner:** I've heard that too. What's that theory?

**Steve:** Well, I guess it depends who you listen to, but one theory is that extraterrestrials visited the planet and interbred with our predecessors, thereby creating a new type of DNA that was part our predecessors and part extraterrestrial, and actually there's some scientific evidence which seems to fit in line with that idea.

**Lorna Bremner:** That's so mental.

**Steve:** I think probably most people have heard about this idea of the missing link in our evolutionary progression and the fact that our predecessors have got 24 chromosome pairs and we only have 23. One of our genes—I think it's number 2 but I'm not a scientist with this stuff so I'm drawing on other people's work—but one of our genes has an unusual structure. The strand which makes them up is normally ended with like a cap on the top and the bottom of the strand, which is something called the telomere, and all of our genes have this structure except for one which has two telomeres right in the middle of the strand as if two different strands have been fused together.

Lorna Bremner: Wow.

**Steve:** Yeah, and no science has really explained why that is the case, so I personally lean towards this theory that there was some kind of extraterrestrial intervention and interbreeding that's shaped who we are today.

**Lorna Bremner:** And that's what, 10,000 years ago? No, it was much older than that.

**Steve:** The best description that I've heard is that the initial intervention happened about 200,000 years ago, which was when modern humans first appeared, but that there was some ongoing interaction, particularly around the explosion of culture, which happened about 50,000 years ago, which is what Terence talks about possibly being related to psychedelic use. 150,000 years ago, we were hunter-gatherers and we made very simple tools out of stone and didn't do much more, but about 50,000 years ago, there was this sudden explosion of art and culture and we started living together in tribes and there's no clear indication of what might have triggered that.

**Lorna Bremner:** It's so interesting, that's mad. What is that gene responsible for?

Steve: I'm not sure.

**Lorna Bremner:** That would be interesting to know: What does it actually do in us and how much of an impact would it have? Oh, fuckin' imagine that if we're all half alien.

**Steve:** If anybody wants to follow it up, Gregg Braden, who's an American author and speaker, talks about that I think in his latest book; and also—and this is a bit left-field—but there's a guy called Lee Carroll from the US who channels, like a medium. Do you know what that is?

Lorna Bremner: Oh, yeah.

**Steve:** He has some disincarnate personality speaking through him.

Lorna Bremner: Wow.

**Steve:** And Lee Carroll's an engineer, he's not some new-age guy. He's been doing that and delivering these messages from an entity called Kryon for I think nearly 30 years now, and he actually has an amazing record of predicting scientific breakthroughs. He's been sitting and allowing this voice to speak through him and the voice said, you know, 'there's this scientific breakthrough coming and it's about this, watch out for it', and he's got a solid record with that. So what's going on there? Something. I think it's worth paying attention to.

Lorna Bremner: Wow. That's so mad.

**Steve:** I actually just went down to Hobart in the last two weeks and went to visit Lee Carroll at an event down there and listen to him doing this for the first time—it's the first time I've ever seen him do it face-to-face.

**Lorna Bremner:** Yeah, I've watched people do that before. I've seen it on a podcast and I used to watch the videos of, I think her name is Delores Cannon. She does a thing like that. It's pretty funny, it is pretty mental. I mean, who the fuck knows what the hell is going on there? Who are we to judge? It's mad, it's definitely mental, but it's mental only for our perspective because it's like, what the fuck is that?

**Steve:** I know. I come from a pretty grounded background. I was in the Army for 15 years and I try to take a very, very grounded approach to these things but I've had a lot of experiences in my life where strange stuff happens, sometimes through the use of psychedelics, and I think you've just got to take things on face value. If something is presented to you in a way that you really can't deny, then ...

Lorna Bremner: Roll with it for now.

**Steve:** Roll with it, yeah.

**Lorna Bremner:** You know something interesting that's just come to mind about that is that, you know you were saying that he's predicted sort of technological inventions and then they come about?

Steve: Yeah.

**Lorna Bremner:** You were talking just before about the idea that our brain adapts to the environment that's around us and vice versa; this is a feedback loop. Just somebody having an idea and putting it out there in the world, how much of that is possible for manifesting that idea and then bringing it back? And I don't mean like 'I'm going to win the lottery' and then you try and manifest that in your life, I mean, literally, like thinking about something and saying it out loud: 'I think we're going to have a technological advancement in this thing.' How much did that start triggering people to start looking into it and then they make it happen?

**Steve:** Well, of course it would. I mean, as soon as somebody starts talking about something new and it's a popular idea and it goes viral, clearly you're going to have a whole bunch of other people thinking about it, right? It just makes sense. And there have been instances of this, particularly around athletic achievements over the years where somebody's broken a record and then within quick succession, a whole bunch of other people will break the same record. It's like somebody's laid down a pathway that takes us beyond the boundary and then all of a sudden it becomes accessible to other people.

**Lorna Bremner:** Yeah, we've seen that a lot with ... I used to do like slopestyle skiing and snowboarding and it's like, as soon as one person lands a 1440, then all of a sudden everybody can do a 1440. It's almost like you have to know that some person tells you it's possible and then everybody's like, 'oh fuck yeah, maybe I can do that.'

**Steve:** Yeah. When I was in the Army, I remember on at least one occasion somebody doing something that was just like out of the ordinary amazing, and often it was some young soldier or officer and somebody would say, 'wait, you can't do that', then someone else would say, 'Yeah, but nobody told him.'

**Lorna Bremner:** Yeah, yeah, right? No-one told him he couldn't do that, now he can. And isn't that cool because it's like just by you taking a chance and trying something new, you're providing a step for everyone else to jump up with you.

**Steve:** Yeah, exactly, and sometimes if we listen to other people too much, we can convince ourselves that something is impossible, which actually means we can't do it because we don't believe we can do it.

Lorna Bremner: Yeah, and this, I think, is of one of the major dangers for people—that idea that we can make the change by just pushing ourselves out there forward, then we bring whatever that is out into being. By not questioning science and accepting that science is a fact and 'this is it'—and I appreciate it, I'm not a person that's going to sit here and say the doctors don't know what they're talking about or whatever, I mean, I think that's insane, there's a lot of history and time and effort that's been put into creating the models of the universe and way we know them—but it doesn't mean that they're immutable; it doesn't mean that they can't be questioned and looked at and retried in new ways as we get better technology, whatever. It has to be done that way because this is the real danger. Clare Graves is talking about this evolution of the species, but if we stop questioning and we allow these rigid structures to stop us from wondering if we can get to that next level, maybe that next level doesn't exist. Maybe we kill ourselves before it even happens; maybe we just calcify, you know, like a crustacean—we just build up these shells of protection around us because it's too scary to take that leap.

**Steve:** And I'm sure there have been many cases of that kind of thing happening, whether it be in individual lives—I mean, we've seen it, we've all seen it. You've seen somebody who's just become terribly fearful and rigid about their attitude to life, they lock themselves down, they don't interact, and eventually they die that way in a closed state.

In his research, Graves wrote that people can be 'open', 'arrested' or 'closed' in terms of their capacity to take in information from the environment and then adapt to the challenges that they're being faced with. If we're open, it's like an open system where information can flow into and out of the system and the system can respond, react, adapt to new information—simple things like you walk out in the sun, you feel your skin getting burnt, you put a shirt and a hat on or something like that. That's an example of you being an open system. You're receiving information, you're taking note of it, you're adapting in a responsible or a sensible way.

Sometimes people can get psychologically into a state where they just close their minds—they no longer listen to new information—and one of the ways you can identify these sorts of people is they tend to try and use the same solutions to a problem even

when the problem has changed. It's the old thing of thinking everything's a nail so you hit it with a hammer, but then you come across a screw and you hit it with a hammer but it's not quite the same.

Lorna Bremner: Yeah, it doesn't quite fit.

**Steve:** So that's what happens when we get closed. We start to do things that are inappropriate and those things become less and less effective.

We're actually seeing this large-scale right now around the planet because we're in this shift that I've been talking about beyond the Modern Scientific-Industrial era to what's next and we're seeing all of the systems that were designed during the Scientific-Industrial era become less effective, like our economic systems, our political systems. People are trying the same old solutions that we've used for the last 300 years but the world has changed—the world is different than it was when those systems were designed—so they don't work anymore.

**Lorna Bremner:** Mhm. It's like letting go of a monarchy. We all were once ruled by kings and queens and rulers and dictators or whatever, and then we slowly realised that that probably wasn't the best way to do it but it is funny because I thought about this once when somebody was asking me when Donald Trump was running for president. They were like, 'what would you do if he actually won?' And I was like, as bad and nihilistic as it is, like I couldn't give a fuck one way or the other, because the one model is that we have this pretend human that stands there and says things off of a script in a really rigid suit, and they just say a bunch of bullshit that they think that people want to hear; behind the scenes they're run by a bunch of money, they don't give a fuck about people, all they're doing is creating a bigger and bigger gap between the people that are struggling and we just run this 'government system'—that is a quote unquote, government system—that's not here to help the people and it never has been. We almost have to have this civil rights uprising to fucking slap them in the face every once in a while and be like 'we hired you, we hired you to do a job for us and you don't give a shit.' What's so frustrating about it is that the Barack Obamas, the Hillary Clintons, the Bill Clintons, they're sitting there looking at you, going like, 'now, we're here to help you', you know, like, 'but you're not, you never have been. You're dropping drones with our money, constantly on people that we have nothing against and yet you're telling me that you're steering the ship, you're taking care of the ship for me and you're not.'

That's on one hand, and so Hillary Clinton gets hired—yep, it's the same old bullshit; we're going to keep going on the same old road. I think that it was her downfall, is instead of her adapting to the new situation, she and the Democratic Party were like, 'no, we're sticking here.'

What they should have done was gone with Bernie Sanders and just realise that, yeah, he's a bit out there—I mean, slightly out there compared to everybody else, but only slightly, just because he had new ideas; he was adapting.

And then the other option is this fucking wacko who doesn't give a fuck about anything. He doesn't care about the institution of it because he thinks he's untouchable, and he's a maniac. He's just an absolute pure maniac, but what I think it did, and I think the benefit of it if we can learn anything from this is, not 'oh, we need to get out and vote', it is 'oh, we've shown the ludicrous nature of the situation of president; that this is absolutely insanely ludicrous, that we would trust this one human, whether they're Hillary Clinton or Donald Trump, that we would trust one of them to make decisions on our behalf is fucking bullshit at this point.'

**Steve:** Yeah, and I think that's Trump's role, you know, in the bigger picture, is he's there to make change; that's why he's appeared. He's kind of like the court jester, you know?

**Lorna Bremner:** Yes, yes. Yeah, I hear you.

**Steve:** Back in the days of kings and queens, no-one would want to offend the king or the queen so often they didn't get told the truth, and the court jester was always the one who could, through humour, actually reveal the truth and say something that was real. That was like a trip switch to release the tension and get the truth flowing, and Trump is like that; he's playing that role.

**Lorna Bremner:** But he's not saying the truth necessarily. I would hold the truth to a higher standard.

**Steve:** The thing about Trump is, you know, I guess some people might say that he's not very smart, but what smart president would collapse the existing system so a better system can be built? No smart president was going to do that.

**Lorna Bremner:** Yeah, that's a good point.

**Steve:** You need a guy who's like the fool from the tarot card deck, that character who naively stumbles in and accidentally does the right thing, and that's Trump all over. I'm not saying that everything he's doing is right, but ultimately what he's doing is he's collapsing the old system, and at a time when evolution is calling us to change our

systems and move to something that's better and more effective; that meets the modern challenges that we're facing.

**Lorna Bremner:** Absolutely, man, I couldn't agree more. And it is gross, it's hard to watch and as with anything, you have your own kind of mental earthquakes every once in a while—it fucking hurts. You got to get slapped in the face and realise you're a dick sometimes and it's not good, but at the same time, it's like, 'well, now how can I change from this?' And this is what's worrying me a little bit, is the polarity that's developing out of it. It's like everyone's latching on to really simplified versions of right and wrong suddenly. I think this tends to happen, it seems like when there's a lot of change going on, you sort of cling on to things that seem like, 'no, this is right, you're left-wing, I'm right-wing, that's it, that's all there is; I'm a man, you're a woman', you know? And it's like, hold on, we are losing an opportunity to learn a lesson here where we are not just one of these things. What we need to see now is nuance.

**Steve:** Yeah, and that dynamic you just explained is documented in Clare Graves's work. He found that when we go through change from one of these paradigms or layers or stages to the next, it actually shifts our fundamental interaction with reality—the deepest subconscious ways that we make sense of reality change—and to go through that change, what has to happen is things have to fall apart. If you think of something like a kid's Lego block toy, if it's a ship, you can't snap your fingers and change it into an aeroplane; you've got to pull the blocks apart and put it back together in a different way. So that has to happen to us as individuals—our psyche has to loosen up and become plastic enough to change radically and our society needs to do the same thing. Our social systems need to change, so they need, to some extent, to fail to the point where we say, okay, we have to rebuild this in a different way.

What happens personally, for us when we start to go through this change process, we feel like something's not right. We wake up one morning and we go, you know, 'something doesn't feel right today. I was really happy and everything was good yesterday, but today it's different.' We usually don't know what the cause is, but we just know that we feel different, and as that tension starts to build, we start to think, 'OK, things aren't right, I can't keep living life the way that I have been, I've got to change, so maybe I'll think back to, like, ten years ago when things were different and I was living life a different way, and if I go back to that, maybe things will be cool again like they used to be', right?

Lorna Bremner: Wow, yeah.

**Steve:** You hear this language in the politicians speeches: "we've got to get back to basics, we've got to get down to brass tacks."

**Lorna Bremner:** Make America great again.

**Steve:** 'Let's get back to our original values, make America great again.' This is that natural human response: things aren't right, let's go back to the way they were. I call this the slingshot effect, because what it does is it actually creates more tension. When we go back to an old way of doing things, it's less complex; it's even less capable of dealing with these more complex challenges that are getting thrown up to us, and so it's like pulling back on an elastic band on a slingshot—you've got to create that tension, you've got to pull it backwards and create more and more and more tension till it gets to the point where it can shoot you forward fast enough to get where you need to go, and that's what we're seeing globally at the moment. That's why things look like they're going backwards, because they are. That elastic band is being pulled backwards, the tension is building and building and building, and it's going to get to the point where—and this will probably happen multiple times—the tension will be too much and it'll release and there'll be some big change happen. We're going to see that happen over and over again in different aspects of society and within ourselves as well.

**Lorna Bremner:** What do you think it is in some people that have this resistance to change or that seem to be more resistant to change than some others? Like some people can kind of adapt to that feeling a little bit quicker than other people.

**Steve:** Yeah, it really depends on their starting point. In Graves's work, he mapped out 8 different layers or stages of consciousness that we can grow through, and he didn't think that was the full story. He actually decided that this is an open-ended system—there's going to be more than 8—and as the world gets more complex, there'll be new, more complex layers added to our capacity, and it depends on where an individual is at in that spectrum in terms of how they will respond to change.

I think there's this common sort of feeling globally that humanity has evolved to a certain point, everybody's at that point, and we're all moving to the same place, whatever that next place might be, but in fact, Graves's work didn't show that at all. He showed that there's actually a spectrum depending on the complexity of someone's life conditions. Say, if they live in a country town, they don't have technology, life's pretty simple—they can keep doing the same thing over and over again and it works—their mindset, their perspective on the world is going to be adapted in a certain way that means they won't cope with change very well because they don't normally get change much. Whereas if someone's living in an intense environment where they're living in close proximity to a whole bunch of other people, let's say New York City where things are changing all the time, every day you've got to be ready to adapt to some new thing that you might encounter in your day-to-day life, then your consciousness is going to

adapt to be responsive and to expect change. So depending on what your starting point is on the spectrum, your response to change is going to be different and if you're not used to change, then you might just kind of deny it for a while and say, 'oh, no, that's okay, I'm fine'. It's like that cartoon of the dog sitting in the bar that's burning, saying, 'I'm fine, everything's good.' It's only when your arse starts to burn that you actually move and do something.

**Lorna Bremner:** Yeah, when you're forced to. Are there ways that people can change that in themselves, like if they're having a really hard time dealing with change, are there things that they can do?

**Steve:** Yeah, absolutely. One of my primary interests is looking at different methodologies and technologies for accelerating change because I think we're going to need them in the times ahead, and there's a lot of good research. For example, there is research into contemplative states like meditation and how they can actually accelerate your personal change over time, so regular meditators tend to be more adaptive and able to change.

**Lorna Bremner:** Why is that, I wonder? Because you were saying before that if you are surrounded by people and a lot of stuff going on, it makes you more adaptive to change, but if you isolate yourself and be quiet and spend your time on yourself, you are also more adaptive to change. Why is that?

**Steve:** I think what it comes down to is this idea of altered states. So if you think of being in one of these layers of consciousness as having a certain construct, a certain expectation of reality being the way that it is—and whether you're closed or open is also going to play a part here, your own personal kind of state there—then if you practise regularly collapsing that structure, then you'll become nimble. It's like an athlete who trains, right? The more you train, the more nimble you can become doing any particular thing, so if you have a regular practice that changes your state of consciousness into something different and then brings you back again, then it's like exercising a muscle. So all of the methodologies and technologies that I'm finding that are useful for accelerating our own development seem to be involving some kind of altered state. It's not always drugs, it can be meditation, it can be exercise, it can be food-induced, all sorts of different things.

**Lorna Bremner:** Mmm, and I guess if we touch on psychedelics a little bit—because you're obviously not recommending that everyone just goes and eats a tab of acid.

**Steve:** No, don't try this at home.

**Lorna Bremner:** What kind of transformative states are you finding through drugs, mostly because you've been looking into MDMA-assisted psychotherapy stuff.

**Steve:** Yes, I'm co-founder of a non-profit organisation here in Australia called Psychedelic Research in Science and Medicine (PRISM; https://www.prism.org.au). The initiation of that organisation was in large part due to Rick Doblin, who's the founder of MAPS, the Multidisciplinary Association for Psychedelic Studies in the US (https://maps.org). Some folks here in Australia started a community interest group in Melbourne, I think it was back in about 2003 or thereabouts, who were mainly a bunch of people interested in psychoactive plants to start with, that used to just come together and swap plants and talk about using them and that kind of thing. That grew into what is now an organisation called Entheogenesis Australis or EGA for short (https://www.entheogenesis.org) and EGA have been running psychedelic symposiums for years now and they've become world class. They're really, really good. Some of the people from EGA travelled overseas and met with Rick Doblin and spoke about what's happening in the US and how we might be able to do something similar here. They invited Rick to come speak at the 2010 Psychedelic Symposium that EGA put on in Melbourne, and I actually saw a media report about the fact that Rick was coming and it mentioned the MDMA research, which was looking at using it to treat PTSD. I was in Byron Bay at the time and I decided to travel down to Melbourne and go to that psychedelic symposium.

It was really, really good, and while Rick was talking, he offered some money to help us start a research organisation here in Australia, so that's how *PRISM* got started and I was one of the people who volunteered to help with that process. We formalised it in 2011, we very quickly tried to kind of jump in the pool and swim, which in hindsight was, I guess commendable but somewhat naive of us because none of us had any experience in drug development or the process that you need to go through to get a new drug approved. We jumped in the pool and found out that we couldn't swim all that well, and then we kind of pulled back a bit and started a longer journey of trying to get some psychedelic research happening here in Australia.

It's been a long road because there's been a lot of pushback from institutions here—and really I think it's partly a generational thing, but it's about the particular mindsets that are normal here in Australia, and again, it's all tied into Clare Graves's different layers of consciousness—this idea that has been pushed really strongly since the War on Drugs was declared in the US; that drugs are bad and everything is clumped under this word, 'drugs' ...

**Lorna Bremner:** It's so frustrating.

**Steve:** Talking about cocaine or heroin or MDMA—it's drugs, right? Yet they're radically different substances that have radically different effects.

We've been knocking on doors and saying, 'We want to do this research, can you support us?', and we've just been getting, 'nope, nope, nope, we can't do that; no, we couldn't be seen to be doing that—imagine that public image.' A lot of the institutions that we approached were worried about their funding base—if they're seen to be publicly supporting drugs, they might have their funding withdrawn and that kind of thing—so it's been a matter of some very real fears.

It's only since late last year, so late 2017, that some doors have really started to open for us. In quick succession—it was like someone flipped a switch somewhere—we had people coming to us offering us money to help what we're doing, we had a university actually step up and say, 'okay, we're interested in this', we had a hospital approach us—a major hospital—saying 'we think we'd like to research this, can you work with us?'

**Lorna Bremner:** And it's mostly MDMA-assisted psychotherapy trials for PTSD.

**Steve:** It's that and also we are working in the area of psilocybin-assisted therapy to treat near-death anxiety. There's been some really good research done in the US around that with terminally ill patients, basically giving them a spiritual experience using psilocybin, which opens them up to the possibility that death is not the end, but it's just a new beginning.

Lorna Bremner: There's many things that I wanted to say about that, that I'm really curious about. First of all, I'm so grateful that you guys didn't give up when you jumped into the pool and then you failed, because I think that's such a commendable act because it is fucking scary and there's a lot of stigma around it. When I start talking about drugs to people, straight away, everybody's just like, 'you fucking idiot, you don't know what you're talking about', and I get it. Yeah, sometimes I don't know what the fuck I'm talking about, but the amount of research—and this is kind of what I wanted to ask—was if you could give us some background on the actual benefits that they've been finding from PTSD, like why is this an important thing to pursue? Why was it worth pursuing?

**Steve:** If you go back and look at the history of MDMA, it was developed, I think it was around 1913-1914 by Merck, the pharmaceutical company, and it was put on the shelf. Then the US military looked at it, I think in the 1950s, as maybe a truth serum or something like that but it didn't go anywhere, and then it was a US chemist by the name of Alexander Shulgin—Sasha Shulgin, as he was known.

**Lorna Bremner:** I have his book, I've got *PIHKAL* [Acronym for: *Phenethylamines I Have Known and Loved*].

**Steve:** Yeah, cool. So he pulled it off the shelf and checked it out and found that it was amazing and then he started to give it out to friends of his who were working as counsellors and psychologists for use in therapy work. They got really, really good results from it, but then eventually it escaped into the recreational drug world. I think it was a guy from Texas who started mass-producing pills and then sort of giving them out for free at nightclubs and that kind of thing. It all got out of control and then eventually the government cracked down.

I think it was made illegal in the US in 1985. Rick Doblin, then, was a young counterculture guy, draft dodger, who stumbled on MDMA before it was made illegal and found it amazing. He decided he wanted to be an MDMA therapist, and then the government made it illegal, so pretty much straight away he started *MAPS* and he started on this mission just to overcome the legal restrictions and get this made a legal medicine.

Lorna Bremner: Because the kind of stuff that they are finding, I mean, their very first trial—I don't remember the exact statistics and you might be able to help clarify for me—but their first trial of PTSD, treating people with MDMA-assisted psychotherapy ... and for everybody that doesn't know how this worked, it was that they give them either potentially a placebo—and the doctor doesn't know this, the therapist doesn't know who's getting what—they give them either a placebo or they give them a medium, high, or low dose of MDMA, and this is your very pure MDMA that came from a chemist, not from the guy around the corner. They put an eye mask on them, lay them down, let them listen to music and then if the person wanted to talk, they could talk. These were 4-8 hour sessions and they'd keep the person there for 8 hours and let them talk through stuff. This was people that were suffering from post-traumatic stress disorder that nothing else had worked for them—all antidepressants, every other treatment had not worked for them—and they had something, I can't remember but it was somewhere around 80% success.

**Steve:** Just over 80% in the first trial.

**Lorna Bremner:** That's fucking insane.

**Steve:** Yes, it is amazing. The exact mechanism of how MDMA does this, we still don't really know, but what we can say is that when people are given MDMA in the right setting, and the treatment is a series of 11 therapeutic sessions plus a 12th longer-term

follow up session, and during those sessions, the patient works with a therapy pair, a male and a female, and it's been Michael and Annie Mithoefer have been the pioneers of this work with *MAPS*. Michael's a psychiatrist and Annie's a registered nurse and they're a married couple and they're old trippers from the 60s, so they know what they're doing, and what they know is that under the right circumstances and within this structured supportive system of a whole range of sessions, if you give somebody MDMA, then it can put them into a comfort zone. Normally somebody who has had PTSD, if they start to think about the things, the traumatic events, which resulted in PTSD, they immediately get anxious, they act as if the trauma is happening right now, not 10, 20, 30 years ago, and what MDMA does, it allows them to think about those traumatic events, but not feel as if it's happening right now. So they're in this kind of comfort zone where 'actually, I can think about that, I can remember what happened, I can talk about it, but I don't feel anxious', and that is extraordinary. That somehow enables this remarkable healing process.

As a war veteran myself who suffered from PTSD and been in hospital with it and who's also experienced this MDMA healing, I can say that it felt to me like it created a kind of a plasticity in my central nervous system and it was able to rewire itself—that's what it felt like to me. Whether that's actually what's happening scientifically, we don't formally know, but that was my feeling.

**Lorna Bremner:** That's incredible. What was it like for you? What was your experience like?

**Steve:** My experience wasn't typical. I had what they call complex PTSD, which resulted from a number of different occurrences over the years. I was accidentally poisoned as a 15-month-old kid so I went into hospital and nearly died when I was 15 months old. Then I joined the army as a young guy. I spent 15 years in the army, I went to war in Africa, in Somalia and had some traumatic experiences there, then when I came back, I got out of the army and I went flying a rescue helicopter as a pilot, and I spent five years responding to like road accidents and all sorts of things and so I got exposed to a lot of trauma there. So I had compounding experiences which made it particularly hard to treat. I had a breakdown in 2003, went into hospital at the Veterans Hospital in Melbourne and went through the conventional treatment system, which really didn't fix me. It got me to the point where I could go back to work on a part-time basis but I still had both PTSD and depression.

**Lorna Bremner:** What was the conventional treatment?

**Steve:** The conventional treatment involved, at that time, antidepressant drugs and one-on-one therapy, which started out at two sessions a week. I also went through a

three month group therapy programme where I was with five other war veterans and then we would come together as a group with different lecturers and therapists and talk about our traumas and get taught about how PTSD affects the body and things that we could do to get around it and that kind of thing. But after all that, I still had it. It allowed me to become functional to some extent again, but it didn't cure me.

Lorna Bremner: So what kind of symptoms do you have? Like what does PTSD feel like?

**Steve:** There's a whole range of symptoms. Usually it's accompanied by depression. Depression and PTSD are regarded as two different diagnoses but usually if you've got PTSD, you've also got depression. I had major depression or major depressive disorder, which meant that I got to the point where I was having suicidal thoughts, where I was so unhappy with the way that life was, I felt like the only way to fix it was to take the exit; and really that was the thing that triggered me to seek formal help.

In terms of the post-traumatic stress, it can play out in a whole bunch of different ways. It can result in anxiety attacks, so depending on what your trauma was, if something happens that reminds you of that trauma like, in my case, there were war traumas that could get triggered by smells or loud bangs that might sound like a rifle going off; disturbed sleep, so you just can't sleep properly; you lose interest in all of the things that you normally do, so if you normally exercise, you stop exercising, if you normally play music, you stop playing music; inability to concentrate—I got to the point where I would sit down on my desk at my computer and try and do some work and I would sit down and just think, 'what am I doing here? I don't even know what I'm supposed to be doing; How do I do this?'

I just became quite dysfunctional and when I was eventually admitted to hospital, I really was at the point where I wasn't able to care for myself properly. I couldn't do my own basic housework or feed myself; I can remember being in hospital just after I arrived in there and trying to eat a bowl of soup and my hand was shaking so much that the soup was hardly staying on the spoon. So it can disrupt your life in massive ways—massive disruption.

**Lorna Bremner:** Wow. And so then how did you find out about the MDMA psychotherapy? How did you get involved with that?

**Steve:** I went through the conventional treatment and I got myself back to work. The way this unfolded for me was that my first sort of access to psychedelic medicine was through ayahuasca. I had a friend who invited me to an ayahuasca ceremony and I didn't know what ayahuasca was—in fact, I was totally drug naïve at the time. I'd drunk a lot of alcohol in the Army, but that was all. I'd never even smoked a joint but I was interested. I was working at the time in the area of change, so I was actually a Change

Consultant. Through my experiences, I'd become so fascinated with human nature and this process of change that I'd started working in that area and teaching other people about it, so I was teaching in the corporate world as an Organisational Development Consultant where I would talk to people about the human experience of change and how it impacts us and how to construct change programmes effectively.

A guy who was working in a similar area to me, who'd become a good friend of mine, rang me up one day and said 'I've just been invited to this ayahuasca ceremony, do you want to come?" So I had to Google it and find out what it was and read about it. And then I thought, 'okay, this sounds interesting'. My primary interest at the time was that it could be a useful thing for helping people navigate change. I had no idea that it could have been a medicine. I didn't even know that psychedelics could be medicines back then. So anyway, I went and had this experience. It was amazing, it was life-changing and I found that my depression just disappeared after this experience.

Lorna Bremner: Wow.

**Steve:** It didn't necessarily disappear permanently, but it was just like not there for a while, and so I thought, 'oh my God, that's amazing'.

**Lorna Bremner:** It's like seeing a blue sky again after a cloudy day.

**Steve:** Yes, and that was the first inkling I got that these things are actually medicines—no-one had ever mentioned that drugs could be medicines. It was some years after that and after I actually got involved with PRISM and tried to start some research here in Australia that I had an opportunity to try MDMA for the first time. I'd been quite cautious about that because if you try and do these things through the underground, you never know what you're getting, there's no guarantee that what you're getting is actually MDMA—it could have other poisonous things mixed in with it sometimes—so I was super cautious and I was very well informed because I had access to all of the research documentation from *MAPS*. *MAPS* are amazingly transparent and open.

**Lorna Bremner:** They're an incredible organisation.

**Steve:** They are. You can go to their website and you can download their treatment protocols, you can see how much MDMA they're giving to people, how sessions are run, how many sessions are in a treatment programme, that kind of thing. So I had all that information and I think by then I'd actually met Rick Doblin, the founder of *MAPS* and I'd spoken to him a few times and had a lot of contact with him, and I'd also been across to

one of their annual conferences, the *Psychedelic Science Conference* in 2013. I'd sat in a room with all of the MDMA researchers from around the world who are working for *MAPS*.

Lorna Bremner: Rad.

**Steve:** And I'd been able to have discussions with them so I was massively well informed. Then I had an opportunity to access some pure MDMA and I decided to self-medicate following the *MAPS* protocol. I had a friend come and sit with me for safety and just to monitor me and I took the MDMA.

**Lorna Bremner:** Is it 75mg? Or is it 175?

**Steve:** At that time, the standard dose in the MAPS dosing protocol was 125 milligrams.

And so I took it and I lay back, and by that time I'd been practising my kung fu for I think it must have been 13 or 14 years, and I do a meditative Taoist form of kung fu, which is also a meditative practice—It's like moving meditation, and it's based on the Chinese medicine energy meridian system—so I was very aware, more aware than most people, of the energy flows in my body and I could sense them changing. Once I took the MDMA, I felt all of my energy centres, my chakras, light up, and I felt my heart chakra just expand amazingly like I'd never felt before. I started to feel ecstasy, and I thought to myself, 'no wonder they call this stuff ecstasy', because it just felt amazing.

My experience was not typical at all. I didn't have any recall of trauma; I didn't actually think about my trauma at all during that experience. I just lay there for like four or five hours in bliss, just going, 'wow, wow, wow, this is amazing.' And then it started to wind down, I obviously had a talk about my experience with my friend who was there looking after me, and then I went to sleep. The next morning I woke up and I felt radically different and what was different was I'd been living for so long with this background anxiety at a fairly high level to the point where it had become normal for me, and when I woke up that next morning, it was gone. That was like, 'my God!' I couldn't remember a time where I'd felt so peaceful and such an absence of anxiety. It was radically, radically different, and that was from one session.

**Lorna Bremner:** One thing that I was wondering about, because it's very typical in any person that I know that takes drugs—takes MDMA—they will always have like the two-day comedown after it's over. You have this big high while you're on it and then afterward you just feel like the world's ending, and so I was confused about that because, you know, this is a treatment for people who are suicidal. How do they navigate those two days of comedown? For you, it sounded like it didn't exist.

**Steve:** I don't remember really having the comedown on that occasion, and it doesn't always happen in a therapeutic sense. Sometimes it does but what they do is they monitor very, very carefully a person's well-being. They have a number of sessions before they administer the drug and out of the 11 therapeutic sessions, usually only 2 or maybe 3 of those sessions involve MDMA. Most of them are just like a standard counselling or psychotherapeutic session.

They start out just so the patient can get to know the therapists, can get sort of informed as to what to expect when their drug sessions start, then they'll do a drug session and the person will usually stay on site where they had the session overnight—they don't go home. The next morning when they wake up, the therapists are there, they've got access to a doctor and medical care if they need it, they'll be questioned as to their well-being—they have like formal measurement surveys which they put people through, just to gauge whether they're feeling okay or whether they're feeling depressed or whatever—and then, of course, if a person is feeling down, then they can take action to resolve that somehow and deal with it and support the person through that.

**Lorna Bremner:** Because I've always been under the impression that it's a chemical thing in your brain—your brain gets flooded with serotonin, dopamine—and then ...

**Steve:** It actually is. What actually happens on a physical, biological level is that MDMA works in a couple of different ways. One of the things it does is we have these little storage sacks called vesicles where we store spare serotonin, and MDMA causes all the sacks to basically squirt all the serotonin out so our system becomes flooded with serotonin, which means that our serotonin receptors all get filled up with serotonin. Also, the MDMA molecule itself bonds to a transport protein, and this transport protein's normal job is to go around and pick up all this of serotonin and put it back in storage sacks because it's not needed at the time. The MDMA molecule actually bonds to those transport proteins so they can't do their job, so we become flooded with serotonin. When you do that, there's always this knock-on effect. There are three, what are regarded as the three primary neurochemicals: serotonin, dopamine, and norepinephrine, which is sometimes called noradrenalin; if you flood the serotonin system, that usually causes an increase in dopamine and norepinephrine, but in that order. It will increase dopamine to a certain extent and then increase norepinephrine to a lesser extent.

So you get a kind of a mild speedy effect from the increase in norepinephrine, you get a really lovely warm and fuzzy feeling from the dopamine, which is the feel good chemical, and general wellbeing from the serotonin flood as well. So what happens is it disrupts the body's serotonin reuptake system, because normally if we've got excess serotonin, the little proteins go around, collect them all up, put them back in their storage sacks—the vesicles—and restore a normal balance. That reuptake process gets

disrupted while the MDMA molecules are in our system, and it takes roughly 44-48 hours for the MDMA to wash out of the system sufficiently for the reuptake system to re-jig itself and start operating normally again, and that's why it's often at that two-day point where we feel like we've reached a bit of an emotional slump, because our normal system of maintaining a balance hasn't re-jigged itself, and it's only once the MDMA molecules are all out of the system that it can do that.

**Lorna Bremner:** Wow, that's interesting. Is there anything you can do to help get it back faster or is it just a bit of an acceptance like, 'oh, no, my serotonin's just down for a while'?

**Steve:** Look, there's a lot of ideas out there about what might help. I don't think there's any good science around it yet but if you read discussion sites on the Web about people and what their experiences are, then some people like to preload before they take the MDMA by taking things that are conducive to serotonin production, like 5-HTP—5-hydroxytryptophan is a precursor to serotonin production—some people would take that as a supplement. Some people will take complex vitamins, because certain B vitamins, in particular, are implicated in the production of serotonin. Whether those things actually work or not, or whether we're just seeing a placebo effect, I don't think there's any really good science just yet, but these are the things that people do. And also taking them after the fact, so maybe the next morning after you take the MDMA, dose up on some complex vitamin B. With 5-HTP, I've not used it much, but I've found that you do need to be careful when you take it, because I did try it but I found that it disrupted my sleep pattern.

**Lorna Bremner:** Yeah, same. I get it too, and it gives me crazy dreams—mental dreams.

**Steve:** Yeah. Melatonin, which is associated with sleeping, is produced from serotonin—it's like a derivative—so if you mess with serotonin it can mess with your melatonin levels as well, but yeah, as far as I know there's no good science around this yet.

**Lorna Bremner:** Well I think my general theory on this kind of major downer that happens after MDMA typically is because we go at it like it's a party drug the same way as everything else, and so if I'm out partying, having MDMA, then I'm likely to be out drinking, possibly having coke, doing whatever the fuck I'm doing to my body, and not sleeping, not getting the adequate amount of sleep that night because I'm out partying all night, and then I just feel like a piece of shit the next day. Then I eat a bunch of bad food and that will knock on for two days. So naturally, as we just discussed, your neurochemistry's probably going to be a little bit wonky and then you're just contributing to that with this.

**Steve:** Yeah, it's a complex mixture of different things, not just the MDMA. My understanding is that in a therapeutic sense, if somebody is suffering markedly from depression to the point where they're having suicidal thoughts, then it can be a danger factor for giving them MDMA, so you would need to be very, very careful about doing that in the first place, and then if they did have, that therapy about monitoring their progress and supporting them through what could be a very harmful slump, potentially.

**Lorna Bremner:** Have you read much about the research on ketamine for people that are immediately suicidal?

Steve: I have read a little, yeah.

**Lorna Bremner:** It's an interesting little start to it. I've had ketamine myself as well, and it's a funny thing. Whenever you talk to anyone who's had ketamine, they usually kind of have a little smile on their face, like it's like a nice pet, it's like a nice friend—I don't know, they're always like, 'oh yeah, I like ketamine'—but it's an intense experience. It's definitely not something that you fuck around with and I imagine getting too attached to what the ketamine feels like ruins it anyway.

**Steve:** All of these things are usually dose dependent and also the experience is very much dependent on set and setting, which means the mindset that you have at the time that you're doing it and then the setting that you do it within—who's around you, what the physical environment is like, how comfortable you feel, how safe you feel—all of these things impact your actual experience in the altered state. There's lots and lots of different factors and in fact, even the astrology of the day.

I don't know if you've heard of Stanislav Grof?

Lorna Bremner: Yeah, sure.

**Steve:** He's a legend in the psychedelic world, of course, and he is one of the pioneers of transpersonal psychology. Back before many of these things became illegal, he put thousands of patients through therapy using LSD, and he actually wrote a book called *LSD Psychotherapy*. He said that the only way that he had any hope of predicting the outcome of someone's psychedelic experience was by looking at the astrology of the day. It was the *only* thing he found which actually was reliable.

Lorna Bremner: Whoa.

Steve: I know.

**Lorna Bremner:** Isn't that mental because you just write it off, you go 'oh, astrology, fucking idiots.'

**Steve:** Yeah, exactly..

Lorna Bremner: Wow.

**Steve:** So he looked at it and he looked at a person's astrology for the day and the general astrology of the day, and he found that there was a definite connection between that and the experience that somebody had.

Lorna Bremner: Wow. That's incredible.

**Steve:** Very interesting.

**Lorna Bremner:** Wow. Oh my God, this is such a good conversation, man. We've already been talking for an hour and 20 minutes—that's insane. I have to try and figure out how to make this an hour.

One last thing I wanted to just quickly ask you about before we go is, obviously we've been talking a lot about using drugs, but in a healthy and kind of safe way. One of the other things that you've had a little bit of involvement in is harm reduction, and that is kind of figuring out how we can get these "drugs" (quote unquote), these substances back into the general population in a safe and healthy way, or at least reducing the harm that's caused by them when they're used recreationally.

**Steve:** Yeah, I think the biggest issue we're facing at the moment is that because we have prohibition in place, the process of manufacturing and distributing these substances is left to criminals, right? who often ultimately just want to make money out of it. Consequently, they don't care so much about the purity or what circumstances people take the drugs under, and consequently, we get some bad outcomes, like occasionally a death in a music festival for whatever reason. Then, the government's activity in trying to enforce prohibition is sometimes adding to the harm because the

presence of police dogs or police at a festival, for example, might make somebody panic and take all of their drugs at once. That's happened and people have died from that.

It's a very tricky situation that we have and it's also complicated by this idea of labelling everything as a drug. It's funny because you go to America and the word drug doesn't have the same kind of implications over there. You have Drug Stores, right, which are what we call Chemists here, and a big sign saying "buy your drugs here", which is kind of funny for an Australian. Here in Australia in particular, this label, 'drugs', has been just used across the board, and within that and within the things that are labelled as illicit on our drug schedules, we've captured some amazing useful substances which science shows can be incredible medicines—like MDMA, for example—and alongside them, we've lumped things that are often harmful like heroin, things that may be not so useful like cocaine, and so it's a terrible mixed bag. I think the first thing that we need to do is actually start to clean up our discussion and not talk about drugs, but be very specific about talking to these different substances in particular and the benefits or the harms that they bring.

**Lorna Bremner:** Yeah, and use in use with each other, because that's the grossest thing about it. When you lump everything in as a drug, then it's like, 'oh, I'm going to party tonight, so I'm going to drink a shitload of alcohol and then we got some tabs of acid, we're going to get some MDMA, we're going to have some ket', you know, and then all of a sudden you having this fuckin mental cocktail of shit that should never be mixed together, ever. And then all of a sudden, you don't know what the fuck's going on and then everyone says, 'oh, drugs are bad', and it's like, 'no, the education on drugs is bad', it's terrible.

**Steve:** That's right. If you go to a doctor and you get a prescription for a pharmaceutical, you go to the chemist, you get it in a box, it comes with a pamphlet that you can open and read that's got all the side effects and, you know, 'don't drive a car when you take this' or whatever. There's none of that.

**Lorna Bremner:** And know what's in it, you know the purity of it.

**Steve:** That's right, you know it's pure, but we don't have that because of prohibition, so I think one of the first things that needs to happen on a government level is we need to reschedule these drugs according to the science, because our drug schedules are not related to science at the moment.

**Lorna Bremner:** Cannabis, for example, is a fucking joke.

**Steve:** Exactly. It's an amazing medicine, yet it's right there, scheduled with everything else, so we need to we need to change that. We need to have a science-based system for classifying these things as harmful or not, and, in the meantime, we need to do whatever we can to reduce the harm under this system, which really doesn't work. Things like pill testing, for example, at music festivals, I think is a great start, and also having places where people can go to festivals to be looked after if they're having a hard time.

Our organisation, *PRISM*, works closely with *DanceWize* in Victoria to do that (<a href="https://www.hrvic.org.au/dancewize">https://www.hrvic.org.au/dancewize</a>). *DanceWize* are run by *Harm Reduction Victoria*, which is actually a government-funded agency, which is amazing.

Lorna Bremner: Awesome.

**Steve:** And they go to music festivals, they set up the *DanceWize* tent, where if somebody's tripping hard and having a difficult time, they can come, their friends can bring them to the *DanceWize* tent, there are people there who know what drugs do, who understand whether medical treatment is needed or not—they're usually parking the *DanceWize* tent next to the medical tent anyway, so if somebody needs medical attention, it's only right next door—and it's a place where people can go sit, be reassured by somebody who knows what's going on, that things are okay and you're just going to have to wait a few hours until this wears off and you'll be fine. Oftentimes it's as simple as that. I've worked as a volunteer along with the other *PRISM* guys at *DanceWize* on a couple of occasions, and sometimes you'll get somebody coming in who really is in need of medical care—they're having a massive anxiety attack, it doesn't matter what you say to them, they're not going to calm down; sometimes they'll be scratching the skin off their fingers or whatever and you have to actually go to a doctor and say, 'look, we need to sedate this person or something has to happen.'

**Lorna Bremner:** Give them a tranquilliser, yeah. Wow. And on a personal level, for a person taking drugs are there some recommendations, like, say, with MDMA, for example, because there has been some research on how to reduce the harm of MDMA while you're taking it because most of the MDMA-related deaths are due to dehydration or heat exhaustion.

**Steve:** Yeah, look, I wouldn't make any recommendations, simply because of the system that we have in place here where drug use is illegal and if I make a recommendation, then I could be seen to be supporting the illicit use of drugs. Because of my connection to *PRISM* and the hope to get some legal research up and running, we can't connect those dots, unfortunately; we have to play by the rules. However, if somebody was in a country where MDMA was legal and they wanted to care for themselves while they were

using it, then that would be a different story—somewhere like, say, Portugal, where it's decriminalised. I think you summed up a lot of this stuff before when you said that people go out and they mix it with alcohol, they don't keep track of how much they're taking, they do arduous activities where they're dehydrating themselves, they won't sleep properly, and then they wonder why they've got a bad comedown.

Simply, it really is about self-care. It's about responsible use, so educating yourself about what is an average dose, taking notice of the effects that these things have on you, and maybe if you take two pills and you wake up the next day and you don't feel good, then maybe don't take two pills next time—simple things—remaining hydrated, not mixing them with alcohol or anything that could be detrimental because sometimes you take two different things and there are contraindications so the effect of one will actually change the effect of the other one in a harmful way. Education is a big part of it too.

**Lorna Bremner:** It's a massive one, yeah, and that's the sad thing. You just touched on a great point there—it's so sad that people that know the most about this shit can't talk about it because it's fucking illegal and you don't want to be seen to be promoting drug use. Because I agree, I don't think that we should be promoting drug use, but people are going to take drugs whether we like it or not. It's going to happen, and what we really want is for people to do it as safe as possible and as healthy as possible.

**Steve:** Yeah, exactly, and somewhere down the track, hopefully we'll get a science-based drug scheduling system so the law changes and those things that have been scientifically proven to be beneficial medicines, less harmful than alcohol and tobacco, for example, they won't be illicit anymore. They'll be available and you'll be able to buy them knowing that they're pure; you'll be able to consult people who can give you the exact information about what to do and what not to do when you take it, and we can have open education out there and those sorts of things.

I really believe the world is heading in this direction. There are a lot of countries that are pioneering this kind of thing. Australia is backward when it comes to this process and progress at the moment. We're lagging behind all the countries that we like to compare ourselves to, like, the UK and Canada and the US, for example.

Lorna Bremner: Why?

**Steve:** As far as I can figure, it comes down to conservative attitudes, particularly within our institutions like our educational institutions and our medical profession. People are afraid to take a risk, they're worried about the impact on themselves or the institution, or being seen to be doing something that's socially unacceptable—and of course, the fact that it's generally regarded as socially unacceptable by older generations is a big

factor there—but as we get the generational change happening, people who've grown up going to music festivals and popping pingers and know that they didn't die, they're eventually going to become politicians and doctors—and this is happening already. We're getting PhD students coming through now who've grown up this way and they know that these things are actually useful if they're used in the right way.

**Lorna Bremner:** Right. That just kind of sparked an idea in my head—and maybe we should end on this—but in the same way we've been talking about fractals and little things that expand into bigger things, you were talking about a person that's isolated and lives in a small country town, and they aren't exposed to change a lot. Australia is very isolated geographically compared to everywhere else.

**Steve:** That's right.

**Lorna Bremner:** So maybe that's why we struggle.

**Steve:** Yeah, that's quite possibly part of it, and plus, agriculture is a big thing here—it's one of the major industries. I alluded to that Agricultural mindset where things don't change radically so much. You can do the same thing over and over and over again and generally it works ... except when the climate changes.

**Lorna Bremner:** Aw man, well, thank you so much. What a great conversation. Where can people find you if they want more information?

**Steve:** So the *PRISM* website is <u>www.prism.org.au</u>. That's our research organisation. My personal website is <u>www.eman8.net</u>.

**Lorna Bremner:** Awesome man. I'll have links to all that on my website and everywhere and yeah, excellent.

**Steve:** And also I do a radio show Monday mornings on *BayFM* in Byron Bay, which is streamed on <a href="www.BayFM.org">www.BayFM.org</a>. It's called *Future Sense*, where I'm talking about the evolution of human consciousness in the future (www.futuresense.it).

You've been listening to Future Sense, a podcast edited from the radio show of the same name broadcast on BayFM in Byron Bay, Australia, at www.bayfm.org. Future Sense is available on iTunes and SoundCloud. The future is here now, it's just not evenly distributed.