



Medicine Stories Podcast

Episode 8 - Stephen Harrod Buhner

Planetary Intelligence, Ancestral Resonance, & the Perception of the Heart

January 29, 2018

[0:00:00]

(Intro Music: acoustic guitar folk song "Wild Eyes" by Mariee Sioux)

[Intro]

[0:00:06]

Amber: Hello friends! Welcome to Medicine Stories. This is Episode 8. I'm Amber Magnolia Hill, and today I'm speaking with Stephen Harrod Buhner.

For those in the herbal world, Stephen needs no introduction, but for newcomers, anyone who has not heard of Stephen, I'm just going to read his bio off his website, somewhat shortened.

Stephen Harrod Buhner is an Earth poet and the award-winning author of twenty books on nature, indigenous cultures, the environment, and herbal medicine. Stephen's work has appeared or been profiled in publications throughout North America and Europe, including *Common Boundary*, *Apotheosis*, *Shaman's Drum*, *The New York Times*, *CNN*, and *Good Morning America*. Stephen teaches about herbal medicine, the sacredness of plants, the intelligence of Nature, and the states of mind necessary for successful habitation of Earth. He is a tireless advocate for the reincorporation of the exploratory artist, independent scholar, amateur naturalist, and citizen scientist in American society, especially as a counterweight to the influence of corporate science and technology.

So aside from Stephen's vast herbal knowledge, one reason that I've been drawn to his work over the years is because, like what I'm trying to do with this podcast, through his writings and teachings, Stephen encourages us to listen to what calls us. Stephen calls them "Golden Threads". That's what I call "mythic threads" on this show. In his book *Plant Intelligence and the Imaginal Realm* he writes:

For deeper reasons than any of us can ever know, of all the connections that run through the world, there are certain ones that touch us more strongly, that call us, that become golden threads that generate in us what James Hillman “noticia”: the attentive noticing of the soul.

I love that idea, “the attentive noticing of the soul.” This reminds of something that Rumi wrote:

Let yourself be silently drawn by the strange pool of what you really love. It will not lead you astray.

So through reading Stephen’s books you learn about herbs, and then you also are encouraged to go deeper within, and that’s just exactly the kind of person that I want to be learning from.

[0:02:42]

Amber: So just a few of the things that we talk about today, and then I’m going to talk about a few other things before playing the interview, are:

- Stephen’s memories of his physician great-grandfather, and how DNA carries more than just physical information down through the generations
- The tendency toward high sensitivity in plant people
- Sensory gating channels & discerning meaning from the touch of the world upon us
- Plant perception and the neural networks in root systems- humans do **not** have a monopoly on intelligence
- The function of psychedelics in the ecosystem, apart from and long before human use
- How we can recover the intelligence of the heart in the direct perception of nature
- Visionary plant encounters & knowing plants through dreaming states
- The nature of bacterial & viral life forms, how we have misunderstood them for generations,
- What happened in the Great Flu Epidemic 100 years ago in 1918
- How the world is now uniquely positioned for the re-emergence of new and more virulent infectious diseases
- How herbs are far more effective at treating these infections than technological medicine, and how so many people are becoming interested in herbalism, right as the age of “miracle drugs” comes to an end.
- Stephen shares his opinion on whether or not humans and the earth will survive the times that we’re in, and for the record, I agree with him 100%
- Personal empowerment in a culture where most of us have handed over our power to experts and institutions
- And finally, what’s on Stephen’s mind as he enters his elder years and watches a new generation of herbalists emerge as his go out.

[0:04:26]

Amber: So our talk is really based on three of Stephen’s 22 books. He’s got two more in the works that we also talk about in the interview. *Plant Intelligence and the Imaginal Realm*. The subtitle is

Beyond the Doors of Perception into the Dreaming of Earth. I think that's basically the best book title of all time. I remember clearly the first time I saw it I was like, jaw-dropped, mind-gasm, need this book now. And so, the things that we talk about related to that book, if you want to go further, are psychedelics, or Stephen's term, "neurognostics" (which I really love), sensory gating channels, and yeah, plant intelligence. And then the book, *The Secret Teachings of Plants: The Intelligence of HEart in the Direct Perception of Nature*, this is when we talk about the feeling sense and being in communion with the wider world. And then his book, *Herbal Antivirals*, when we talk about infectious diseases and viral intelligence.

So Stephen also has a book called *Herbal Antibiotics*, and I remember really clearly also the first I saw these books on someone's bookshelf, being very drawn to them, and immediately understanding, without having to look at the title, just looking at the spines, that these were really important books and this was information that I wanted to know and that everyone should know.

So I bought them, and it actually took me a long time to save up to buy them. This was during my really broke, single mama years, but they were always on my Amazon wishlist. You know, I knew that these books were coming into my life, and I've since read them many times, and really become almost obsessed with viral infections. I'm really trying to understand them and prepare myself and my family for them.

[0:06:22]

Amber: So one of the most profound effects that the book *Herbal Antivirals* had on my life is it led to the formulation of our Extra Potent Elderberry Elixir in the fall of 2016, that has since become the foundation of our herbal line, Mythic Medicinals. So this was during Standing Rock, and Standing Rock was putting calls out for herbal medicine, and I really wanted to make something that would be valuable to the people there on the ground. One thing they were asking for was elderberry elixirs.

And so, I went back into *Herbal Antivirals*. I read it for the third or fourth time. I took a ton of notes, and between reading that book, thinking about my own experience with these plants and having cold and flu, and my intuitive pool towards certain plants as I was formulating this medicine, and reading plenty of writing from other herbalists, especially Kiva Rose, I came up with this recipe and put it out there. Ever since then it has just sold like mad. It sells out every time we release it within one to seven days. (*Amber laughs*) It just completely takes over our lives for a week or more every time we put out a new batch.

So at the time of the release of this podcast, I think we'll have a new batch out. You can check it out at MythicMedicine.love/shop, but I make no promises. If you listen to this later they might be sold out. They might sell out quickly. I'm not really sure how it's going to go, but I'm really, really grateful to Stephen for helping me know, like, the most (some of the most) potent plants I could put in here. There's plenty. In his book, he goes over many strongly antiviral herbs, and in *Herbal Antibiotics*, he talks about strongly antibacterial herbs. So we don't really talk about specific plants in this area of infectious diseases in the podcast, but if you're listening and wondering, like, "well, which plants?" you can find them in those books.

Also, in the listing for the Elderberry Elixir on my website, I have photographs of some of the pages of his book to kind of give people an impetus to grow in them the desire to want to get these books and read them.

So a couple of the things that our elixirs have that was inspired by Stephen are fresh ginger juice (not powdered ginger). I learned from him that if you're using ginger for a viral infection, it needs to be fresh. A ginger tea isn't going to help you with that. It might help you with a stomach ache or something, but it's not going to help knock out an infection. We also added licorice on the advice of the book, and there's a lot of good, local, raw honey, plus many other herbs. So you can look at my website. I don't want to go too deeply into that, but thank you for that, Stephen.

[0:09:24]

Amber: And so my interest in infectious diseases and viruses, and just how much Stephen's book sparked this interest for me even further, has led me down many roads, and I think about this stuff all the time, and like to share about it when I can.

So a couple of weeks ago I did an Instagram Live video all about viral infections and got so much good feedback from it that I have shot it again (since it disappears after 24 hours when you do an Instagram Live) and put it up on my blog. So that's [Mythicmedicine.love/blog](https://mythicmedicine.love/blog). You can watch that video.

In it I talk about:

- Common misconceptions about cold and flu, including the misuse of commonly used herbs, like citrus, ginger, echinacea.
- How suppressing symptoms is not only **not** treating the infection, but can often make it worse.
- The treatment guidelines that my family follows. And the three things that I always have on hand, every day of the year, in case someone in my family starts to get sick.
- Other ways to empower yourself before you're too sick to do anything but lie in bed.

[0:10:29]

Amber: So, speaking of empowerment, I was really struck by what Stephen had to say about that here. It's brief, but I think it's so, so important, and it's something that I think about a lot, but have really struggled to articulate because I don't want to sound condescending or judgemental, but I'm going to try. I'm going to try to articulate it here around this that have been building for many years, and to do that I'm going to tell a story.

This is a true story (*Amber laughs*). This is about a family I know, and I know four generations of this family, so we're going to call them the matriarch and patriarch or the great-grandparents, and then there are the grandparents, and then the parents who are my age now, and then the kids, who are around my daughters ages; they range from baby, now, to teenager.

So starting with the great-grandparents, the matriarch and patriarch, this would've been in the Fifties, they had super-medicated births. This was at the time of "twilight births", so, the mom had those kinds of births. She formula-fed. She wouldn't dare think of nursing her babies. It was so far below her at that point and were just feeding the kids processed food. You know, like, so many of us still do, and it really started around the Fifties, processed food being heavily advertised to stay-at-homes, and "miracle foods", you know? Frozen dinners.

And so this next generation, who are the grandparents, they raised their kids the same way: super medicated births, would not even think about breastfeeding - it's just so archaic and gross; and

very processed foods. And so now, the parents, who are my age have done the exact same thing, and, you know, technological birth has gone even further over the edge now with inducements and unnecessary c-sections. We know so much more now about the importance of breastfeeding, but every mom in this generation, too, was like, “Gross, I would never.” I remember them looking at me, nursing my first daughter like, “Eww.” And always running to the doctor immediately when the kids are sick. It has happened in all these generations. So now, with the kids, the fourth generation, there’s a lot of them, they are all really sick all the time.

When I was over there years ago, I remember one of the grandmas, like, yelling out, and she did this big gesture with her body, “Why are my grandkids ALWAYS SICK?!” and I wanted to be like, “I know why!” (*Amber laughs*) you know? But it’s so hard to talk to people about these things. I love this family. I don’t want to seem holier-than-thou, but it’s the lifestyle choices that they have made generation-by-generation, and moment-by-moment, so these kids, now, I see them sitting in front of the TV, watching things that are totally age-inappropriate, and just being like shoveled Cheetos and Oreos and things to eat, and then constantly, like, monthly, going to the doctor when they’re sick and being put on more antibiotics, and so much of the time, these are viral infections that these children have. They are **not** bacterial infections. Antibiotics do not address viral infections, and doctors know this, but they will prescribe them anyway just to shut the parents up and get them out of their office.

[0:14:08]

Amber: And so I’m watching as these kids get sicker and sicker: allergies, auto-immune issues; it’s really sad. It’s really sad, and I see how frustrated and sad the parents and grandparents are, watching these children be so ill, and feeling completely disempowered to deal with it and to help their children live long, strong, healthy lives. In fact, one of the little ones has an issue that’s going to end her life at a much younger age than it would otherwise, and I did look it up to see if this issue was epigenetic, and it is, meaning that if different lifestyle choices had been made by her ancestors, those genes may not have been turned on that gave her this disease from birth.

So, I also knew the fifth-generation ancestor in this whole family, and you know, she was healthy as a horse. She didn’t have an antibiotic a day in her life. She birthed her babies naturally and breastfed them, and her children and their spouses just had the misfortune of being born in a time in the 1950s — or having their children born in a time — they were born in about the 20s when it was the age of miracle drugs and technological innovations, and experts, and just “hand your power over to us and we will take care of everything. And they did that, and they didn’t question it. They didn’t question it at all, and now they’re really paying for it, and it’s really hard to see and to watch.

We know enough now about epigenetics that it seems to me that starting to take — if this is like you and you’re family, and you’re like, “Yes, this is so familiar to me” — taking your power back and learning what you can slowly over time, integrating the lessons, you can change that, the story for your family going forward. You can reweave health back into your descendants and the people that you love and the people in your life.

So I grew up eating nothing but processed food, being put constantly on antibiotics for ear infections, and just watching hours and hours a day of TV, but at some point, I just felt in my bones, like, in my late teens and early twenties that it was wrong, and there was another way. And I just started reading any books that I could find, seeking out any teachers I could about herbalism

and other ways to live, and the fact that you're listening to this podcast tells me that you, too, wish to be empowered and wish to empower others.

[0:16:53]

Amber: So I just wanted to expand a little bit on Stephen's brief sentences because I think they're really important. You know, he says when he meets people that are totally disempowered, it's almost shocking to him, and I feel the same way. Like, when people — when I see what people post online sometimes, I'm like, oh my God, you know nothing about taking care of your children. This is really basic, easy-to-find information. Like, it's out there. It's in Stephen's books. It's in other books, in podcasts, and in articles, and in blog posts. It's at conferences, and in forums online, and it just takes the willingness to seek it out and take it in and act on it. So I hope that what you hear in this podcast today, and in everything that I do, empowers you. Empowers you to empower you, inspires you to empower yourself and others, and let's just keep empowering ourselves and one another.

[0:17:49]

Amber: So, a few more things here:

I have over 100 Patreon supporters now. It's growing so quickly since the last podcast where I really talked about it, very grateful, and I do have a little Buhner-related thing up on Patreon for you today. Years ago I wrote to Stephen, asking if he would sign a copy of *Plant Intelligence* and the *Imaginal Realm* to me and my now 11-year-old daughter, Mycelia. I have this — I call it, like, legacy bookshelf for her, where I have sought out some of my favorite authors and asked them to sign a book to me and to her, or just to her. These are just my very favorite authors; the books that have really meant something to me and changed my life, and Stephen agreed, and so I sent the book off to him, and he mailed it back to me, and I could not read what the inscription said.

(Amber laughs). Which, I have a lot sympathy for because my handwriting is awful. After we ended the call, Stephen and I spoke a little bit longer, and we talked about that; just having **no** patience for writing things out by hand because for me at least, my mind just works so much faster than my hand, but I'm like, so frustrated trying to write things out.

But anyway, I asked him what the inscription said, and read it to him, and we, like, parsed it out, and figured out what it says. So, I have the photo up there of what he wrote, and the translation of what it says, and then the meaning of what it means because there's a word in there that you probably don't know. I didn't know it until I read it in Stephen's books.

And lastly, don't forget to enter The Garden Party giveaway with Sophia Rose from Episode 3 of this show. You can enter it by joining the Medicine Stories Facebook group. Just search for Medicine Stories within Facebook. Ask to be added, and then the post just pins to the top of the page there. If you don't know what Garden Party is, you can go to GardenParty.love to find out, or you can listen to the last podcast episode with Lara Veleza Vesta, and I explain it in the intro there. So she's giving away a one-year subscription to online learning via Garden Party, and you just comment on that post that's just pinned to the top of Medicine Stories Facebook, and this will be ending on February 8th, which is my birthday.

So okay. That was enough of me talking. This is a wonderful, beautiful, to me, extremely meaningful conversation. Thank you, Stephen, for agreeing to talk to me, and thank you, everyone, for opening your heart and being here to take this transmission in.

--

[0:20:34]

Amber: Oh hey, wait. I just listened to the intro and I wanted to add a little something. I'm not really able to edit and make these intros just perfectly formed as much as I would like because I just have, like, an hour, here or there, when the toddler sleeps, and get them, bust them out so I can get these episodes out into the world.

So forgive this sometimes rambles and forgetting things, but I'm envisioning people writing me, being like, "What does technological birth and formula feeding have to do with all this?" and I'm pretty sure you know about breastfeeding being extremely important to the development of the baby's immune system. Just, it's a minute-by-minute conversation between the mama's body and the baby's body. So when I'm nursing little Nixie, if she's getting some sort of infection anywhere in her body, my body immediately knows it and immediately starts producing the antiviral or antibacterial compounds that her body needs to fight off the infection, and she gets that via my breastmilk right away. So, that's what I was referring to there. It's just **so** important for immunity to breastfeed.

And then with birth, there's a lot to say there, but mostly, like, first of all, when babies are born via c-section, they don't get the probiotics in the vaginal canal that are the first inoculation of probiotics and of good bacteria onto their little bodies. They've been in this sterile environment of the womb for nine months, or however long, and then they come out and that's a really important first inoculation of good bacteria is through the vagina. So when they come out through a slice in the abdomen, they don't get that, and it really sets them up for a lifetime of just having different microbiota, not necessarily worse, and of course, you can work with, but it's going to be different. It's only pretty recently that we know that you can work with it.

So for decades children have come out via c-section, and awesome. When it saves a life, I'm not against them at all, it's the unnecessary use of them because it depletes children of this really important first coating of bacteria.

And even without c-sections, when there's just a heavily-medicated birth or... there's just so much, so much to say about birth, but it can really impair bonding between mama and baby, and that can impair breastfeeding, or that can impair how much time the mom spends holding the baby skin-to-skin, on the body, which, the more you do that, the better the immune system. So there's a lot to say about all of these things.

I recently listened to an episode of The Adventures of the Mind podcast called "Primal Parenting and the Evolved Nest" with Darsha Narvez, and I thought it was **great**. So if you're interested in any of this stuff, that podcast just kind of breaks down everything, and I was really grateful for it, and it made me really grateful that I sought out this information and came across it and parented my babies the way I did. Starting when I was in my early 20s I really had to seek the information out.

So that's that. That's not what this episode is about. Let's get into all of this awesome stuff with Stephen Harrod Buhner.

(Transitional Music: acoustic guitar folk song "Wild Eyes" by Mariee Sioux)

[Interview Begins]

[0:24:16]

Amber: Okay, hello Stephen!

Stephen: Hi.

Amber: Hi. Thank you for talking to me today.

Stephen: You're welcome. Thanks for having me on!

Amber: Yeah, I've been a long-time reader of your books. I've learned so much from you, and really appreciate the way you synthesize huge subjects and seemingly separated realms of knowledge and bring them together. I'm just honored to be speaking with you.

So I wanted to begin by talking about your ancestors. This is something that you've kind of... you've put in your books in little bits now and then, but I want to hear the whole story. Like you, I was lucky enough to know four of my great-grandparents as a child

Stephen: Wonderful!

Amber: Yeah, my oldest daughter was two. But you were especially close to your great-grandfather, Cecil Harrod. So he was a doctor who used mostly herbal preparations and from whom you get your middle name.

Stephen: Right.

Amber: Yeah, no, I was going to quote you 'cause I want to expand on this quote. You wrote about him:

I remember the way he looked at me as we sat and talked in that room, which was his doctor's office as if he could see deep inside me in ways I didn't as a young child understands. I remember the sound of his voice, the shape of his hands, the veins on their backs, the smell of tobacco. I remember his touch, and how he held me late at night, as I laid in bed with him as he told me stories of ancient days and magical times as I fell slowly asleep in his arms. I knew in some indefinable way I was loved into the depths of me.

Stephen: Yeah, that pretty much sums it up. *(both laugh)*

Amber: Yeah! It's beautiful, but you write in that same piece which is the introduction to the German version of your book, Herbal Antibiotics, that

It seems to be DNA doesn't only carry physical memory. I think it carries other kinds of memories, too. From those memories come glimpses of the lives of the ancestors whose DNA still stirs inside us.

And so you come from at least 300 years of healers and doctors, and you have other herbalists and healers in your lineage, and I'd love to hear about how you think these people have shaped who you are today and the path that your life has taken.

Stephen: Well, it's umm... you know, both things of course: the ones I knew and the ones I never could know. You know, the weird thing is I'm not really a fan of reductive science, and it's gotten much worse as the decades have gone by and because reductive science just can't see holes, and it's certainly is unwilling to perceive what you might call— or what's to them— “invisible” (*audio unclear*) though it affects all of our lives. Now, you know, it's pretty well known that our genome carries chromosomes which gives us hair or eye color for instance, but that always seemed to me to be too reductive; too simplistic.

[0:27:26]

Stephen: Some new research that they've been doing has shown that if you terrify a mouse, for instance...

--I think I might sneeze in a minute (*Stephen laughs*) just so you know. —

... But they would terrorize a mouse with a stimulus, you know, a spider for instance, and there would be a female mouse, and then the mouse would either be pregnant or would soon become pregnant, and what's interesting is that the offspring would have the same fear even though they had never encountered that particular organism before.

In a tiny way they're starting to figure that out, but one of the things that pretty much every indigenous culture on earth sees the importance of the ancestors. In our culture, we have very little respect for that, or even for elders who still happen to be with us.

One African tribal group, a member of that was interviewed (someplace I don't remember), and he said — well, the guy goes, “Do you pray to God?” and he goes, “Oh, no! No, we wouldn't pray to God. God's really busy with a lot of fo stuff, and God is very, very far away. We would most often immediately pray to our ancestors because they're closest to us and they still remember what it's like to be a human being, and so, they're much more willing to help us in our times of difficulty.”

And I've noticed in myself certain characteristics of my temperament, all different kinds of things, which were unique and when you come to think about it, our genome carries the memories of our ancestors. They go all the way back to first man and first woman, and really, even beyond that because there's all other kinds of life forms, genomes blended in, and DNA blended in with our own. So, it's not surprising that there would be these influences that would be taken into account, in large measure because they're so hard to identify or measure with the kind of instruments that science uses.

[0:29:53]

Stephen: I remember quite clearly seeing photographs of some of my ancestors, and some of them were just like strangers. You know, those odd, old photographs you see, and you go, “Huh, those people look funny,” but then every so often I would come across one, and it would be as if I knew them; as if I'd known them my whole life, and I've become very aware of these sort of presences in my life that, just as indigenous people say, are there to help us on our difficulties, and they seem very close to me for whatever reason.

So, you know, there's not an easy way to explain that using a mechanicalistic science, but every culture on earth, certainly, cannot be completely stupid, you know? The reductive science completely forgets all the time that human beings have tremendous capacities for perception that ... the kind of science we do here has always been done by people to some extent, and that people in indigenous cultures (not in cities) were acute observers of their own internal world and their external world. So they talk about a lot of things that we've assumed don't exist, and rather than exploring those, most people in our culture just go, "Well, they were superstitious children and they made this stuff up," and in fact, more and more all of the time, specifically, I've seen it in my work with plant medicines, they were able to identify extremely subtle effects of plants in great detail, even though they were using an entirely different way of gathering that information.

[0:31:54]

So, of course, all of this heavy, huge motivating factor in it was really in my close relationship with my great-grandfather because when he trained as a doctor, a physician, who used mostly botanical medicine. They used some other things as well, but antibiotics didn't come into common use until after World War 2, and that point he was already 60 years old.

So he had this sort of way of interacting with people and interacting with the natural world, that was substantially different than anything that I encounter now, and in industrial life culture. Because of that — and he also had a farm. He had a house in the city, and he had a farm out in the country surrounded by wild forests — and sort of those two things blended together inside me in a way, and really led me to have a huge amount of value for that different path. It seems to engender a real different orientation toward one's own life as well as all the other life that people encounter. So just that sort of constant experience of being with him opened me up to a very different approach to life. In fact, he died when I was 11, and as I grew older and started immersing myself more in the sort of herbalised world that I became aware more and more acutely that there was something really missing from the way most of us live our lives, and I certainly wasn't willing to do that so that at the end of my life I'd look back and went, "God, what a mistake!"

So that's sort of the short part of it, but those sort of influences that come from a different orientation of mind and the heart really had a substantial impact on me, and I don't regret my choices for a second.

[0:34:10]

Amber: Do you think that, perhaps, your great-grandfather saw something in you, wished to nurture you with his love on this seed level?

Stephen: Yeah, oddly enough, my brother and sister have — my sister's six or seven years younger than me. My brother's a year younger — but neither of them seem to have much memory of him, and he didn't seem to make that kind of impact on their life.

The older I've gotten, as I've aged in my eyes, matured, you might say, when I look back through my past with these older eyes, it's really clear that I was very different. I think people who end up working with earth and plants the way I do, they're somewhat different than other people. I had a very high sensitivity to, you know, just the tiniest shifts in meaning, in people, and in their conversations, I was very shy. I didn't really have a strong boundary between myself and the rest of the world, but I think that, my grandmother, his daughter, would say sometimes, "You're just too sensitive for this world," and then she sort of had her own version of the visionary sight, and she'd

come around sometimes and be like, “Oh, I don’t know. Maybe you should be a forest ranger or something like that.” You know? And you could kind of see how she was pointing to the world I ended up inhabiting anyway.

So yeah, I do think that there is some sense on his part of something in me that needed the transmission of what he had to give, and he was very good at giving that.

I think most young people need, I mean, Robert Bly would talk about how all young men need to find the father, and it’s quite often not the birth father, but some man to whom, in whom, they carry this sort of awareness and then it’s transmitted from the older man to the young man, and it’s usually passed in silence when they are just sitting or lying next to each other. I think my great-grandfather was extremely aware of that.

So that’s been sort of, and I think that life is difficult, and I think all of us need to find talismans of the good life, and one way of looking at my own journey is that I’ve constantly sought out talismans of the good life, which I keep inside myself to orient me on my way.

And one of those is certainly that relationship I have with my great-grandfather.

[0:37:12]

Amber: You speak about being sensitive as a child. I think that many of us that walk the plant path are like that and continue through life like that. Is this innate sensitivity to the world and what comes at you through your senses and nervous system what got you interested in sensory gating and sensory gating channels, and can you tell us what those are?

Stephen: Well, yeah. The, you know, one of the — there’s a number of really tremendous delusions or it’s like I’ve heard sometimes as (*audio unclear*) we’ve been inculcated with since we were children because, really, the rationalist and the monotheist paradigms don’t really capture the complexity of the world very well, and they both have investments in their particular paradigm and they each try to pass it on to people if there are no other options. But life is far more complex than that, and you know I happen to.

Well, one of things that happens to all of us if we decide to look at life this way: there’s these strange moments of serendipity that occur in our life where we’ll sit down at a park bench and find a book that somebody had left there, and it happened to be a book our soul needed us to find on that particular day, and these things, they don’t happen exactly every minute, but they’re very common.

[0:38:52]

Stephen: My birth family, my mother, father, sibling, was extremely dysfunctional like a lot of people’s are. So when I turned 16 I filed emancipation papers and left home, and I moved to California and got there on January 1, 1969, in San Francisco - Berkeley area because I could just feel there was something interesting going on there.

I had \$40 I think, or something like that, which was virtually nothing. I ended up, through an odd series of coincidences, finding this flat to live in with a bunch of people who were going to the university there, and one of the guys living there was a guy named Marc Guyer, who was studying

for his Ph.D. and he was one of the people who ended up developing the whole concept of sensory gating channels. So, it's this kind of odd thing that happened.

Really, you might say, the way to explain what they are: you know, everyone's pretty aware of the lens in our eyes, that when there's a lot of light coming in that lens narrows down to control the amount of light. When it's really dark, that lens expands considerably to let as much light in as possible, and sensory gating channels are exactly like that.

We have what's commonly called five sensory mechanisms. We really have six, with the six one being our ability to feel the touch of meaning upon us which is more oriented toward heart than it is the brain; that we basically have our ears, you know, our nose, our skin, etcetera, etcetera, our taste, and these are all sensory mechanisms to give us information about the world. And another one is our heart, which is a sensory mechanism which is focused on "feed the feeling of things", like, going to a restaurant, for instance, that we've never been in, and we look down and go, "Wow, this place feels kind of weird. Let's leave," and everybody has that experience, but it's just simply been removed from our American conversation.

[0:41:28]

Stephen: The thing is that the people that are extremely sensitive, their sensory gating channels tend to be far more open than others, and so the amount of sensory data that comes in is very large. One of the things that is routinely missed (because of a reductive orientation that we're sort of immersed in) is that the sensory input, the visual sensory that comes in, is not simply composed of colors, but there's also some dynamic that goes along with that feeling of the thing.

If you spend any time, you go and see a various number of chairs, and then you focus on one and let the visual image develop, and you say, "Well, how does it feel?" Well, there's this kind of intimation of moods that emerges in your awareness. We might not have an exact name for it, and the reason why we don't is that our culture has spent the majority of its time focusing on the minutiae of the exterior world, but we have very little cultural depth in looking at people's interior world, except through some terribly limited means such as psychotherapeutic modalities.

When you do that, each sensory impression carries with it some sort of meaning that gives some particular intimation of mood or feeling, and it's most easily understandable when you think about music because musical notes, although they're a sound and that they can talk about the vibration rate of it that produces that sound, the reason why music works so well for us is it bypasses the conscious mind and generates a complex of feelings inside the listener so everyone is aware of that; we just don't talk about it.

So, people that have... that are very sensitive; that have very open sensory gating channels, tend to be pulling in a lot more sensory data than a lot of people, and they also tend to be much more aware of the meanings that are also embedded in those sensory flows, so, they're really working with an invisible world that everybody's aware of to some extent, but that is just not talked about very much. That's why a lot of people like that tend to become artists of one sort or another because that allows them an output for it.

So that's sort of the short of it.

[0:44:27]

Stephen: Marc Guyer ended up spending most of his career looking at two things: the impacts of psychotropic drugs on sensory gating channels as well as the dynamics of sensory gating channels in people that are labeled as schizophrenic.

Schizophrenia is really kind of a constant visionary state more than anything else; like somebody's high on LSD all the time. The thing is that the metaphors, or the map, that our cultures use to make sense of how they're oriented in space and time and meaning aren't really very good, and so, schizophrenics very rarely can find somebody that can explain to them the territory that they just live inside of most of the time, and in consequence, there's a lot of confusion on their part, you might say, misdefinition of what they're perceiving. So, that's sort of a short look at it really.

Amber: When I was 16 I had a big psilocybin experience; a big, mystical, eye-opening experience. I didn't know that was possible. I just ate too many shrooms and ended up there, and it was really life-changing and beautiful, and I didn't know what had happened to me. I didn't understand it, but a few years later I had stumbled upon Aldous Huxley's book, *The Doors of Perception*, and I read about his "reducing valve theory", and that theory says that there's so much sensory stimuli coming at us all the time that our brains have to reduce it down; have this reducing valve. So everything coming at us gets filtered out. Most things coming at us get filtered out, so we can just focus on survival and the here and now and what's important.

And this is basically what sensory gating is, although, it's more diffused throughout the body in the different organ systems and things like that, but so, psychedelics are...

[0:46:42]

Amber: — How do psychedelics affect our sensory-gating channels?

Stephen: Well, Aldous Huxley, he actually got that concept from the poet William Blake, who had talked about that in-depth, and then he took it a step further, and then, of course, researchers. Oddly enough, Marc Guyer was, Albert Hoffman talked about it a lot, the discoverer of LSD, and he did a lot of research on psilocybin. So that theme really continued into Marc's work and life in a much more, sort of dispassionate dynamic, but that's really one of the things that hallucinogenic drugs do. I really prefer to call them "neurognostics" because they shift the neural networks of the brain and gnosis means, you know, "knowledge. And so, this kind of understanding of things that are normally imperceptible to the conscious mind, we start being able to perceive them and start to work with them to some extent. So, that's really the function of neurognostics, because they've been around for hundreds and millions of years some of them. Long before the human species emerged, and one of the things that continually missed in this sort of reductive, mechanicalistic view is that nothing emerges in the world ecosystem without an ecological function.

The question that people have never asked — I mean, oddly enough, the most important questions -- tend to be the simplest ones, and for some reason, they're the ones people never ask. Like, we often do if children ask some of them. Like, I remember one asking "Do cows in France move different than cows in the United States because people in France talk different?" Everybody goes, "No, no, no, no, cows always move the same!" Of course, they hadn't done any research or thought on it, but that's just sort of it. But then, of course, I was really pleased to find maybe 10 or 15 years ago that scientists studying cow linguistics found out that cows in France very much do have a different language than the ones in the United States. (*Amber laughs*)

So, you know, asking these very simple questions that children tend to do in that childlike wonder that all of us had at once, 'til we were trained out of (and can have again), really leads to some of the depth of understanding the world that we're in.

[0:49:25]

Stephen: One of those is “what is the function of hallucinogenics in the ecosystem?” I wrote about that a lot in my book, *Plant Intelligence and the Imaginal Realm*, and that particular book invoked...

When you look at plants, a lot of people say, “Well, plants are really stupid because they don't have a brain,” but the thing that's missed is that the brain is simply an organ that holds our neural network. It's not the brain, itself, that's important, but rather, the complexity and structure of the neural network. Plant root systems are identical in appearance and in structure in many ways to our own neural network, and they use the same neurochemicals our brain uses and acts in very much the same way. They have memory, sensory perception, and so on.

So, looking at the impacts on neural functioning on plants from hallucinogens in various species that researchers — I mean, they gave LSD to EVERYTHING they could find — and it turns out that it has the same impact on every neural network it encounters, and what it does is it opens sensory gating channels very wide so that more sensory data comes in, but not just simple sensory data; also, the meanings that accompany that. So there's this deeper perception of dynamics in the ecosystem, and it allows whatever organism, cakes (?) or in jet fuel (*audio unclear*) substances to create behaviors outside the habituated patterns. So, it really allows a kind of innovation that wasn't available prior to that.

That really seems to be their function in the ecosystems because when there's environmental pressures that happen, and psilocybin, which, is a mycelial network that runs under grasslands, for instance, and that network is connected to virtually every plant there, then that whole ecosystem begins to innovate its responses to environmental preservations. Then, it's an important thing.

[0:51:56]

Stephen: Many of the visionary experiences, like vision quests and things like that, that adolescents would undergo in indigenous cultures perform the same function that sensory gating channels open very wide. People become aware of sophistications in the world that they weren't previously aware of. It begins to orient them toward a sort of life work in a different way than going to college does, for instance. (*Amber laughs*)

Amber: Yeah, that a paradigm-shifting idea to realize that psychedelics... I love the word, “neurognostics”. You have a really wonderful paragraph in that book where you break down, like, every word that people use to describe these substances and exactly what the word means — that they were here long before humans were here. That DMT, psilocybin, have functions in the ecosystem beyond just humans coming along and using them and having a good time. I mean it's This idea of neuroplasticity, that they, yeah, they help us change our behavior. They break us out of the habituated patterns that we've been stuck in.

Stephen: Right, our neural network literally begins to change its dynamics, and so what we perceive, what we can innovate, what we can do all begins to shift, and that's, you know, an important dynamic. I don't think there's anybody alive now that isn't aware that there's something

seriously amiss in our world, and people don't really know what to do. It's this feeling of helplessness of if these massive powers are moving through the human world, whether it's governments, our corporations, our institutions, and they just don't really know what to do.

One of the things that I've seen that have come out of the 60s was there was so many people taking psychotropics back then, and then if you start looking at all of the innovations that those people came up with: Apple computers to the different kinds of music to herbal medicines, it goes on and on and on; that there was this massive movement out of contemporary form, and the generation of very different approaches to things that have had a great impact on the way our world is now.

Neuroplasticity is a very important thing. The last thing we all need is to become our conservative parents, and not only is that not very much fun, it doesn't really... we just sort of perpetuate the same old systems of thought, which really are no longer useful.

[0:54:58]

Amber: Do you feel heartened by the new resurgence of psychedelic research happening at such high levels in universities?

Stephen: Not really, because the university system is, by its nature, incredibly conservative.

— Excuse me a second (*Stephen sneezes in background*).

... And there's not a lot of support for moving outside existing paradigms. I mean, one of the reasons James Lovelock, who came up with the Gaia theory, was able to do that was because he was an independent researcher. He invented something used to analyze atmospheric content, and he patented that, and that gave him enough money that he wasn't dependent on exterior institutions.

And his observations about the earth, when he came up with that, they were obvious in hindsight. They're not anything different than the majority of indigenous cultures, or even the ancient cultures, had been saying, and yet, once he came up with it, he was attacked incredibly, intensely, by scientists who were heavily invested, emotionally and intellectually, in the older system of thought. Because... you know, one of the things that he said, which was really neat, he said, "Well, the neat thing about it is, having enemies, is that they force you to focus your thinking, which is one of the real functions." So the more they attacked what they saw as limits in his thinking caused him to go deeper in design more ways of showing that it was true until, finally, it became generally accepted that the earth acts as a single living organism.

Now, what the reductive scientists are trying to do now is turn that into something they call "earth system science." where they say, "Yes, yes, the earth is exactly like a superorganism; this single living organism, you know. But it's not intelligent. It's just..." So the last thing that that system can do is attribute intelligence equal or superior to human beings to anything in the natural world.

So for instance, there's a new science of plant neurobiology that is getting a lot of steam, and because they're looking at the neural network of plants and saying, "Well, plants are highly intelligent, highly communicative. They engage in tool making through their innovation of chemical structures over and over; they have a complicated language; they have culture..." and

on, and on, and on. The thing is that people who are working in that field now tend to be extremely stubborn and extremely smart. So the more they're attacked, the better their work becomes, but nevertheless what we're looking at is a shifting paradigm.

[0:58:33]

Stephen: You know, when I was young, I thought the paradigm shift would be fun, but what I realized with more maturity is that the existing paradigms are connected into the entire culture and infrastructure of that culture. A lot of people have huge survival investments in that old paradigm being true, and there isn't any way that they will give it up because of the threat of giving it up creates to their survival.

So, what we're looking at and a large reason why the cultures of the earth are going through the kind of incredible disarray they are is one paradigm is really dying, and another one is fully coming into being. The old institutional structures have to fall away. So, when they do that kind of research in universities, although some aspects of it are positive, the last thing that they're ever gonna end up saying is that you know, people should be able to take in neurognostics whenever they want. And especially, teenagers.

I remember I was speaking about this several years ago, and somebody, some guy, raises his hand and goes, "Well, don't you think that teenagers should only be able to do this under the guidance of a more mature person?" I looked at the guy, and I go, "Well, how many teenagers have you known? And when you were a teenager, how would **you** have acted in that situation?" He was like, "Teenagers are not gonna go, 'Oh yes. I want to do this, but I want to do this responsibility, so what I'm going to do is find a hallucinogenic mentor." That's not what teenagers do. They tend to follow urges in themselves which lead to a lot of interesting memories; sometimes they survive it; sometimes they don't, but nevertheless, that drive inside human beings, the last thing they're going to do is look for a mentor.

So, that kind of attempt to control breaking out of the old paradigm, it's not going to work. There's going to be a great deal of, you might say, simplistic thinking that comes out of the universities, despite the fact that they're finding hallucinogens are good for PTSD and quite a number of different things.

Stephen: You know, I'm very much in favor of human beings choosing their own course for, well or ill. I have a lot of faith in the individual genius of human beings, and that seems like something that seems to be in really short supply these days.

There's a tremendous assumption that human beings in math are pretty stupid and they really need some sort of an elite group of people to control their behaviors so that they don't cause trouble. That's just not a belief I subscribe to.

[1:01:55]

Amber: Touching on much of what was just said, let's talk about plant intelligence more, and the perception of the heart in plant intelligence. This interest in herbalism is just exploding today. More and more books, articles, online courses coming out all the time. Growing up in the West, we think that we get knowledge through books and through the brain and intellectual learning.

What is what you call “the intelligence of the heart in the direct perception of nature,” and how can you utilize it to take a different path in getting to know the plants in the natural world?

Stephen: Well, one of the real problems that we face — I think James Philman said it most perfectly, “We’ve lost the response of the heart to what’s proven unto the senses,” and I think that’s one of the major differences I think between my great-grandparents and people today is that they... it never occurred to them to doubt the response of their heart to what’s presented to the senses, and so they had an aesthetic dimension to their life that we’ve been trained out of.

For me, you know, I’ve had visionary experiences for various different reasons since I was young, and what really got me into plant medicine — I mean, these events that change our lives, the beginning signals that start to turn us away from the path we’re on are often so subtle and simple that most people never consciously notice them. — I’d been wanting to find land like my great-grandfather’s, in some way, for much of my life, and so, in 1985, we bought some land at about 9000 feet outside of Boulder, Colorado, and it was very wild land; never been logged or farmed or ranched or anything else. It was extremely wild and the plant diversity was huge.

And so, that had been a drive from when I was very young. Now you could — an interesting question is why did I have that particular drive, and why didn’t I let go of it and become the good children who obeyed? But there was just something in me, some drive in the deeps of me, that said that’s what I had to do. So we kind of got some money together for a deposit, and there were some parcels of land for sale up a very difficult road outside of Boulder, and we went up there, and there were four parcels of the seven still for sale.

And so we’re driving along there, and we get to the third parcel, and it’s almost as if a hand reached out and put it, rested itself on our shoulder and said, “Here,” and we were just pulled into that place. Now, these things happen all the time but most people don’t really think about them that way. So we went, “Well, this is the one.” The most expensive one, irritatingly, (*Amber laughs*) but nevertheless, that’s the one we got.

I built a house and we started living there and one day, about, I don’t know, a year and a half or so into it, this odd thought just came into my head, like, “Gee, I should learn what all these plants are up here, and what their medicinal uses are.” Now I had never, nothing like that had ever occurred to me. It was not on my plan. It was not part of any kind of thing that has ever occurred to me, but I just went, “Oh I gotta do that.”

So I find a little herbalist in Boulder and bribed her because herbalists then were all often poor and perceptible to bribery, and I said, “Oh, I’ll pay you a \$100. Come up and take me for a walk,” and so she did, and started showing me all these plants. I talk about this in the books and sort of one thing leads to another, and I get more and more involved in that, and I started spending hours every day for the next seven years with those plants.

[1:06:46]

Stephen: So one day I’m sitting with the plant there called usnea and all of a sudden I just went into sort of a dream state. I saw — you know it was in the same landscape, but it was a bit different — and I saw walking toward me over the meadow this, what looked like a young man, and he gets up really close to me, and I can see his hair is usnea, and when I look at his eyes and his face, I can see really he’s very, very old. I mean, far older than any human being I’d ever met. And he comes up really close and he looks me right in the eyes, and he goes, “You know, you’ve been sitting with

me in a good way. I just wanted to tell you that the reason why usnea works well for human lungs is it's medicine for the lungs of the plants and the trees. That's why it grows on trees." And he just smiled at me and turned and walked away.

And then I had to sort of come back to myself, and I was like, now, this is REALLY interesting. I thought, because I had been feeling a little funny, it's one thing to get direct information about plant medicinal use without challenging my orientation and identity, but the interesting thing was that it had never occurred to me that plants were doing something here besides pining away for our existence, you know? Because I was so anthropomorphic and narcissistic then. Then I thought, "Man, I think I need to find out more about this."

[1:08:28]

Stephen: I finally found a whole bunch of ethnology texts in the basement of the University of Colorado library that had first-person interviews with medicine people in North America, a lot of tribal groups. Frances Densmore had tended to be the best of those people, those writers, and she would ask them, "How did you come to understand the use of these plants?" and they all said the same thing: "Well, it came to me in a vision or a dream" or "a plant told me," and they would recount some of the visionary experiences that they had which weren't really that different than my own. That's the first time that I really started to become acutely aware that there was a different way to gather information about the world than reductive science and trial and error.

All of those people talked, they'd say that if you asked ancient and indigenous cultures where they live in the body, they tend to gesture toward the region in the chest. Where, if you ask people in our culture, they're going to point, you know, about an inch above the eyebrows and two inches into the skull. And that's a very different and unique shift in human history because it's orienting us in the brain rather than in the heart for instance.

So I started really looking at this and how the indigenous people talked about it, and, really, the secret of that whole way of gathering information — and I've spent decades working with it — is the restoration of the feeling sense, because you can't work with the subtle meanings that we're surrounded with without doing that. And again, everybody knows about it. You come home, and you see your mate, and you walk in, and you go, "How are you?" and your mate goes, "FINE." Well, you know right there, that he or she is not fine, and one of the greatest mistakes you can make in your life is to take them at face value because then you're going to have a huge fight.

So what it really comes down to is the form of the thing has very little to do with the meaning that's inside of the thing. Indigenous cultures have spent thousands upon thousands of years learning to understand the natural world in which they were embedded. Really, they read it very much the way we read books. We read words, and yes, the word has a meaning we can find the definition of in the dictionary, but it's also the context that gives us an idea of the meaning, and then there's subtleties such as irony or sarcasm that shift the meaning in unexpected ways.

What they were really doing was reading the book of nature and working with the meanings of everything that they had encountered. And also, one of the things about language and writing is that the words in a sentence interact with each other. They form a coherent whole, just as all of the sentences in the paragraph do, and so there's this kind of communication that occurs between the words. So it's generally only writers that work deeply with language that tend to understand that.

And so, that's what they were doing by being immersed in that way and developing that to such an extreme level their capacity for perceiving meaning through the subtle feelings, or the feeling complexes that would arise in them as they approach something outside themselves. I mean, one of the nice ones that I heard was the Bushmen's of the Kalahari said, "Every human being must wake up twice: they must wake up their body in the morning, and then they must wake up their heart to the touch of the world upon them."

That's just something we've forgotten and that we've been trained out of.

[1:12:49]

Stephen: One of the things I told my students in the premises of these years is the first thing they really have to do is to reeducate that part of themselves that has been shut down since they were six years old when they started school, and to, with everything they encounter, look at it, allow the visual image to become really acute in their perception, and then to just say, "How does it feel?" And right in that moment, there's going to be this burst of feeling in intuition and mood that has a really unique nature to it, and that meaning, that sort of intuition of mood or feeling that sort of bursts into their awareness in that moment is the key to the deeper meanings that the thing has.

In the beginning, it's... So, for instance, you go to that restaurant that you walk in and it feels kind of weird. If you stay there, and you go, "Well, why does it feel weird?" What you begin doing then, is you start accumulating a sort of database of the meanings that you encounter in the world. That gives us a clue. Like, we've all met a dog that looked like it might be nice, and we start to go up to pet it, but then we got this weird feeling that it's not really a nice dog. And that's sort of a thing that you begin to do. But in the indigenous world, that sort of dictionary of meanings was extremely well-developed.

As you do that and learn to read the world through that kind of process, oddly enough, more and more visionary experiences just naturally begin to emerge in your experience, and you start to develop the ability to learn in the old way to get the direct transmission from the world without going through reductive analysis and trial and error. It's a very, you know... the ancient Athenians talked about it; the Romans talked about it. It's not a strange phenomenon. It's as natural to us as breathing.

[1:15:09]

Amber: Yeah, I was just going to say the same thing. It's innate. It feels so very far away for many of us, and for me, it does, oftentimes, too. I can just get so in my head, but it is the gift of ancestral knowing; it's knowing in that way, and it's still right here. Right inside of our bodies.

Stephen: I mean, one of the odd things is you think about, literally, what a lot of people say, they'll say they don't feel well. Everybody interprets that to mean their interior world, but what's really, what they're actually saying is, "I don't feel well. I might think well. But I don't feel well." There's a real reason that such a huge proportion of the United States is on anti-depressants all of the time.

The ancient Athenians called that moment — when you see that puppy there's that kind of exchange immediate exchange of energy — they call that moment aesthesis: it's the exchange of soul essence between two life forms. They say something leaves the human body and goes into the puppy; something leaves the puppy and goes into human body, and at that exact moment that

that happens, there's a deep breathing in, an inspiration. And they said the source of inspiration is in the world; not in the isolated human being.

This dynamic I'm talking about, as you immerse yourself more and more into it, the long loneliness of the human species begins to end and we begin to feel that we are companions by other ensouled beings who care for our welfare and are communicative.

So this is really the first time in the human habitation of earth that people have been isolated. As Robert Blyth put it, "inside their own houses," and when we look out the windows (our eyes), we look out at a world that contains no soul in which we can have no meaningful contact.

So there's this terrible, existential loneliness and depression that begins to enter human life that is a sickness, and it comes from the loss of capacity to feel the touch of the world upon us. And so, that's really, in my opinion, the greatest danger that we face and also the root of the majority of the problems that we have.

If people in this culture, as a general rule, had that feeling, it would be much harder for them to clear cut a forest, to hunt a species to extinction, to pollute the atmosphere. You have to be, James Hillman once put it, "Only when science convinced us the world was dead could they begin their autopsy in earnest" As soon as you hear that, there's this kind of grief that emerges inside because it tells us something really important about a "bad choice" or as Gregory Bateson once put it, "an epistemological mistake."

[1:18:46]

Amber: Yeah, well, speaking of not feeling well and trying to wipe out life forms on the earth, we're speaking in January of 2018.

This marks the 100th year anniversary of The Great Flu Pandemic of 1918. The world has changed since then, and in the book, *Herbal Antivirals*, you write:

We now face the emergence of epidemics more devastating than any known before. If we are to adapt, we have to see with different eyes, understand through a different paradigm. Not to realize that viruses are not what we thought them to be. We have to learn to see them as they are.

So viruses are commonly misunderstood and very underestimated as "Oh, it's just the flu." Can you explain the nature and intelligence of viral life forms for us, and tell us what we can learn from what happened to the human species a hundred years ago?

Stephen: Well, I've been working with understanding bacteria for a long time and eventually that moved into looking at viruses and just to touch on bacteria a little bit:

Bacteria are now known to be far more intelligent than human beings and that is something that irritates people to no end, but bacterial researchers all around the world are finding that bacterias are supremely intelligent organisms; that they have culture, that they really are the most exquisite toolmakers on the planet; that they can change their genome structure at will; that they literally design genome changes in their design structure to deal with environmental inputs.

One of the things that concern bacteria all around the world now is the trillions of tons of antibacterial substances that human beings are dumping into the ecosystems. And, of course, James Lovelock's colleague, Lynn Margulis, what was one of her great innovations was the idea of symbiogenesis; that unlike lifeforms combine together to form a third very different organism. She found all lifeform on this planet is basically bacterial innovations. That we are formed of bacteria ourselves.

So that dynamic, by creating, by attacking bacteria, and thinking we can do that without sort of any side effects, occurred because our beliefs about bacteria were so incorrect. That they were just these stupid organisms, and we could do this stuff to protect us so that we could live forever, and, of course, that didn't understand population, when it's in the ecosystems, where there's unrestrained population, always crashes and sooner or later; you can't sustain that. You can't sustain it.

So, then I began to look at viruses, and it gets even weirder if you look at prions — which I don't really want to talk to or about today — but viruses are considered by the majority of researchers to be non-life which is, of course, stupid. They act like life: they reproduce, they do all kinds of things that other lifeforms do.

One of the interesting things about viruses that's really crucial and very few people understand is that whenever an organism emerges out of the ecological matrix of the planet, it does so for a particular ecological reason. That species will tend to be... it will reproduce and spread, and what happens over long evolutionary timelines is it becomes genomically isolated.

One of the great innovations that the earth has come up with was how to keep the genome and species vital, an ability to respond to environmental predation. So the fascinating thing is, for instance, when we're bit by a mosquito, and the mosquito, I mean, viruses have this really interesting habit of getting into the DNA structure of all lifeforms and snipping off little pieces to take with them and leaving little pieces behind. When you begin to look deeply at the human genome, you find that there's plant DNA in there and starfish DNA and bird DNA. So we're not really as isolated of a species as we think. There's DNA from multiple lifeforms in our DNA structures.

[1:23:30]

Stephen: One of the things that viruses do is they spread, they sort of counteract the genomic isolation that species go through under long timelines. That's one of their major functions. They, you know, they're also highly protective of their territory.

For instance, if you... there's been some really great research that shows monkeys, for instance. They will be infected with a certain virus in a certain eco range of Africa, that, if other monkeys begin to move into that territory, the viruses will en mass infect the new monkeys. In the infection in their health population, it doesn't cause any problems, but in the new ones it will kill them off really quickly. So, it maintains ecological integrity.

I mean that's just a tiny look at what they do.

So by our disturbance of the ecological balance of the planet through industrialization and technology, and just of that point of view, what we've been doing is releasing bacteria and viruses

into the human population in a way that, you know, I don't know if this has ever happened before on the planet. And at the same time, by dumping these trillions of tons of antimicrobial substances, it's changing the behavior pattern of those bacterial and viral populations.

So we have this really strange belief, and most people in America do believe it in one way or another, that through rationality we can— in this sort of reductive, mechanicalistic thinking — we can control the natural world so that we will be safe from, I think, death, which is obviously ridiculous. I mean, we're all supposed to die and biodegrade.

And that's one of the funny things for me about my liberal tribe is that we're **all** for biodegradability until it comes to themselves. You know? As one friend of mine said, "All this love and light stuff is great, but we're talking about SURVIVAL now!"

[1:26:05]

Stephen: And every epidemiologist on Earth has been saying, and with increasing insistence, that the age of miracle drugs is over; that we're reaching the end of that kind of thinking and what it can do. And we've sort of put this massive chemical barrier up between ourselves and the natural world, but each year it takes more and more energy to maintain that barrier.

You can see it most easily in agriculture, where they'll use pesticides to keep pests out, and the first year it works great; crop yields crop; the second year it works okay, but the third year the pests have all adapted to that by genome alterations, and so, the crop yields begin to go down. If they keep going on, crop yields will fall to zero. Then they design new pesticides, but they have to use more of them. When the timeline between resistance and effectiveness goes down, the thing that happens is that eventually, that chemical barrier between ourselves and the rest of the world is going to collapse, and when that does, those bacteria and viruses are going to flood into the human population, and we're going to see epidemic diseases that are more virulent than anything we've seen before.

Now, Robert Heinlein, who had a lot of personal problems, but he was, as one guy said, "the master of gaudily-embellished understatement" (which I thought was a nicely, gaudily-embellished, understatement itself), but Heinlein said, "Population problems have a horrible way of solving themselves." And they do. Historical records are clear about that.

It's a very difficult problem when you look at, if you start to talk about that, then you're faced with intentionally curtailing population growth, and it's a moral problem that absolutely nobody on this planet is going to be willing to address overtly. Many ecologists off-the-record will say that one way or another human population has to be limited and because nobody's making a direct — they're not directly addressing the problem in making the — choice, we're just going to let nature do it for us.

And at that point, the thing is, that technological medicine will fail because their paradigm is inaccurate to the problem. I always think it's interesting that hundreds of thousands of herbalists are emerging at the same time that we're approaching this crisis point because herbs are much more able to deal with the complexities of disease and infection than technological medicine is. And so, you know, a lot of people say, "Oh, the earth is in trouble," and I say, "No, the earth isn't in trouble. We're in trouble." And really, it's not really the human species that's in trouble but our civilization that's in trouble because it's untenable.

[1:29:33]

Stephen: So I'm very optimistic that human beings will survive, as they always have, and the earth, itself, will survive and restore itself as it always has. It's just that this sort of edifice that we've sort of created the last thousand years or so is not going to survive. For a lot of people that is a very disturbing thought.

Amber: So, did we learn anything from 1918? Can we learn anything from it? And how are you preparing yourself to meet this great, big epidemic?

Stephen: Well, no, I don't think we've learned anything from it. I mean, it was a unique series of events that caused the pandemic of 1918 because it was the first run of flu that went through the trenches in World War I that was fairly benign. The problem was that those soldiers in the trenches couldn't get away. They were stuck there, and that — really, when the flu begins to hit — isolation is the best way to go, and that really stops it, but they couldn't get away.

So when the second one hit, the influenza virus had changed its structure substantially and had become much more virulent and was entering into a relatively weakened population because of the trauma and the bad food and the bad conditions they'd been in for so long.

And then the next thing that happened was the war ended, right as those troops were heavily infected. So they all got on troop-carrier ships, and they were taken back to their home country with many stops on the way. As far as I could tell, every country on earth was infected except for one island off South America that didn't allow any troopships to land, and that stuff just blew through the human population like a wildfire.

So, you know, the researchers about it are really clear that it was a really unique circumstance that created that, and they go, "Well, we're not going to have that circumstance again," and we're not going to have that exact same circumstance again, but the thing that they haven't learned is that, you know, I suppose the main thing that's left out of the belief and rationality of the belief to control nature, is they leave out all of the other human attributes. Like the nuclear alert in Hawaii that recently happened, it was some guy pushed the wrong button, and that's where the stuff always happens. You can't eliminate human error or all of the other human attributes of greed or anger or jealousy or anything else, or just simply unclear thinking for whatever reason.

We've built up a situation now while the earth is extremely (all human beings are) extremely, closely connected. And one of the scenarios that epidemiologists look at is, which happened to a certain extent, but they were able to stop it, is somebody infected with Ebola got on an airplane and flew into the United States. Now, all that has to happen for a virulent form of some microbial pathogen to occur that's spread by aerosol particles from breathing or coughing, and somebody gets on an airplane, they infect everybody on the plane, the plane lands in New York, then all those people get on a plane and fly to Atlanta and Chicago, and all over the place, and then you very quickly have this rapid spread of an infectious pathogen that's virtually impossible to stop.

[1:33:59]

Stephen: So the thing that we haven't learned is the dangers of our hubris. And that's really the worst problem. We can't prevent it. We've disturbed the ecological, homeodynamics of the planet to the extent that ... you know, and this is just one factor, if you look at water tables, soil, health,

atmospheric dynamics, the life structure of the ocean, it doesn't matter where you look, we're reaching massive tipping points, which, from a geological perspective, are all happening together in a very short period of time.

And I think part of the reason for the degree of hysteria among people all around the world is everybody can feel that something is wrong. We're not that different than elephants. Elephants can tell when a tsunami is coming or when an earthquake is about to happen, and all of us can feel this instability in the earth's ecosystems, and we can feel this massive tsunami approaching us. And nobody knows what to do.

As a matter of fact, most human beings in the West have been trained to not really think for themselves; to not think outside the box. If they get sick, the majority of people think, "Well, I need to go to the doctor or the hospital." The doctors and hospitals they're not, they're not very... well, they don't understand much except a very reductive paradigm of treatment. That terror, because there's no kind of sense of self-empowerment or self-knowledge, the terror's more pronounced, and people begin to seize on simple solutions that they think will make them safe.

If you look at the massive arguments going on online, whether it's in my liberal tribe or the conservative right, the whole thing is about "how can we be safe?" And the truth is there isn't any such thing as safety. So, that's what we're facing.

It's not considered very politically correct to talk about it, but nevertheless, one of the things I've found from my three and a half decades of working with plant medicines and learning about my own body is that when you know this stuff, when you know that all around your house or your neighborhood around your town, there's all these plants growing that have really exceptional medicinal capacities, and you learn how to use them, as time goes on, and you use them more and more for your health, and you go into the medical system less and less, there's this sense of being able to take care of yourself that it's so ingrained in me now; that when I meet people who don't have it, I'm shocked. And I also am very struck by the degree of fear that they have about any sort of minor disease condition that shows up in their body or their family.

[1:37:33]

Stephen: So, I'm 65 now. I'm going through the transition of late-middle-age and early-old-age and the process of eldering. One of the things that happens then, it's, I believe, as hard as a transition as adolescence. One of the things I'm finding is that there's a huge difference than that of adolescence, and that is that in adolescence you have your whole life ahead of you, and you go, "Well, I could do this! Or I could do that!" and you're aware of a long timeline. But at this point, the inevitability of dying becomes predominant, and you become extremely, excruciatingly aware that none of the strategies that you developed over your life to solve problems is going to work. It's not like Death shows up and you go, "Okay, let's talk about this." You know? *(Stephen laughs)*

"Perhaps I could make a rudimentary lathe out of this, make a spear..." None of that, no. Nothing's going to work. So you start to face this sort of inevitability, and I think that's one of the things that leads to such terror in people is that one of the functions of elders is to hold that kind of awareness. And in that period of time in people's lives, they start to understand the nature of hope.

Now when people are young, when I was young. I confused optimism and hope all the time. Optimism and hope are not the same; optimism is the belief that things will turn out well, and so you figure out strategies to facilitate that. At this point in time, the whole dynamic changes, and hope is a kind of faith, really, in life itself, in the earth itself, and human capacity. Not very many people write about it, but there's this sort of enduring faith in, really, life itself. I don't really know how else to say it. In understanding that in coming to terms with the fact that death is inevitable.

[1:39:55]

Stephen: I think one of the things that's really difficult for people is that both science and medicine have viewed death as an adversary. They don't really know how to work with it themselves. So, when people are ill, and there's always during illness the potentiality of death, there's not really any human wisdom or understanding about it that they can receive in the medical profession very easily.

And so, it's those kinds of things, coming to terms with that, for me, is something that's important. But working, too, prior to this, when I was in middle-age and still playing the role of optimism, that the knowledge of the plants and how much I trusted my life to them over decades, there wasn't that sense of terror or panic that most people feel, simply because I put my medicine where my mouth was. I trusted the plants with my life. To truly become a person of the plant, to become *vegetalista*, means going beyond the community kitchen herbalism and eventually getting to the point where you literally trust them with your life.

Once a plant saves your life, and that sort of way of life begins to develop everything changes, and it's a very difficult thing to explain to people who haven't gone through this sort of initiation and descent and reassembly and reemergence of the new self that happens in that process. Nothing is ever really the same again after that.

Amber: Beautiful, Stephen. Thank you for all of your work, all of your words.

Stephen: You're welcome.

Amber: I'm... yeah, I'm without words, myself, as to how you have influenced me and the way I think and what I see as possible.

[1:42:17]

Stephen: And I think that, you know, I was lucky enough to be sort of a "junior member", one of the last of my generation that joined the great herbal renaissance with all of the founders that were involved.

There was 12 or 15 of them. They've taught hundreds and hundreds of people, and those people are teaching hundreds and hundreds of people and are spreading outwards. I think, really, the next step for so many of us that have been pulled into the plant world is to make that transition from "what's this good for?" kind of a thing — which is where everybody starts, "What's it good for?" you know? — and to move into understanding that if we really sit at the feet of plants and begin to learn from them, and then there's a transformation of self that happens where we really become very different than the rest of the people in our culture, and we become people of the plant, and we also become bearers of speech in a way.

The speech of plants and the natural world, it demands a great deal of intellectual coming-to-terms because the reductive world will dismiss it and denigrate it, and we'll doubt our own experience over and over again. But that slow journey to the self, once the plants begin, eventually we become the earth, looking out of our own eyes. We learn how to become old-growth just like the great trees have.

We carry a certain lineage in ourself, which is important to pass on. Then when people, like you, encounter it, they can feel there's something in it that's calling to the depths of them. That same journey, itself, is then necessary to be taken to become transformed in that way so that after our generation is gone, we're already starting to die off, that you, yourself, can pass it on to other generations. It's like a great relay race of the soul, but that, you're also holders of the new paradigm, and the more that paradigm spreads, the greater chance that all of us have to endure as a people.

[1:45:02]

Amber: Where can people find you? You have something like 20 books out, and will you tell us a little bit about the two books you're working on now?

Stephen: Yeah, I'm working on my 23rd and 24th, and the 23rd one is called *Becoming Vegetalista*, and it's about plants and the journey to the self. I've, you know, this is probably the most in-depth one I'm going to write about even though I've put pieces of it in many of my books before. That's a small British publisher's going to bring that out. I mean, if I can ever get this part of it done, he's going to bring out about the first third or so in a limited print run of 550 copies, hopefully, the end of this year, very early next year. Then hopefully, by the end of the following year, I'll finish it, and it will come out early in 2020.

And I'm also, at the same time, working on a book, Chronic Obstructive Pulmonary Disease, which has a lot of similarities to Lyme, but nobody's ever really done anything on it. There's no real medical treatment for it. I mean, there's something like 40 million Americans that suffer from it. It's generally a terminal diagnosis. Because I have really early stages of that from pneumonia I caught a couple of years ago, I thought, "Well, I wasn't going to do any more medical herbals, but we're talking about the writer here!" (*both laugh*)

Amber: Yeah, my 96 year old grandma who just got over the flu has COPD, and it's scary.

Stephen: Right. And a lot of people put it down to smoking, but what's really true is less than 25% of smokers get COPD. It has a lot to do with a lot of other things. I mean, for me, because I've done — I buy crummy houses, I fix them up, it's kind of like my giant art form. I've done it for, gee, 40 years now. Inhaling all of that particulate matter and all the toxic chemicals and everything over the years, it puts a real strain on the lung system that then, when you get a really serious pneumonia or something, then it kind of kicks over into this long-term low-level inflammation that becomes COPD. It just gets worse. Really, the majority of people who have it were not smokers. Most smokers don't get it.

So that's one of those things about tobacco. It's always a really bad idea to decide a plant is "evil". As herbalists, that's one of the things that we learn early on. Anyway. That's another one of my tiny rants, but I could go on forever!

Amber: Yeah, I love all your rants! (*Amber laughs*)

Stephen: I mean, rants are important, you know?

Amber: Yeah, you have some really interesting paradigm-shifting rants.

Okay, thank you Stephen!

Stephen: You're very welcome, Amber. Thanks for talking to me today.

(Exit Music: acoustic guitar folk song "Wild Eyes" by Mariee Sioux)

[Closing]

[1:48:41]

Amber: Thank you for taking these Medicine Stories in. I hope they inspire you to keep walking the mythic path of your own unfolding self. I love sharing information and will always put any relevant links in the show notes. You can find my blog, handmade herbal medicines, past podcast episodes, and a lot more at MythicMedicine.love.

While you're there, be sure to click the black banner across the top of the page to take my quiz "[Which Magical Herb is your Spirit Plant?](#)" It's a fun and lighthearted quiz, but the results are really in-depth and designed to bring you into closer alignment with the medicine you are in need of.

If you love this show, please consider supporting my work at Patreon.com/MedicineStories. There's some cool rewards there, like, exclusive content, free access to my herbal e-book and online course, and the ability to chat with me.

I'm a crazy busy and overwhelmed mom and adding another project into my life with this podcast has been a questionable move, but I'm also so excited about it and just praying that the Patreon will allow me the financial wiggle room to keep doing it.

Another way that you can support, if that's not an option, is to head over to iTunes and to subscribe and review the podcast. That would be super helpful. Thank you!

And thank you to Mariee Sioux, who provides the music that I use. This is from her song "Wild Eyes." One of my favorites. Check out Mariee Sioux. Beautiful music.

Thank you and I look forward to next time. Bye!