



Flowering of the Heart Newsletter

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Transcript of interview with Martin W. Ball, Ph.D.



Bio: Martin W. Ball holds a Ph.D. in Religious Studies with an emphasis on Native American Traditions and Entheogenic Shamanism. He is the author of the books *Mushroom Wisdom: How Shamans Cultivate Spiritual Consciousness* and *Sage Spirit: Salvia Divinorum and the Entheogenic Experience*. He is also the host of a weekly podcast about entheogens and spirituality, the *Entheogenic Evolution*, which can be found at www.entheogenic.podomatic.com or on iTunes. For more information about Dr. Ball's books, music and art, visit his website at www.martinball.net.



Dr. Rick Strassman, pioneering psychedelic researcher and author of the book, *DMT - The Spirit Molecule*, discusses his new book, *Inner Paths to Outer Space: Journeys to Alien Worlds through Psychedelics and Other Spiritual Technologies*, Zen Buddhism, psychedelics and spirituality, Old Testament prophecy and more in this fascinating interview. Dr. Strassman conducted the first federally approved psychedelic research in the US in nearly a generation with the compound dimethyltryptamine, or DMT, in New Mexico in the mid 1990's. Though expecting mystical raptures and deep psychological insights, in his study he was astonished to find many of his volunteers reporting unexpected encounters with strange and sometimes disturbing alien beings with advanced technology in what amounted to classical UFO "abduction" experiences. Unable to explain away the volunteers' experiences, he concluded that these were genuine encounters with independent sentient beings in otherwise normally invisible dimensions. For this interview, I visited with Dr. Strassman in his home in Arroyo Hondo, New Mexico, where he currently works in a clinic for psychiatric medicine and is busy laying the foundation for his new research facility, the Cottonwood Research Foundation, where he plans to do continued research on psychedelics and their relationship to spiritual experience, creativity, and higher states of awareness and perception. More information on Cottonwood can be found at www.cottonwoodresearch.org.



MB - It's a great pleasure to meet you and come out here and do this interview with you. Your new book just came out, *Inner Paths to Outer Space*. Maybe you could start by telling us a little bit about it.



RS - Sure. It's a multi-authored book, non-fiction. It's pretty much the brain-child of the second author, whose name is Slavic Wojtowicz, who is an oncology researcher for a pharmaceutical company in New Jersey, and who also happens to be a big science fiction buff and illustrator. He read my book, *DMT: The Spirit Molecule*, and felt that there was a lot of overlap between the material we presented there and the kinds of things that people read and write about in science fiction. He felt it would be a fun and helpful thing to educate people in the science-fiction community about some of these overlaps and areas of similar interests. He asked me if I'd like to collaborate with him, and I agreed. I asked another colleague of mine, Louis Eduardo Luna, who is a South American anthropologist who divides his time between Brazil and Helsinki and has been working with Ayahuasca for a few decades now. He has probably got one of the more balanced and sophisticated overviews of how to look at and apply the states and plant wisdom information that is associated with Ayahuasca. And so Louis Eduardo agreed to collaborate, and then Louis had a friend in Budapest Hungary named Ede Frecska, who is a Hungarian psychiatrist and has written a lot on new science views on shamanism - having to do with quantum mechanics and non-local theories of information transfer and storage - and so Louis Eduardo asked Ede if he'd like to collaborate. So that's how the four of us came together to collaborate on writing the book.

Each of us contributes three or four chapters. I wrote an overview chapter on psychedelics and DMT and also describe some of the range of experiences that occurred during our research on DMT. My last chapter in the book is probably the one I'm most proud of, which is a fairly long and involved chapter on getting ready for the journey - kind of how one prepares to take a psychedelic trip. Louis Eduardo wrote several chapters on his relationship with Ayahuasca and the way that he supervises Ayahuasca sessions and Ede Frecska wrote some chapters on shamanism and new scientific paradigms of consciousness through which he explains some of the findings in shamanism. And Slawek wrote some chapters pointing out the commonalities between the material in science fiction books and films with the material that is more well known within the psychedelic community



MB - Something that comes up time and time again in people's experiences in your book, *DMT - The Spirit Molecule*, is that when volunteers are being injected with DMT, they experience UFO's, alternate technologies, and really sci-fi kind of material, so I can see how that would definitely speak to people who are interested in science fiction. Maybe you can tell us a little bit about what those kinds of experiences were like for people and what they were encountering.



RS - I may want to preface my description of some of those kinds of encounters by stating at the outset neither I nor the volunteers expected anything like the frequency of those kinds of experiences to occur which actually did take place. Both myself and the volunteers were expecting mystical experiences, near death experiences, psychological breakthroughs, those kinds of things. Now, I was doing my studies in the early 1990's and there may have been a fair amount out there on UFO's and alien abductions, but the volunteers who were in my study weren't that interested in that kind of material and I didn't know much about it and wasn't interested in it

either, so I certainly don't think, though one could always argue that it was the case, but I don't think, that it was an example of people expecting to have alien contact sorts of experiences. And Terence McKenna's descriptions of the machines elves and the dwarfs and the pixies hadn't really come out to any extent yet - I don't know if his first book had really come out yet - and not that many people were really familiar with Terence in the early 90's in the first place. So, in that case as well, I don't think it was an example of people's expectations being fueled by their anticipated effects of the drug.

So I think both in terms of more contemporary memes that are passing through our culture, as far as the abduction experience in our culture and Terence's raps, I don't think that either of those had really filtered into the consciousness of our volunteers or my consciousness at the time. So, saying that as an introduction, people were certainly not going into our research studies with hopes of seeing entities or beings. Nevertheless, a huge number of volunteers did. I was reviewing my notes in preparation for writing the DMT book. I completed the research in 95, and sort of did other things for a few years and then returned to my notes, and started writing the book a few years later. I had taken about 1000 pages of notes by the bedside of the volunteers - 400 DMT sessions that we gave them over the space of about 5 years - and in reviewing people's accounts of their experiences, probably half, maybe more, reported having the experience of being in some sort of contact, some sort of relationship, more or less passive, more or less active, with these free standing, discretely demarcated, sentient sort of beings. I ended up calling them "beings" rather than "entities" or "aliens" or any of that sort of thing because it seemed like the most neutral term to use, but they were described in various shapes and forms and guises. Sometimes they were humanoid, sometimes they were insectoid, sometimes they were reptilian, and sometimes plant-like. They were more or less aware of the volunteers. Oftentimes they seemed to be expecting the volunteers and were glad to see them, and then began interacting with them.

Other times they seemed surprised and angry that the volunteers' consciousness, at the very least, had intruded upon the sphere of activity of that particular being. Sometimes the volunteers were treated or experimented on. Sometimes they experienced some type of sexual intercourse with the beings. Some were told scenarios of the future. Others were marked somehow or another for future reference in a way. Others showered light and love onto them. Others were guides to lead them to some other place, like through a tunnel leading to a typical near death or mystical experience. So it was the whole gamut of what you might expect.

Some of the motifs were pretty classical science fiction - kind of flying toward a space station or a space ship, or automatons or robots were busily doing their business. Sometimes they would see very hard to describe hybrid entities - machine/animal, even furniture kinds of conglomerates of beings. So, it was one of those things - in giving DMT, it starts very fast, within a few heartbeats, and is over within 30 minutes or so. One of the advantages of a short acting agent like that is you can write down everything that happens in the course of somebody's experience. I wrote down every possible thing I could - every thought I was having, everything the person was doing and saying, how they looked, the noises in the hall or outside, the emotional ambiance of the ward at the time. So I took a lot of notes and basically, once I wrote the notes and had them transcribed by my secretary, I really stopped thinking about people's individual sessions. So it wasn't until some years later that it really sank in how often indeed people were having those experiences.



MB - And when they're having these experiences, I'm wondering what their physical natures are like. Are they lying down, moving around, are they active, perhaps even acting out some of the situations they're going through?



RS - Well, most people, when they get a big dose of IV DMT are just lying down, and in our study, they are kind of hooked up to machines and IV tubes and a blood pressure cuff and a rectal temperature monitor and all kinds of things like that, so even if they could have moved around, they wouldn't have been able to just because of the physical restraints they were laboring under. But even if they weren't as constrained, a big dose of DMT, even when you smoke it, is pretty disabling, and they just are lying there. People might start to have a tremor or shiver, but any more formed, articulated, purposeful movements were not really that common. So they were just lying there and within 15 - 20 minutes they would start to talk to me and relate what they had just undergone.



MB - Something that I noticed in your book is that many people felt that there would be a point where they had kind of left that aspect of their experience and then returned. Perhaps the DMT is still affecting them, but they feel that they are back in the room at this point. Did you find that people had pretty clear distinctions and transitions between feeling that they are fully in another reality, interacting with these beings and then kind of finding themselves back in the room, back with you, where they could then communicate more freely about what's going on with them?



RS - Well, in our first study, when we just getting the kinks worked out of the protocol, a lot of times people would open up their eyes as the drug was first starting to affect them. First of all, that was pretty startling and disorienting and actually pretty unpleasant as we were doing the study in a pretty standard clinical research type of environment. It was a hospital room with all the accoutrements one would expect. But beside the disorienting aspect of the actual environment itself, it was also confusing too because the visions that the people were having would be overlaid on the objective physical reality of the room at the same time. So it was just a lot easier to monitor what they were experiencing by closing their eyes and not being distracted by the room so that the feeling of the being in the room wasn't as impressive. Within a few months it was obvious that we needed to help people keep their eyes closed because it was just kind of a reflex to open your eyes when you're just so stunned by the onset of effects. So we just got a pair of Walgreen's eyeshades - the ones you use to sleep during the day time - so even if people did open up their eyes, they would see it was black "outside," so to speak, and just close their eyes again.

The peak of IV DMT occurs within 2-3 minutes of the injection and they start resolving pretty soon after that - so most people could open up their eyes and see me pretty clearly at the 15 minute to 18 minute point, but they'd still be pretty high, and even though they would be pretty eager and quite excited to describe what it was they had just experienced, I encouraged them to keep their eyes closed for another 10 or 15 minutes because there could still be some pretty interesting psychological or maybe emotional material that they could process during that time. And then when they'd open up their eyes again at maybe the half hour point, they were pretty much feeling normal and the visual and emotional effects had pretty much worn off. And that actually corresponded with the blood levels of DMT that we were monitoring all throughout the study. The highest concentrations of DMT occurred within 2-3 minutes after the injection and they'd be negligible or completely gone within 30 minutes and there wouldn't be any at the hour point after the injection.



MB - Now, in your book, you kind of went out on a limb a little bit in really processing your own surprise with so many encounters with beings, where you write about tuning into, I think you call it, "channel dark matter," in proposing that people seem to be perceiving things not just within their own subjective consciousness, but perhaps perceiving other aspects of reality. I was wondering if you have any additional thoughts on that now, some years later from the study.



RS - It was obviously hard to come up with a model, at least in my mind, at least with what I knew at the time, to really be able to accept and hold and take the stories that people were telling me, and come up with a theory that I could live with scientifically and personally and ones that would make sense to the volunteers.

I'm a clinical psychiatrist. I learned clinical analysis and how to prescribe anti-psychotic medications, so in terms of the kinds of models that I cut my teeth on as a psychiatric trainee and subsequently, there were primarily biological models and psycho-analytic sorts of

Freudian psychology models. In the meantime I had undergone a fairly extensive Zen training and study, which I felt, or thought at the time, gave me a pretty firm understanding or spiritual basis for understanding the psychedelic experience. In fact, the questionnaire that we developed to monitor and rate people's experiences psychologically in DMT was derived from Buddhist psychological principles, so I felt I was pretty well saturated and marinated with Zen Buddhist ideas - including their cosmology of deities and spirits and angels and demons and bodhisattvas and those kinds of things - so I was expecting that I would be able to articulate a theory that would make sense to both me and our volunteers for all the possible varieties of the DMT experience that they might encounter. I just started off with the most gross explanations and worked up from there when those got rejected. The grossest explanation is obviously that of the brain - this is your brain on drugs - you give people DMT their brain does this - this is why people were having these entity contact experiences.

But every explanation that I tried fell on fairly much deaf ears on the part of the volunteers. They either rejected the ideas about this being a brain on drugs, or the other approach that I was taking that was pretty much a psychological approach - these were unexpressed dreams or impulses or drives or motivations to be special or to belong or to have exciting experiences - kind of the Freudian approach. So when that didn't work, I tried to learn as much as I could as fast as I could, in terms of what Jung had said about UFOs and aliens, so I tried using those models or explanatory systems to kind of encompass people's experiences. That didn't work. I tried the more generic approach of interpreting what they were experiencing as dreams, but that didn't work either.

The idea of the dream state and the DMT state deserves a little bit of thinking about. I think that one of our volunteers summarized it in a succinct and cogent manner when he said that in dreams, you have a dream and then another dream and then another dream, and you kind of pick up with the following dream where the last dream left off. But with the DMT state, as he described it, that level of existence was going on all the while, even when you weren't in it, and you were just kind of dipping into it at the point where it was just happening. If it was a month between trip to trip, then a month of time, in some form or another, had elapsed in the DMT realms, and you were just dipping into it, at the point at which the DMT state was, not necessarily your state, if that makes sense. It's kind of like going to India. It isn't as if you've been to India in January and then returned in June, it wouldn't be that things would begin for you just as they were when you left in January.

It's more that you're back in India in June and all this stuff is happening over those five or six months. So that was, I thought, a pretty clear and insightful way of differentiating between dreams and the DMT realm - especially when you enter the DMT state over a week or a space of time, either weeks or months or years. Also, from the Buddhist point of view, even though I knew a lot about Buddhist cosmology and their worldview, especially with respect to spiritual kinds of realities, either for my own reasons that I never quite swallowed the whole Buddhist rap, hook line and sinker, or maybe because it was a Zen community and they were more focused on everyday, here and now reality - chopping wood, carrying water - that I just wasn't feeling that equipped to deal with people's experiences through the lens of Zen Buddhism. So, I think what the major contribution of my Zen practice was, at the time, to just be as open as I could and to focus more on the immediate situation than being stuck in any kind of theoretical rut that would prevent me from being able to take into account the full impact and depth and variety of what people were experiencing.

I tried and discarded various levels of interpretation until I finally just figured I'll just start to do an experiment assuming that what people are undergoing is real and that indeed they are experiencing or making contact with real, externally verifiable, discrete, freestanding sorts of beings. This is what they're saying and this is what they're doing and this is what is going on between them and the volunteer. What happened as a result of that is that people became a lot more comfortable in sharing with me the full range of their experiences. I stopped fighting and trying to pigeonhole a round peg into a square hole - trying to fit their experiences with the theoretical constructs that I was stuck with. I think as a result of my change in attitude or approach that I was getting deeper and richer reports from people about what was going on. But still, as a scientist, I'm into mechanisms of action and when I started to write the book, I started to hunt around for scientific models that might encompass free-standing, sentient, independently existing, outside just one's mind, explanations for what people were undergoing. So even though I'm no expert on quantum physics or any of the more far-out psychedelic views of cosmology, I did learn a little bit of this phenomena that is known as dark matter, which is non-visible matter that neither generates light nor reflects light, but still makes up 95% or more of the mass of the universe. It seemed to me that if it makes up that much mass of the universe, it could very well be inhabited, and it would just be a question of changing the receiving characteristics of consciousness through chemical changes that occurred with DMT to be able to perceive things that were normally not perceivable. And there are plenty of examples of that in everyday reality - I mean, with a microscope we can see tiny things we couldn't see normally - with a telescope we can see things very far away we can't see normally, with ultraviolet sensors we can see things that we can't normally see - so the only difference, maybe from a philosophical point of view, is that the change in our receiving powers are not tied in with a machine - they're more in our subjective/receptive consciousness rather than with a piece of metal and electricity and glass and things that can magnify or somehow change the things that we're capable of seeing.

So it's a bit of a stretch, but I don't think it's completely that crazy. The main thing that prevents further movement along the model that I'm talking about is just the verifiability between two people - like can two people see the same thing at the same time - like if you have two people looking through the same microscope at the same time, they can pretty much see and describe the same thing - but is it possible for two people to take DMT at the same time, or not even at the same time, and be able to see the exact same thing? There are all kinds of caveats about how one would do an experiment like that - especially if there is a wide range of DMT related states, if it's not just one state. I think a lot of what people perceive is based on their own consciousness - their instrument of perception - so if they're depressed or tired or if they're in a good mood or over-energized, didn't get as much sleep as they normally do, or got more sleep than they normally do, I think all of those things will factor into affecting where they will go on any particular DMT experience. One interesting historical footnote is that when people were first studying Ayahuasca, which is a brew from the Amazon that contains DMT and also another plant that has a substance in it that allows the DMT to be orally active - otherwise when you just swallow DMT it's broken down - but the Amazonian Indians discovered that if you combine a DMT containing plant with another plant which contains an enzyme inhibitor that the oral DMT then becomes active - when chemists were first looking at the chemical composition of Ayahuasca, one of the compounds that they isolated they named telepathine, which I think was a reflection of how commonly it is reported by South American natives that they share perceptual effects when under the influence. And I actually know a couple of Western scientists who were doing some studies down there some time ago and they were in a small circle and they both drank DMT together and they both had the exact same vision of a big bird, like a vulture, sitting just outside the circle, which just the two of them were able to see - no one else did in their group. So I think experiments can be designed that can try to standardize as many of the independent variables as possible to see if people do enter the same state with DMT and other really powerful psychedelic drugs, and if they did, then that would lend some more credibility to the idea that it is something that isn't just one's individual hallucination.



MB - It sounds like part of the difficulty, coming from a Western standpoint, is that we don't really have a sophisticated model of consciousness. We're getting very sophisticated with neurochemistry and neurobiology and looking at brain states in relation to neurons and chemicals and molecules in the brain, but we don't really have a firm model of subjective states of consciousness, and it sounds as if this research could really be paradigm shaking if we can get to performing this at a high level of examining what's really going on.



RS - I think we'd also have to have some models that can incorporate those sorts of experiments and if those findings did come through in the way that I would expect them to, and to interpret those findings. In this new book, Inner Paths to Outer Space, Ede Frecska describes some of the theories that are being circulated regarding non-locality and also some of the network ideas with respect to microtubules, and microfilaments that are contained within the nervous system - so I think we're starting to develop some theoretical models.



MB - Coming from quantum biology then . . .



RS - It isn't really coming from within mainstream psychology or psychiatry, it would have to be some kind of hybrid of quantum science and maybe even an introspective science, like some of those that have been developed in introspective traditions that have been around for thousands of years. It is interesting that in terms of the long span of human history we are one of the few cultures that does not believe in a free-standing spiritual level of reality. We've kind of thrown out anything that can't be objectively measured or imaged or photographed into the waste bin of superstition or supernaturalism, and we've got this view that things that can't be seen by a group of people at the same time are not real - that's a relatively recent development in the long span of human consciousness. That's not necessarily to say that old ideas are true ideas, but the vast majority of humans, for the vast majority of time, have firmly believed in and utilized to the best of their abilities the belief in and the conviction in a free-standing spiritual level of reality. That could mean that it's a true fact - that there is a non-visible, only subjectively experienced, spiritual level of reality that we're so far ignoring or relegating to unreality. It may be that it's through the tools of science and pharmacology that we are also able to validate non-corporeal levels of reality and we can learn from and interact with the inhabitants there of and maybe get back on course.



MB - So, let's step back in time a little bit and talk about what inspired you to do this DMT study. I think that yours was the first study to be done in something like 30 years for research on psychedelics in the United States, and you write about in your book how this was a very difficult challenge to actually make that happen. So I'm kind of curious about what inspired you to delve into that hornet's nest and also what made you choose DMT as what you wanted to study.



RS - In terms of what got me interested in the whole field in the first place, I went to college in the late 60's and the early 1970's, when there were two very interesting converging lines of research and experience. There was a discussion going on and a whole new level of experience was being had by people and these were, on one hand, the Eastern religious practices and traditions, especially Buddhism and Hinduism, and on the other hand, there was this influx of experiences being brought on by the ingestion of psychedelics. And it didn't escape all that many people's attention that there was a lot of similarity in people's descriptions of those two sets of experiences. So I started thinking to myself, if the descriptions of meditators comport so closely, at least in some respects, with the reports of some people taking psychedelic drugs, then there must be some kind of biological concomitant going on in the brain at the time that people are having deep mystical experiences. So I began to search for a biological basis for mystical experience because it seemed as though there must be as they were so similar. It seemed like there must be something going on in the brain at the same time that people were having these non-drug induced experiences that might at least in some ways be similar to what happens in the brain in reaction to a psychedelic drug. So I began to hunt around within the literature for a biological basis for mystical experience. I didn't know about DMT at the time - this was in the late 60's - and actually a lot of the research on psychedelics in humans was winding down. But I did learn about the pineal gland, which is a small organ in the center of the brain which had been thought to have a spiritual role to play in the spiritual physiology of the Hindus, in particular in regard to the chakra system. So I started to learn about the pineal. It was a few years later that the whole phenomenon of winter depression became current, and there was an interest in the role of melatonin, which is the main hormone of the pineal gland, which is involved in causing winter depression. So that was actually the root through which I was able to get involved in clinical research regarding my unspoken interest in spiritual states and spiritual consciousness. I ran a study at the university of New Mexico looking at the role and the function of melatonin. And even though it was a pretty psycho-pharmacological kind of study, looking at a whole range of hormones and autonomic functions, my underlying interest was to see if there were any psychedelic effects of melatonin. So when that came up short, I decided to switch fields and go more directly into the field that I was fundamentally interested in, which was the psychedelic work. I had learned by that time about the existence of DMT as a very powerful psychedelic chemical that exists in plants and animals, including mammals and including humans, and the great amount of interest that DMT had garnered in the psychiatric research field in the 50's and 60's and the early 70's, and so even though there are no data yet connecting the pineal gland with DMT, there is a lot of circumstantial evidence that suggested a relationship between the two things. There were a number of reasons that I chose to begin using DMT, one of which was its possible but still unproven relationship to the pineal. The other is its endogenous nature - it occurs in human beings and I felt it was important to study it carefully and find out more about the effects of a naturally occurring psychedelic. I mean, nobody is looking at this, really, even to this day. It's still kind of a minor substance of abuse, but when you really think about the existence of this incredibly mind-blowing psychedelic that's being made in our bodies at all times by the lungs and the red blood cells and the brain, those sites of formation are fairly well established at this time . . . Nobody is thinking or really talking about what could be the role of DMT in normal consciousness and in extraordinary states of consciousness. When people first were looking at naturally occurring DMT in humans, they of course were looking at it from the psychiatric point of view. For example, perhaps it causes schizophrenia. And there were a number of studies that compared the levels of DMT in the blood of schizophrenics versus normal people and they really weren't able to find any differences. But the levels of DMT occurring in everyday existence are so low that you really need incredibly sophisticated equipment to make a differentiation between the levels you might find in one group of people compared to the levels you might find in another group of people, so I think those studies suffered from a lack of technological expertise that hopefully we have made some progress in overcoming in the last 20 or 30 years.

In terms of a rationale to study DMT, one of the reasons I presented to the regulatory and funding bodies was that it was important to understand more the effects of externally applied DMT so we could then start to determine the levels of similarities and differences between psychosis and between the state of DMT intoxication that we were expecting to see in our volunteers. The other reason I chose DMT was because it was relatively obscure and it had been a couple of decades at least since anybody in the US had done human studies giving psychedelics to people. I was afraid that if we began our studies giving people a drug like LSD, or even psilocybin, that it would garner a lot more publicity than beginning with a relatively obscure drug like DMT. The other reason we chose DMT was because of its extremely short duration. I was thinking that it would be pretty stressful for our volunteers to be given a psychedelic drug in the hospital and I was suspecting that people would perhaps undergo adverse affects or panic or get pretty disabled or disoriented. I was thinking that it would be much more manageable to deal with a 10 or 20 minute bad trip than a 6-10 hour bad trip.



MB - Something that seems to be a central and reoccurring theme that runs through your discussion of a lot of this is really looking at the question of mysticism or spiritual states of consciousness or visionary states of consciousness, and of course you do raise in your book the controversy between what we can consider mainstream religious practitioners who tend to look down on the use of visionary medicines as being authentic spiritual experiences, at least within Western tradition, but certainly you're asking the larger questions of how this relates to spiritual experience. What is your view on that?



RS - It's not any clearer than when I set out on this work. An interesting aspect of my involvement with the Zen community that I was with for over 20 years - I was a lay member - I was never a monk - I was ordained as a lay member and I ran a meditation group that was affiliated with the main temple - I never shaved my head and donned robes though and never got an Asian name, but I went up there fairly regularly, and frequently, and underwent lay ordination and was entrusted with teaching meditation and Zen for a couple of decades. So in the beginning of my relationship with the monastery - I was in my early 20's, as were most of the monks who were there at the time, and every chance I got I would take one of the monks aside and ask them if they had taken LSD, and if they had, how important their LSD experience was in their decision to enter a monastic lifestyle. At the time, this was probably 1974 that I started to spend time at the monastery and be friends with the monks, I'd say at least 3/4, maybe 80-90% of the monks had an LSD experience, and the vast majority of them, probably every one of them, felt that their LSD experience was their first glimpse that there was another way of looking at reality.

In Buddhism, that's what's called bodhicitta, which is the thought of enlightenment, which, for a lot of Buddhist thinkers, is the most important step on the road to enlightenment - the realization that enlightenment exists and is possible to experience. So strictly speaking, for almost everyone - 3/4's of the monks at that particular temple who had had an LSD experience - their first entry into the enlightenment stream of life was through an LSD experience. So that validated in a lot of ways my thinking of the similarities and overlap and the relevance of the psychedelic experience to a spiritual lifestyle and a spiritual worldview and a spiritual way of interacting with people and with things.

I described some of the ins and outs of my relationship with the monastery over the years and pretty much as long as I kept the level of discussion and discourse just between me and a monk, and they for sure all chatted together about the laymen and laywomen who had come through for workshops and retreats and made sure that everybody was on track - so I'm sure that they were talking about my interests in psychedelics and the role that they play in spiritual growth. So I got quite a bit of explicit encouragement over the years from these monks who had taken LSD and were climbing the hierarchy of the monastic organization. But it was only when I was actually starting to put the rubber to the road in doing my studies and both speaking and writing publicly about the association between the psychedelic experience and the spiritual life and practice, that the monastery started getting the jitters and for a number of reasons had to disavow any relationship between the two and any relationship between me and them. So that was a fairly good example of even an Eastern religion, which ostensibly puts more faith in the truth than in orthodoxy or any dogma, being faced with the public relations fallout that might be associated with any linking of their organization and me promulgating psychedelics as a possible way to work on one's spiritual life.

I certainly, at the time, never suggested that psychedelics were a replacement for spiritual practice. On the contrary, I think that one of the things that you can get from the psychedelic experience is a view - a glimpse, and that's what the monks and I had been talking about all these years, was how you got your first glimpse and then you worked on it every day, 24 hours a day. But those kinds of subtle distinctions were lost in the heat of the argument over whether there is a role for psychedelics within Buddhist practice. It was disappointing - it wasn't that surprising. This sort of break with the Buddhist community occurred in 1996 and I haven't really had anything to do with them since. I still do meditate on my black cushion, but I turned in my small piece of cloth that demarcated my membership as a lay Buddhist. I returned that to the mother temple a couple of years after the split.

But as the result - there's always a silver lining - the fact that I lost one religious community forced me to start re-examining my own spiritual roots, which are Jewish in nature. So for the last 10 or 12 years I've embarked on a fairly rigorous course of self-directed study of Hebrew texts and commentary and scriptures and have found that in a lot of ways they've augmented and filled in a lot of the gaps I had been struggling with in regard to a real spiritual view that could incorporate both a psychedelic experience and a religious experience. So I've been just starting to formulate the ways in which I can describe that in a sense that is intelligible and compatible with a more Western worldview of a more religious and psychedelic sensibility.

I've been circling around the Old Testament idea of the prophetic state of consciousness, which I think in some ways can allow for an incorporation of the psychedelic state - though there are a lot of dissimilarities - but probably more importantly is the information that comes in the psychedelic state. I think one of the pitfalls that the contemporary use of psychedelics is suffering from is that there isn't a culturally relevant framework in which to take home and incorporate the lessons of the psychedelic experience. A lot of it is, "Oh wow! That's the most amazing experience of my life and now I see that all is One," but that isn't really the prophetic viewpoint. The prophetic viewpoint is that there is information that is experienced in these exalted states and so what is that information?

So there's a huge amount of material in the first handful of books of the Hebrew bible, but especially in the prophetic books such as Isaiah and Jeremiah and Ezekiel. A fair number of them underwent incredible psychedelic visions on one hand, and on the other hand they really did a lot of teaching about what they felt and heard and thought and saw under the effect of that altered state of consciousness. And what they bring back isn't all that exalted - ethical teachings and moral teachings and a view of God and of history that isn't especially unique or far-out, but it's quite Western and as a result, it takes a lot of swallowing of bitter pills by most Westerners to get past their visceral aversion to looking at the Bible as a sacred text. There are probably more people in the psychedelic community that have read the Bhagavad Gita and the Buddhist sutras than have read the Bible. And that's cool, but it's kind of crazy too because the answers to how you incorporate and how you live under the umbrella of a psychedelic worldview or through a lens that's compatible with our Western worldview is kind of right beneath our noses. It's a powerful book, obviously. Look at the course of world history as it's been driven by this vision of the Bible, especially of the Hebrew bible and all the prophets and Israel as the chosen ones, the Ten Commandments, and the Red Sea and Abraham and all that - you know, there's a tremendous amount of information there that is accessible, though it's pretty dense and it's fairly obfuscated by the efforts of the clergy and the rabbis, as it were. But it's still there, and the first step is to review what's in the Bible as a means of trying to articulate a psychedelic type of vision that is informed in the West. You know, we're not shamans. We didn't spend our infancy and childhood and adolescence and adulthood in the jungle and you know, we're not Buddhists or Asians or Indians or Japanese, we're not Native Americans. We're people who emerged from the matrix of the Bible, more or less.

People talk about a Judeo-Christian worldview, but I think it's more Jewish, because Judaism is the root from which both Christianity and Islam grew, so I think that's our worldview. And to just reject it out of hand without knowing about it I think is a mistake, because there are quite a number of people out there in power, both governmental and other power, who are familiar with what's written in the Bible, and if the psychedelic community is not, I think our ignorance hurts us in a couple of ways. For one, we can't counter some of the crazy, fundamentalistic interpretations of the text, but on the other hand, we aren't able to take advantage of what's there to live a psychedelically informed type of life in a culturally relevant way for us. I don't think that we have to reinvent the wheel, but we do have to return to our origins a little bit more intently, critically and passionately.



MB - So I notice on your bookshelf here, which we are sitting next to, you do have a copy of Magic Mushrooms in Religion and Alchemy by Clark Heinrich where he talks a little bit in this book about looking at some of the prophets from the Old Testament as actually being mushroom hunters and gathers. He makes an argument for Moses and the Ten Commandments, the burning bush, and looking at all that as actually relating to amanita mushrooms.



RS- I think those are fairly strong and well-reasoned arguments, but I think rather than looking for some external source of the psychedelic experience, once again we have them under our noses. All of us are always making DMT at all times, so I don't think it's actually necessary to take in something from the outside that will cause the psychedelic experience - we've got the machinery in our brains already. I think even more remarkable than the effects or presence of mushrooms or acacia plants as being responsible for the visions of the prophets, a more prudent explanation, is that there may be some role of naturally occurring DMT or comparable psychedelics as mediating those types of phenomena.



MB - I also wanted to ask if you have any thoughts on the preponderance of DMT in nature. It seems kind of surprising that it is in so many different species of plants and it seems to be everywhere, to some extent, and it's also inside us. Do you think that this is just part of our evolution and our physical bodies developing neurotransmitters and whatnot, that we're taking in these influences from the plants that we might be encountering or eating? It seems kind of odd that we have the chemical both within us and it's in so many plants.



RS - I can speculate regarding that, but I think the person who really articulates that vision or some of the ideas behind that even better is Denis McKenna, and actually we've got a really fantastic interview with him for the DMT documentary that's in the works, which I hope will come out, maybe next year, if all goes well. I asked him that exact question - what do you think is going on with DMT being a ubiquitous as it is? I think a simple-minded answer, but one that fits the bill as well as anything, is that the presence of DMT is a shared conduit, in a way. It's the medium through which individuals or species that contain it are able to relate to each other.

It's a fairly common phenomenon when people take DMT, or any strong psychedelic for that matter, that they're able to understand the consciousness of animals and plants to a much greater extent than they ever were before. It isn't quite the case that you take DMT and you understand a rock or a couch or a stove (though some people do). It's a little more common of a phenomenon that people seem to describe a deeper level of empathy and consciousness sharing and communication with particular sorts of animals or plants. So it could be that DMT is the matrix through which we can maybe communicate with other beings that also contain DMT. It wouldn't necessarily be through the spoken language. It would be maybe more telepathic or empathic or visual or visceral, emotional kinds of content, but compelling and real content nonetheless.



MB - I suppose in one sense we can say that it allows for interspecies communication on this level, but on the prophetic level, allows for communication beyond our immediate physical reality as well.



RS - That could be. I think it's really strange that everyone isn't studying DMT. Everybody ought to be studying DMT - I mean, what's going on here? We have this incredibly weird chemical in our brains that seems to allow inter-species communication and seems to allow the reliable and reproducible entry into a spiritual state, it's a naturally occurring chemical - our brains make it, our lungs make it, our red blood cells make it, it lasts a half hour, you can infuse it into people for a few hours at a time and it retains its psychedelic potency, so it's almost like this spigot or valve that you can just turn on and open to some kind of consensus reality and observationally agreed upon way of looking at things or anybody at any time, so that's a question that I think about all the time. Why isn't everybody looking into this? Which you may want to counter with the same question - "so why aren't YOU looking at it?"

In some ways, that brings us to the end of the book, my DMT book, which if you read between the lines, it was clearly the case that I was in over my head. I had a tiger by the tail and I might hurt somebody or hurt myself and it was just too complicated, so I took a break. I had to work through things on my personal level, on the level of my spiritual development, and had to go back to the drawing board and reintegrate myself into my Jewish roots and learn about the Bible and the Hebrew language and the prophets and really start to get a handle on what seemed to be a spiritual level of reality - angels, demons, God, the afterlife and non-corporeal levels of existence and the way in which they interact with the physical level of existence - and I also had to make a living.

So it's been 12 years, almost 13 now, that I gave my last dose of anything to anybody. I'm feeling like I'm more in a position to renew the research, so that's why myself and a couple of colleagues put together the Cottonwood Research Foundation in the last year to renew studies with psychedelics, especially the psychedelic plants in a more humane and larger-view perspective of what these plants and drugs are able to provide access to, both in terms of information and their human properties, those kinds of things. We're just getting off the ground. We have a little bit of money in the bank and I'll be taking a vacation for a month or so after I complete my contract at a local clinic here. Then when I return this late summer, I'll be hitting the ground running to try and do some more fundraising and developing some proposals for grants. I'm also collaborating with a group right now up in Seattle trying to get an Ayahuasca study off the ground.

So I think this time around, I want to be helpful rather than clever, which was kind of the approach I was taking with the first series of studies. I was being clever in as much as I wanted to give people DMT and describe its effects and understand the brain chemistry going on behind it, but I was a little too hands-off. I was pretending that I wasn't interested in what the effects were other than just kind of knowing what they were. But I think that it's more important to apply those effects and to be helpful rather than just gaining some information, which was sort of my approach, for lack of a better reason.

But I was constrained by the model though. It was the government and it was a grant for brain chemistry and psychopharmacology and I couldn't have gotten anywhere without using that kind of model, but I opened up the door to get this new wave of American research up and running. But it's been kind of slow, so that's another reason that I opened up the Cottonwood. The pace of psychedelic research in the US has been quite slow since I left the field in '95 and seems as though it can use some re-energizing and reorienting away from the strictly scientific model. Clearly we're not going to be going off the deep end, but we're going to try and enlarge the questions that we try to address using the scientific model. It won't be strictly limited to brain chemistry and psychopharmacology.



MB - Obviously with Ayahuasca it would again be looking at DMT. Is there a reason other than that why you are interested in looking at Ayahuasca?



RS - Well, there's a whole lot of information out there about the effects and properties of Ayahuasca, and the reports that I've been hearing is that it is the mother of all healers, so I think that any plant that has that kind of reputation is worth studying. Up in this part of the world and in northern New Mexico, there is a huge problem with alcoholism and other substances being abused. There's a couple of centers in Latin America using Ayahuasca to treat substance dependence and there's a slowly increasing number of reports in the scientific literature as well that seem to confirm the impression that lots of substance abusers are able to stop abusing once they've undergone a number of sessions with Ayahuasca, so that's a natural set of studies that would be easy to do and wouldn't be hard to get funding and approval for, just because of the nature the problem is quite so pressing.

And it is DMT, and I like DMT. I made my career out of it, and it's a plant, so it's not quite as harsh an experience. It's a little gentler, someways, than a pure extracted powder that you inject into somebody's veins. There's a tremendous amount of information about Ayahuasca in the non-psychiatric literature - in the anthropological literature and religious literature, indigenous literature and the oral traditions, so I think that it's possible to utilize some of those sources of information that are at least ostensibly external to the scientific worldview, at least at this time in our history.



MB - Of course, recently in the past couple years we did have the study by Johns Hopkins University that looked at psilocybin that, not surprisingly, came back and said that something like 60% of participants described their experience as being deeply mystical, deeply spiritual, and the most significant experiences of their lives. I wondered if you had any thoughts on their study?



RS - It's a great study. It was quite well done and their control situation and actual implementation of the study was impeccable. On the other hand, it was basically a repeat of a comparable study that was done at Harvard University of giving psilocybin to divinity students and a large number of them also described results comparable to the ones that just came out of the Hopkins study. I think in some ways, comparable to the study I was doing with DMT, the Hopkins psilocybin mysticism study was kind of going back to basics, to, number one, establish that you can do these kinds of experiments in a safe manner, and number two, at least in terms of the Hopkins study, that you can induce positively valenced subjective experiences. I think that the next step is to be creative and start to apply some of these potentially beneficial effects in a healing and therapeutic manner. I understand the Hopkins group is interested in doing some substance abuse work, specifically with psilocybin, so I think the more therapeutic work is done, the better.

I think that when you're working in a strictly university setting that your explanatory models are a bit more constrained than if you were working in a free-standing institution like Cottonwood is going to be. I don't think that they'll be quite able to talk about p-values and statistical power in quite the same breath that they can talk about spirits and plants and the natives and angels and helping beings and those kinds of things. We wouldn't be using those terms and models in any of our scientific work, but I think we'll be freer to discuss those explanatory models in our more speculative models of what might be going. In the best of all possible worlds, we'd like to have Cottonwood be an institution of higher learning that kind of revolves around the psychedelic experience. So we would apply every relevant discipline that has an interest in the psychedelic state, which would include anthropology and religion and shamanism, psychology, cognitive sciences, psycho-pharmacology and therapeutics, let alone just from the pure psychiatric point of view.

I think both levels of discourse have to take place. The university is a more appropriate institution for certain levels of discourse, but I think there needs to be a really explicit and overt role of a spiritual worldview in any full discussion of the psychedelic experience and its relevance to growth and healing and creativity. When you're in a university setting, you have to be much more circumspect in those disciplines that you might bring to bear on the discussion.



MB - So it really sounds like you're trying to open up the paradigm here and move it out of the scientific reductionistic model, or at least scientific explanation of things and genuinely acknowledge that, look, there really is something going here that is opening people up to different levels of spiritual experience and perception, whatever that may be, and really is affecting people's lives.



RS - Psychiatry is a relatively recent invention, and these drugs and plants have been used for a long time before there was even a word "psychiatry," so I think that there are other people and cultures that know a lot more about the effects of these plants than we do. To pretend that's not the case or to hold ourselves out as having a more advanced or superior view or any kind of hegemony over the knowledge of what kinds of experiences these kinds of plants can bring on, I think the term is hubris, is a little far fetched that we can't learn from other cultures and traditions that have been around a lot longer than we have and have a lot more experience in the trial and error process of the scientific method using the tools that were and still are at their disposal for using these plants and their effects on our consciousness.



MB - It sounds like this could also potentially have a large impact on culture. For one, from a legal perspective, looking at these scientific studies and things like the UDV or Santo Daimé making court cases for their legal right to use Ayahuasca, but could also potentially have broader effects within culture itself, that if we have people like yourself studying the spiritual effects of these plants and visionary medicines, it could perhaps change other people's attitudes and their openness to what the potential of these plants might really be.



RS - I don't think that we're going to come to the answers either through science or through religion. I think it's going to be some kind of hybrid. Science is a bit too constrained in the model building, and most religions are too constrained through the maintenance of their institution at the expense of the truth. As a rule, if you can establish the veracity of your findings through science, it's believed. It isn't excluded necessarily because someone disagrees with your findings. So I think it will require some kind of hybrid of scientific religion or spiritual science to be able to take into account the entire range of the phenomenon, the ethical implications that's available and also maintain the peer review and the cross-checking of your findings that occurs within the scientific model. Yeah - so it's pretty out there. It's kind of a large view and if I get one half of one percent done before I die, I'll feel pretty good about that.



MB - Do you think society is ready for that?



RS - I don't know . . . I'll find out . . . It could be . . . I mean, people are hungry, and they're lost. We're not doing so well as a species. People are taking psychedelics. I think as a means of living their life, science falls pretty short, but as a means of taking into account reality, religion falls pretty short. So I think people are looking, but they don't know quite where to look. If we can begin developing Cottonwood where these things can be looked at carefully and experiments can be designed and explanatory models are offered that take into account the entire range of possibilities of what is going on, then we might make some headway into establishing a new kind of hybrid model.



MB - What can those of us out there in the psychedelic community do to support this kind of work and research, and specifically, what can we do to support the Cottonwood Research Foundation?



RS - If you go onto the website for Cottonwood (www.cottonwoodresearch.org), you'll see the projects that we're beginning to work on, and we'll give you the opportunity to donate, so tell your friends and family and try and spread the word. We need money. Obviously, any research projects take lots of funding and time, and the more time I have to work on things, the more I'll do them. I'll be giving up my clinic job at the end of this summer and after I return from being gone for about a month, I'll be working on Cottonwood more in a bald-faced appeal for my own support. The more money I can bring in for operating expenses, the more time I can devote to Cottonwood. We don't need much in the way of local volunteers right now. Once we get our coffers a little more plentiful, we'll be able to hire some staff. Ultimately, we're going to need some land, some buildings, some medical staff, a psychiatrist, a nurse, people who are keen on this work and are willing to devote themselves to it, so a few really large grants would help. A lot of small donations would help. It's a very long-range goal. The more funding we get, the more quickly we'll be able to start implementing some things. I have a contractor friend who's beginning to draw up some sketches and designs for the research suite with a couple of research rooms and a lab and a kitchen and a lobby and those kinds of things. Once that's firmed up, I'll be posting those to the web site. It's pretty young and inchoate now. I'm a patient person - obviously I wouldn't have gotten my research on DMT done if I weren't - so I've got plenty of time to work on it, and even if I didn't, it's got to be started off in the way that I would like it to turn out.

I think that one of the problems with our University of New Mexico work with DMT was that I felt like it was important to get this work started no matter what it took to get it started in the US and I was willing to do that. But I think as a result of just doing whatever had to be done to get my funding and my permits in order, I kind of painted myself into both a conceptual and practical corner. This time around I don't feel like I have much to prove. I've done the DMT work, I've written a couple of books. I feel as though I've left a good legacy behind. Other people have taken the baton and run their own studies, so I think that in respect to the Cottonwood, I would want to begin it the way that I would ultimately like it to turn out. If it never manifests in that particular way, then that's fine - it's obviously not meant to be at this time. And if we can get the funding to do it in a way that I think it needs to be done and do it right, then great - we'll go ahead and get started.



MB - So in the ideal world, where would you like to start a study on Ayahuasca, if everything could fall into place nicely?



RS - The first thing is to start giving Ayahuasca to people in this country, and that could occur anywhere. There's a group up in Seattle that's beginning that, though it isn't clear how quickly they'll be able to get started. But that could occur here in New Mexico or anywhere in the US, as long as somebody starts giving people Ayahuasca in at least a relatively humane setting. Obviously the more humane and attentive it is to the non-psychiatric aspects of the setting, the better. In terms of the treatment center, the obvious thing I'd like to do, living in New Mexico with the rampant alcoholism and other substance abuse problems we have here, is to have that kind of a protocol locally. But it would need to be in a conducive environment and that's the only way that I would be giving people drugs or psychedelics again, in a compassionate and humane setting.



MB - One last thing that I'd like to touch on is you mentioned in your new co-authored book that you have a chapter that basically gives some advice for those who would personally venture out on this journey. I wondered if you could just touch on a couple of the ideas that you've expressed in there.



RS - I'm quite pleased with that chapter. It's called "Preparing for the Journey." It's a fairly long-range view of getting ready for any kind of psychedelic experience. It takes into account the psychological work and preparation one needs to undergo to establish some kind of discipline, either psychological and/or spiritual to try and understand yourself and your motivations as well as you can. And I do spend a lot of time in that chapter emphasizing the importance of intent - to clarify over and over again what your intent is to undergo a psychedelic experience. The more you know of your intent, the more you'll be able to do the necessarily preliminary work to get the most out of the amplification of your normal mental and spiritual faculties through which these substances work. For example, if your intent is to work on psychological sorts of issues, if you can spend some time in psychotherapy first with a psychotherapist that you like and you trust and think is helpful. You can do a lot of the legwork that would make it easier to make the most out of your psychedelic experience. And it may even turn out to be the case that you don't need to have the experience if you've gotten what you need out of the psychological work. If you're interested in a mystical experience, it's a helpful thing to educate yourself on the literature of mystical states, especially if you can find something within your own tradition, and do some work and study with a master within that tradition. So the preparation can extend for months or even years before the actual trip.

I also discuss some of the more proximate kinds of planning that one can do, such as deciding if you're going to be tripping alone or with a group. If with a group, is there going to be a leader? Are you going to be alone or have someone with you? What kinds of preparations are you going to have in case you get sick or if someone panics or gets confused? Issues of staying nearby, when to drive - those kinds of immediate things that you want to make certain you've looked after. Getting enough sleep, are you feeling healthy? Are you especially stressed out or jet-lagged? Taking care of business like taking out the garbage, even taking care of your will, if you're old and you have some concerns that you may die - which, you know, isn't very common, but it can happen. You certainly can, at some point in a big trip, experience some fear of dying or be convinced that you have died. Taking care of every possible problem that you can anticipate, and making sure that you are steering the trip in anticipation of a good trip to optimize the kinds of effects that you have. And also ancillary instruments such as writing tools or art supplies, those kinds of things. I also spend time at the end of the chapter talking about integration issues and how to deal with adverse effects such as panic, depression, or anxiety, those kinds of things.



MB - And what was the name of the book again?



RS - It's called Inner Paths to Outer Space. It's published by Inner Traditions, the same group that did the DMT book and it is on Amazon and Barnes and Nobel, and tell your local bookstore to carry it if they don't already.



MB - And it has a beautiful cover, so I do encourage everybody to check it out, and we're very lucky to have the original art piece here in the house that we're able to look at and it really is fantastic. I'm looking forward to seeing what else is in the book - it looks like a very good one. Thank you very much for your time.



RS - You're very welcome. I hope it was helpful.