

Sound Healing With Guest Dr. Jeffrey Thompson

Steven: Welcome everybody. My name is Steven Halpern and I'm joined today with Dr. Jeffery Thompson. We're going to be exploring the field of sound healing. Sound healing is actually one of the most ancient if not the most ancient of the healing arts. The healing powers of sound, going back way before it's use in the bible, going back to ancient Egypt, the Mesopotamian ancient China and India, in fact all ancient cultures honored the power of sound to help bring us into higher levels of health and wellbeing, also to bring us into a greater sense of communion and attunement with the divine and in recent years, in the last 50 years or so, the use of sound as a modality to help people reduce stress and enhance their health and well-being has become a viable part of the alternative complementary and holistic medicine and approach to living. What we're going to today is to look at some of the main aspects of the field to discuss some of the conflicts and differences of opinion and also some of the misinformation and disinformation that's been popularized to assist you in making the most informed choices so that you as an individual tuning in to this program and the series that we've been recording can benefit the most that you won't be wasting your time and your money with some things that have more hype than factual. So I'll begin just with a paragraph and open it back up and ask Jeffrey some questions here. At the beginning, Jeff would you be in agreement that sound healing is an umbrella term that refers to the use of sound and music to assist us in haling ourselves. The modalities include using ancient instruments like Tibetan singing bowls, and some contemporary variations of that such as tuning forks and crystal bowls, using the voice of course and chant, and mantra, but also using music and specifically contemporary compositions composed with the intention of creating a healing response working with some of the built in response modalities that we share as a human instruments that work with a different intention than if we're just looking at music for entertainment. So let me turn it back over to you and see if there's some other things that you'd like to add to that.

Jeffrey: Well, I certainly agree with what you said. To me it seems like people, we heard to sound healing there's differentiation in my mind anyway between what I call sound healing which is using certain types of sounds that are tuned a certain way that have an affect of some kind and then music, music therapy that's a combination of sound combined together mathematically to make chords and make music and then that music certain type of chords can have emotional effects and relaxing effects and energizing effects. Of course you can't have music without sounds so sound therapy certainly includes that and yeah, I think there's probably not a culture on earth that hasn't had as a major part of its healing modalities sound going back to the beginning. I think the most beginning would be the womb. The sound environment of the womb, we all were exposed to and then the first example of sound healing would be a lullaby from your mother or ancient drums. Drums beating at certain speeds that cause certain kinds of streams of consciousness, in the modern world, we see acoustic instruments recording of those instruments with analog like on tape and digital like on CD and now we have these new formats that high definition DVD and others that make the resolution of those digital recordings even more fine. So I think some of those areas of controversy are in those areas.

Steven: Right.

Sound Healing With Guest Dr. Jeffrey Thompson

Jeffrey: And like everything else, as soon as you get human beings involved, you have all kinds of controversy. You have people that are trying to make a living and therefore saying grander things about themselves, maybe true or derogatory things about others in the fields that may not be true just to make themselves look better, some consciously, some unconsciously. Many people believe that in many of the things of saying because they don't quite understand the science behind what they're talking about, but we can explore all those.

Steven: Exactly. Let me suggest that one of the overarching way that sound and music can be so fundamental to healing is related to the whole concept of reducing stress and enhancing relaxation, understanding that our bodies minds and spirits, I always call it our human instrument, is a self-healing and self-regulating organism if we give it a chance and sound is one of those expressions energy in a pure form that can be infused that we can inject as it were and surround ourselves with that assists our energetic anatomy that assists our on vibratory reality and energetic fields in establishing a higher level of coherence balance. Now the question of course is how does it do it? It's very clear that not all music does that. I've always found if music takes your attention away and gets you focusing on the music it's harder to deal with some of the internal realities. So for me, the work of Harvard Medical researcher and professor, Dr. Herbert Benson, has always been a great model to refer to. His research of course was exploring the many levels of the relaxation response and how fundamental that is to so much of healing and wellness.

Jeffrey: That's a good point. On the one hand, in physiology we really understand very well and have for a long time the mechanism of the stress response, this idea that the fight or flight response when it turns on a certain part of your nervous system turns on the sympathetic nervous system that fires your adrenal glands and adrenaline kicks your heart and respiration and pulse and galvanic skin response and a whole series of things that physically happen that you can measure and I think that's where the whole biofeedback industry got off on consciously learning to control those physical parameters to relax. Yet I think Benson who first really explored the opposite idea, the idea of the relaxation response and what are the physical parameters that take place during that and can we in the 21st century use medical monitoring devices and scientific know-how to use music and sound in very specific ways to watch that outcome on monitors so we know exactly what we're doing. Intuitively, people have been doing it for thousands of years.

Steven: Exactly.

Jeffrey: Now we have scientific tools so that we can really look at it and measure it and refine it in ways that we never could before. That's exciting.

Steven: It is and I think it's really necessary because one of the other things going back to when I first really got involved in the field in the late 60's and early 70's. The field of quote music therapy acoustics had some very simple and gross ways of

Sound Healing With Guest Dr. Jeffrey Thompson

measuring the effects of music whether through the speed of blood flow through a fingertip.

Jeffrey: Blood pressure?

Steven: Right, and how your knee jerk reflex when it was hit, but mostly people would ask people how do you feel when you listen to this music and the subjective response was all over the map and what you about medically measuring things, gave it an objectivity that it never had before. In other words when 100 people, according to some of the major studies listen to a particular piece of music by Mozart, maybe 60 percent might find it relaxing, another 20 percent might find it irritating another 20 percent had no reaction at all, what was interesting when I first started doing biofeedback research is when people told us that the music was making them relaxed the biofeedback the BSR, the brain wave monitoring that we had them hooked up to told us that their bodies were not in a relaxation mode. In other words, they were out of touch with their own body and they didn't know what relaxation itself was and this always has been one of the most fascinating aspects that is so huge that a lot of people never considered it that if you don't know what relaxation is, how do you know if you're relaxed? It's like if you don't have a map, how do you know where you're going?

Jeffrey: There is an interesting thing about the disassociation between people's thinking processes and their mind and their physical bodies. Western society tends to be visually oriented and kinesthetically non-dominated, kinesthetically means your body, how people are out of touch with their body. So I think that's one of the fascinating fields of study in sound healing, this idea of vibro-tactile therapy using sound chairs and sound tables with speakers built into them but put low frequency vibrations right through your body but the low frequency parts of the music are playing right into your thoughts. So this physical sensation of being immersed in the vibration part of the sound in your body grounds you out back in your body. I've seen remarkable things with patients just from the physicality of getting vibrated. Never mind what it tuned to or anything else, but just that physical resonance in your tissues bring you grounded back into your physical form. Very valuable stuff. Well for instance like Joe Shmo's is overweight and he doesn't like the way he looks in the mirror, and his doctor is on his case because his blood pressure's up and his life is shortening he's in danger risk of diabetes and so he resolves he's going to start running and to shame himself into running he buys himself some expensive running clothes and shoes, sets the alarm for six, but when the alarm goes off at six, the guy who wakes up is not the guy who made the promise. The guy who made the promise the night before was the visual center of the cortex of the mirror, and the guy who has to wake up and do the running is the physical cortex, the physical part of the body, and it's kind of like it and says hey, wait a second I didn't have vote in this. I'm not going to do this. So the decision was made from the wrong center, but I've seen that switch around by using, playing the vibrations through the body and over time, these people ground out on their body and the body makes the decision.

Steven: Right and that's a very, I think important point that we can share today is that even listening to both of us as leading authorities in the field with the longest

Sound Healing With Guest Dr. Jeffrey Thompson

track record, we've actually been doing it longer than most any other people who are now calling themselves pioneers and authorities. The reality is that everyone needs to verify what we say or what they read anyone else saying for themselves, because even there are universal characteristics, it's also true that some things for wide variety of reasons may work for one person and not work for someone else.

Jeffrey: The Mozart music is a good example of that. If you have a teenage rocker then for psychological reasons, he's not going to like Mozart, because he's use to a different type of music, you know. So he's not going to be able sit still long enough and listen to a slow tempo like that without a drum beat. It is kind of in there somewhere.

Steven: Right and we may be getting ahead of ourselves, but what you just bring of course is one of the just about 10 years ago, something called the Mozart effect really broke into mass consciousness, there was a best selling book that was built around a three paragraph letter that some researchers and UC, University of California at Irvine set to a British magazine, called Nature, saying that when.

Jeffrey: I can't believe that you pulled that out. You actually have that reference where it started. That's awesome.

Steven: Just a hint of what, you're going to have to write this down, oh yes because I --

Jeffrey: That's awesome. I mean it was in the public nomenclature, people had referred to the Mozart effect. It was one of those kind of rumor mill that took on a life of its own and then as soon as there's a book written about it, it became official

Steven: Right. Of course (inaudible) was using that, but it really got, hardly anyone knew about the French physician who did a lot of great research on the ear, Dr. Tomatis, but in 1993, Doctors Gordon Shaw and Frances Rauscher at the University of California, Irvine did a little experiment, now it turns out and if you're a scientist you'll appreciate this, they really didn't have any controls for the variable that they played.

Jeffrey: Which means it was a study, which is okay.

Steven: Exactly. And they said, it was an interesting phenomenon that was deserving of more attention. What they found is that when they played a little bit of some Mozart music, and it was a specific piece, it was a sonata for two pianos in D major, not just any Mozart for their 34 students in a class.

Jeffrey: I wonder why they chose that one.

Steven: Well when I went down to interview Dr. Shaw that was the first question I asked.

Jeffrey: I'm really loving this.

Sound Healing With Guest Dr. Jeffrey Thompson

Steven: This is behind the story, this is part of who I am. I don't just take stuff at face value. But I actually went down there and his office was the size of my bedroom, I mean it was a small little office, very unimposing, school office, and they had a little tiny boom box and three scratched CD's. So I said why did you choose this music, well we only have a few CD's and we like this one. Now later on I heard some other stories, but he told me that directly, so I trust him. So okay, people like Mozart, and.

Jeffrey: Some of the great discoveries and invention. That is the story.

Steven: Oh yes, and then a back story is created to make it seem much more official. Well what happened was when they played this music for 10 minutes before students took and they call it a test, but what it was it was something on the old scholastic aptitude test where if you take a piece of paper, you fold it up into a little tiny, fold it in half, and half and half and then you cut out a little piece of it, what will the diagram look like when you unfold it? Now that's something that hardly anyone uses in real life. But that little trick is the mouse that roared. That little experiment went around the world because it seemed that scored a little better on the, I'm guessing on what the final image would look like. Well, there was a couple major points here. Number one, the effect lasted for only ten minutes it wasn't like a test in terms of concentration, when I asked Dr. Shaw based on my own experience when I listen to Mozart I can't concentrate because my brain is following the music. He said me too, we don't recommend people listen to Mozart when they're reading or when they're studying or when they're taking a test you use a little before to kind of fire up the brain cells or just to get started, but then you have to get it off. So what happens is when newspaper and magazine writers and headline writers had a field day with it, they said Mozart makes you smarter and I know because I've been doing workshops around the country for about 30 years, I started having all these people come to my workshop saying I listened to Mozart and I got dumber and I said well, what did you listen to? And they said well, I only have one Mozart, it was Mozart's Requiem or the Marriage of Figaro. No one in their right mind should try those to enhance learning. But people did because they weren't in their right mind and in the process a lot of people turned off to the whole concept of music assisting learning, music for super-learning, music for relaxation. Or then other studies and other books starting writing you want to relax, listen to classical music. Well, and interestingly, in the current --

Jeffrey: You kind of get a backlash too where as soon as anybody tests that out and they use the wrong music, and use it in the wrong way then they write an article that the Mozart effect doesn't work and everybody jumps on that bandwagon and the whole thing has lost the point completely twice now.

Steven: Exactly. There's always been a couple of caveats with that, number one, using an appropriate piece of music but when you deal with something like Mozart, I'm going to tie this into both of us in a moment, when you talk about a dead, white, European composer, there are many, many different variations of recordings of any given Mozart composition.

Sound Healing With Guest Dr. Jeffrey Thompson

Jeffrey: Oh, yeah.

Steven: You probably know that some of them are so radically different, it doesn't even sound like the same piece.

Jeffrey: Studies that were done with orchestras and musicians were showing that a, this was a John Diamond a psychiatrist, where you have a piece, an orchestral piece that in general causes a nice relaxation response. But, if the soloist is under stress, it sets the tone of stress in their muscles and causes a stress response playing a relaxation piece of music.

Steven: Exactly and the work of Dr. John Diamond and his landmark book originally called BK, Behavioral Kinesiology.

Jeffrey: The body doesn't lie.

Steven: Right, your body doesn't lie really helped put a measurement of protocol on the map. He did a lot of the great early research in looking at what happens with music. And he was always very, very dogmatic and still is about saying you have to be very clear on which performance of Mozart or Bach or whatever because without that it's just like saying food is good. I mean are we talking about spoiled food? High fructose corn syrup or – it's these blatant generalities that have no meaning and as I was starting to say I picked up the current issue of Psychology today last night and as I was thumbing through it at midnight, low and behold on one of the pages is a page on health and harmony and they talk about music fights stress and ups smarts and keeps you in sound mind and body and then they give you all sorts of wrong information that makes every one of these errors and more. The only thing they didn't do is say you want to feel better, relax and get smarter listening to Britney Spears. That's about the only thing they didn't say here. Usually there's no one around to call these people on the mat and say wait a minute, that's wrong. You can just say listen to music, but here they say listening to music can make you less susceptible to catching the common cold.

Jeffrey: If you or I were to call them up and to call them on this, it wouldn't make any difference, because they're not going to republish the article with all corrections.

Steven: Exactly.

Jeffrey: Because that's not why they published the article in the first place.

Steven: That's also true.

Jeffrey: It was filler to sell a magazine. It wasn't accurate news reporting. Well anyway that's --

Steven: And that's what we're seeing in the fields. In the last couple years, there've been more articles on sound healing showing up in mainstream as well as the alternative and new age and magazines.

Sound Healing With Guest Dr. Jeffrey Thompson

Jeffrey: It's been building up a head of steam over the past decade, more and more and more the last few years. I think there's been – once they started doing the few studies with pre and post operation, post operative outcomes, with people listening to relaxing music and they're not even telling what music they're using. Just relaxing music. So I think most people would probably choose something that really is relaxing, if you ask them to choose relaxing music. You know, it's hallmarks of what you think that would sound like

Steven: I would disagree with you, because what I found over the, last again 35 years or so is that people and the fact that this article in Psych today also say choose music you like. Well the earliest thing that I sorted through in my literature into the field of Psychoacoustics and the psychology of sound and the psychology of music was that can't just ask people and tell them to choose what they like because what they like might be a Britney Spears or rap or whatever and let me give you and our audience a very simple and specific way that anyone can prove that that approach is wrong and you therefore know more than a lot of the writers of these magazine and etcetera. Perhaps the most prevalent and obvious response in listening to music is the way our heart is entrained and will respond to the beat of music. So if you are listening to music that is a bump, bump, bump, bump a beat of about 80 to 100 beats per minute, that's a tempo of about let's say 100 beats per minute. It's well known in most physiological circles that a relaxed heart beat is at max at 60 beats per minute. That's, maybe between 40 to 60 beats per minute is generally considered the range of a relaxed heartbeat when you're sleeping it's even slower. So if you're heart is beating at 100 or 120 or 140 beats which is the tempo of a lot of music, try to relax when your heart is physically beating that fast is like trying to drive a car with your foot on the gas pedal and the brake pedal at the same time and it's just not an intelligent or effective way to drive or an effective way to relax. The same way if you try to go to sleep and drink a cup of coffee, that is not a good idea for most people. I know in lectures there'll often be one person who says oh I can drink a cup of coffee and I can go to sleep.

Jeffrey: If you drank ten cups of coffee for the last two years and now it's a homeopathic does and it knocks them out.

Steven: Right because when I look at coffee after 4 o'clock in the afternoon, I can't fall asleep. Coffee is an upper, it's a stimulant, it has caffeine it's known for, so when I hear people, in fact how many ads are still out there of take a moment to relax with a cup of coffee? That's just a contradiction in terms, but it's so inculcated into our culture that it just really confuses people and most people never consider wait a minute, if I'm putting stimulant into my body, isn't that the opposite of what the word relax means?

Jeffrey: Yes, yes. This might be a good time to inject here some that are done with biofeedback for measuring stress and EEG patterns for what happens in brain waves during a relaxation response.

Steven: Yes.

Sound Healing With Guest Dr. Jeffrey Thompson

Jeffrey: And this whole idea of, well back in let's see it was December 1973, issue of Scientific America, that was the article by Gerald Oster. Mt. Sinai researcher who wrote an article called auditory beats in the brain. So that's where he described three important interesting things that he discovered. Number one, that if you hook a person up to a EEG and you expose them to a sound pulse that's pulsing at a brain wave speed, the brain waves will change from whatever they are and lock themselves onto the speed of this pulse and change our state of consciousness in that process and then he had EEG pictures that showed that to be true. Number two if you, so for instance, that would be the mechanism behind shamanic drumming practices.

Steven: Yes.

Jeffrey: Shamanic drumming practice of pounding a drum at a certain speed and if you listen to some of those, it's about four and a half cycles per second. Way down on the bottom of theta or the borderline between theta and delta. That means that you're taking a person from a beta awake state of consciousness of 15 cycles a second brain waves and having it slow progressively down through alpha into theta where dreaming takes place at night. So you're literally putting a person into a dream state without going to sleep first, classic definition of a shamanic trance state. So now just Gerald Oster saying okay if we take a drum beat and we beat it at a brain wave speed something's going to happen. If we create a sign wave pulse. A scientific tone that's pulsing same thing will happen. If we take two sign waves this was the second thing, two sign waves that are slightly out of tune, their interaction creates a pulse, and that's called the binaural beat. That's, so many people have heard about the binaural beat thing and all the CD's that are on the market for brain wave and training it using binaural beats. He's the one who put the article out. So anyway this idea of binaural beats with two sign waves that are causing a pulse to arise between them because they are slightly out of tune, and have the pulse be at a brain wave speed also cause of this brain wave entrainment on EEG. And that was also in this article. Number three and really what's happening if you've got a sign wave of 100 hertz in the right speaker and 105 hertz in the left speaker you have a five cycle a second pulsing. That pulse is not coming out of either speaker it's arising by collision of air molecules in the room. And then your brain waves follow. The third thing that Oster was showing was if you put head phones on, something new happens, because there's no air molecules between your ears that are colliding, unless, I know a few people that are kind of like that, but it's a quirk of neurophysiology with hemisphere and the left hemisphere that each listen to the opposite ear, integrate their function and synchronize the right and left hemispheres on EEG. Then entrain to that pulse. The pulse is actually being manufactured by the brain as the two hemispheres compare notes. There's no pulse coming out of the headphone on the right, or the left it's being manufactured.

Steven: Right.

Jeffrey: Very powerful stuff, because of the hemispheres doesn't happen too often, it's an ecstatic state, it's an "aha" moment. It's the moment when the problem gets

Sound Healing With Guest Dr. Jeffrey Thompson

solved. It's a personal epiphany, so this means that we have a tool for orchestrating an extraordinary event in consciousness using sound and technology that we never had before, very powerful stuff. It lends a lot of light on ancient practices. When you listen to these Tibetan singing bowls you rub this stick around the bowl and you hear the bowl. You hear a tone but within that tone you hear a pulse.

Steven: Right.

Jeffrey: The pulse is a brain wave speed. So you know every time I think I've come across something new and fantastic with all these fancy smancy equipment I've got, I find out that the Tibetans have done it 4000 years ago. It's, and how did they know that? They didn't have any fancy equipment. It was all this intuitive process of rubbing the bowl and seeing how you feel and sanding it down and tuning it up to a slightly different frequency and rubbing it again until it clicks. Of course they had more time on their hand than we --

Steven: Well, exactly and if you were priest or healer that was your gig, that was what you did. you searched all day for the magic frequencies in the process – it's like for me, yesterday I spent all day in the studio and was feeling of totally in gratitude for having as part of my job description, being forced to spend 8 hours in a recording studio getting into highly synchronistic states of balancing my right and left hemispheres searching for music that got me to ecstatic states and then recording it and sharing it with others.

Jeffrey: And the challenge of course is after you've made that recording then you're suppose to put the headphones on and listen to it like a recording engineer without falling off your chair.

Steven: Exactly, well I've learned not to try listening and editing when I drive after sessions, not save.

Jeffrey: Yeah the cops will pull you over and say hey buddy you know how fast you were going? 4 miles an hour.

Steven: But it seemed like I was – well right, so again which is what we're saying is the sound is very powerful and we're all, what we're doing is honoring, well not necessarily being mystified with it in fact just the opposite was saying there's a incredible mystery it's been know as one of the great mysteries for thousands of years we don't necessarily know how the ancients knew what they knew, but right they were tuned in on some of the same levels. When I first heard in my dreams and meditations a very crystalline metallic sound that sounded like what I had heard in Tibetan bowls but it was a keyboard, I started searching for that instrument and a couple months later, I actually saw Herbie Hancock playing one of the very first loads, developed by Harold Roads, and electric piano that was basically a series of tuning forks tied into a keyboard. I've always, and I started talking about in my earliest public...

Jeffrey: That's the same as piano tines, right. Tines sound.

Sound Healing With Guest Dr. Jeffrey Thompson

Steven: Right so it's not a synthesizer, it's a real mechanical instrument that it was like I was playing a series of 73 Tibetan bowls. And in the early 70's, a lot of people didn't know what Tibetan bowls was, so the reference was lost but I understood that what I was, and when I would set my reverb.

Jeffrey: The sound is (inaudible)

Steven: Exactly and when I would set that vibrato and the pulse, I, back in the days before digital, everyday you'd go in, I mean I actually marked down on the little round knob where my magic frequency was. I'd go in, I'd set up and then I'd instantly get into state where I would just go into what ultimately learned was a very deep alpha theta state where I was suddenly in the place where the music became alive for me and it was very easy to be creative in that state of consciousness as opposed to trying to compose things just with my left brain. I was playing as (inaudible) talks about now by getting in the gap, getting in the space between thought. I talked about it as getting in the space between the notes and that where space and time really opened up for me.

Jeffrey: I think that's the secret or one of the secrets to the most famous composers that we all love had they were on a journey that was something that could not be denied. It's not like you choose this as a profession, it chooses you and you, for instance a famous composer like Mozart, has the ability to go into this emotional space and be there and the music that comes out of the space communicates to all of us that listen to it that same emotion. We go there, it's kind of like higher order brain entrainment in a way, you know. It's a subtle mysterious place but if one person can go there and pull music out of that place and let the rest of us listen to it, we go there too. That's what separates the great masters from someone who's trying to compose some music in a certain genre to be famous. This is different. I also see well there was an interesting bowl experience that I had when I first moved to California in 1988 I upgraded my studio and bought a new type of electronic keyboard that was coming out that was called the Sampling keyboard. A digital synthesizer uses sign wave tones combined and all kinds of different ways to great more complex tones and can kind of mimic orchestral instruments in a way. But the sampling keyboard was like a little computer with a keyboard attached on top and you could stick a microphone in the back of the and record anything and spread that sound across the keys. So you could record dogs barking and piano key being played so when you hit the key on this sampling keyboard you're really playing back a loop of a real piano key being played, so that's why it sounded so real. Well at that time I was exploring with a lot of Tibetan bowls so I made a recording of six inch Tibetan bowl and I spread that across my keyboard. So I had a Tibetan bowl symphony. Any key I hit the computer would speed up or slow down the recording of this Tibetan bowl to hit that note. So I could have Tibetan bowl chords and choruses and the interesting thing that when you cut the speed in half you got the, what's called one octave. You know that. The computer will play the bowl at half speed so a six in bowl becomes what almost sound like a 12 inch bowl. And an octave lower sounds like a 24 inch bowl and a octave lower sounds like a 48 inch bowl. Have you ever seen four foot diameter bowl? Eight inch diameter, I mean eight

Sound Healing With Guest Dr. Jeffrey Thompson

foot diameter, 16 foot diameter 32 foot diameter and a certain point these slowed harmonics began to sound like monks chanting, it was pretty spooky. I swear that within a week of experimenting with those kind of sound and filling my head up with them, I had this phone call, from this scientist from one of the companies that deals with, it's a US government contract that deals with JPL and NASA. He said he had these NASA space sounds, sounds from space, and I'm going what? You know from the Voyager one and two program and he wanted to come and talk with me about these sounds. I said fine so he shows up the first one he played for me was from Uranus. It sounded just like these Tibetan bowls things I was screwing around with a week before. Like Tibetan bowls slowed down. It sounded like exactly the same kind of sounds. Other sounds from Jupiter and Saturn and Neptune, they sounded like crickets and birds and choirs singing and all kinds of weird stuff, it was pretty hair raising. To me, the first thought that came to mind was Jung's idea the collective unconscious, you know. You because the more experimentation I do with that sampling keyboard, the more crazy things started happening, when I took human voice speech patters and speeded them up, at a certain speeded up, speaking sounds like birds chirping. Faster than that, it's like crickets, and way faster than that, it sounds like dolphin chirps, and so I started thinking, what happens if we take cricket sounds and slow them down? They sound like birds, and birds slow down to sound like dolphins and dolphins slowed downs sound like people singing. All of it sound like these space sounds from Voyager. You know there's like, it's like the universe is printed on a rubber blueprint paper or something. You stretch it this way and you got person, and that way you got a planet and this way you got an elephant and that you got an ant, you know. There seems to be something profoundly activating to the unconscious mind by listening to these sounds. Then I started exploring that with patients and that certainly showed up to be true. Many of those sound like the kind of sounds that you heard in the womb.

Steven: Yes.

Jeffrey: Very familiar kind of sounds. Very powerful stuff. Also, I did some recordings of shaman rattles and when you took these rattles and stuck them in the keyboard and started playing with the speed, you slow them down enough it sound like the ocean, it sounds like water. Very interesting.

Steven: Right, that's a great point in dealing with some of the specific rhythms and the specific tones, what was early on in the field coming at it from a very left brained analytical aspect, I was looking at what rhythm patterns are the rattles being played. Some of it is I learned that that was basically the wrong question. That constant sound, that white noise, pink noise sound has same effect as any pink noise or white noise has on our hearing apparatus and on our nerves cells that again at a certain point kicks the brain into an altered state of consciousness.

Jeffery: White noise is definitely stood the test of scientific scrutiny there. Still white noise that kind of shhhh sound is the best for putting people to sleep for whatever that reason is. The closest in nature to that is a waterfall.

Sound Healing With Guest Dr. Jeffrey Thompson

Steven: Yeah, and of course when you get into water if it's running water some people get the bladder meridian engaged so you got them going to the bathroom.

Jeffrey: Oh yeah.

Steven: So again, there's a plus and minus aspect, you got to check it out for yourself, is it a fast waterfall, slow waterfall.

Jeffrey: But deeper than that, if you we all spent nine months water.

Steven: Yes.

Jeffrey: And there's that sound that water makes when you're immersed in it. Hold your nose and drop down to the bottom of your swimming pool its' this kind of deep watery bubbly sound. This swishy something and that was our first experience at 16 weeks when the senses pop open, it's only hearing that's active.

Steven: Right.

Jeffrey: You're in the dark, you can't see, your nose and mouth are filled with fluid so you can't smell and taste, but you can hear and sound travels through water five times better than air so you have amplified hearing for nine months. Like a sensory deprivation chamber, a float tank. Of course in a float tank if you've been there for like 15 minutes with no neuro input your brain starts to hallucinate input. After an hour your little altered, what happens after nine months? No wonder why we're all screwed up. But it certainly is a very powerful imprint of the power of water, like ocean recordings still are the big ones that work well.

Steven: Right and even with that, and I know you live in Southern California, very close to the ocean, you live where the ocean is generally more relaxing. I've heard recordings of oceans recorded off of Cape Cod in the winter that were so howling.

Jeffrey: I lived in the East coast in Massachusetts so I know both oceans and it's a rocky coast, so it isn't --

Steven: Right, so when I see and I've bought a number of different recordings of ocean and most of them are, the section of my library called albums to laugh at and make fun of. These are, just like this Psychology today is saying listen to music and you'll relax, no that's a ridiculous statement, listen to the ocean, well it's got to be an ocean on a calm day with a gentle wave form where it will acoustically and bio-magnetically strobe our brain and our energy field because we are biologically linked to our planet and biomagnetically linked to the Schuman resonance. That of course is another aspect I'm not going to bring in, we're getting close to the end of our time, but another very important aspect for me has always been that well you know it may not even be that important if we say the music is doing the healing or something I'm more interested in outcome is healing happening? Am I feeling relaxed? I was a definite type A individual, coming from New York and I started manifesting some stress related diseases

Sound Healing With Guest Dr. Jeffrey Thompson

early in my life and I say you know I'm not ready to be sick or ill the rest of my life. I want to see how to deal, and handle my stress and I prefer to have something legal non-fattening safe and enjoyable.

Jeffrey: With no side effects.

Steven: Exactly and going okay so I've read about the ancient use of music, why isn't anyone, this is 1969, 1970, why isn't anybody working in this field of, for me it was they are waiting for me to get in and start doing it and have the first shot at it so that's how I got involved. I needed something very literally medically and psychologically to assist me in relaxing and balancing and part of the reason I'm hear today is because I learned how to handle my own stress, I learned how to orchestrate my own states and in the process, hooked up with a number of different scientists and found out that when I, when anybody gets into a relaxation state, where the brain waves also, the body shifts into a pulsation that hooks us and biomagnetically allows us to entrain the dominant magnetic and electromagnetic fields of the earth itself which are now popularly known as the Schuman resonance, so that when we get in to the state, or get close to that appropriate frequency, we literally entrain and hook up with a much larger power source and our job then is to facilitate that segue that connector into the ballpark where the earth or the higher power or whatever we may want to use or our own innate intelligence and our preprogrammed, genetically preprogrammed hard wired ability to heal ourselves and to come into harmony is allowed to happen, same way that we don't see the stars in daylight because the light of the sun blocks them out but the star are there, we just can't see them. In the same way, we are, our bodies, in fact Diamond, Herbert Benson and one of my other mentors talking about entrainment and the whole aspect of tuning in. if you ask the body what, if it would like to be stroked at a harmonious and relaxational fashion or in a random chaotic fashion, most people's bodies other than those that are addicted to disco or rap or some other things, most people's bodies would chose that which is more natural and which is more healthy, but if you never had a choice then you don't even know that choice exists and this is one of the things we're seeing generationally now and culturally we're surrounded by so much fast mechanical non human nervous system type music.

Jeffrey: Noise pollution could be an entire segment of this show. So for the people out there by the way, the Schuman resonance is the, is a cavity space around the entire earth created the surface of the earth and the upper limit of the ionosphere, in the atmosphere. So you've got this space where frequencies bounce off the underside of the ionosphere and bounce back to earth with a certain speed, therefore have a certain frequency. Frequency tends to be about 7.83 but the ionosphere has be thinning out because of the global effects of our, civilization and --

Steven: Well, things changing --

Jeffrey: It's drifted closer towards 8.0 but not quite there it fluctuates actually but it's definitely a resonance that's planetary wide and if you can tap the same frequency of that resonance and since 7.83 is a brain wave frequency, it's a state

Sound Healing With Guest Dr. Jeffrey Thompson

of consciousness, so it's in that state of consciousness the around seven to 8 hertz depending on which textbook you read, is the borderline of alpha and theta so somewhere between very low alpha and very high theta is what this frequency is.

Jeffrey: Because I know there's been so many stories about the Schuman resonance and all of the mystical aspects of it and many people don't have the faintest idea what the Schuman resonance is but they kind of take it on faith that the person knows what they're talking about.

Steven: Right and again if someone goes out into a forest or by a lake or by the ocean, when you get away from some of the manmade electrical fields and the sounds of traffic and concrete, one of the reasons people typically feel so good out in nature is because they're getting again getting in tuned and getting in entrain and resonating through the dominant frequencies of our planet.

Jeffrey: Yes, a nature frequency and not a man frequency.

Steven: Exactly.

Jeffrey: An it's not just a man frequency, it's thousands and thousands of them all in different frequencies bombarding our body and all kinds of different spectra. It's chemical and electromagnetic and television and shortwave and military frequencies and television. It's pretty unbelievable. There's a, I was on the faculty of a graduate school that had a also a research center. They had an electromagnetic shielded room. Eight by ten copper room. Copper floor ceiling walls, hermetically sealed door. And when you turned the lights off so there's no electromagnetic fields at all, you're shielded from everything. So, first thing I wanted to do after hours, I'm running in that room and close that door, and of course it's 100 percent dark space too. So there's two things that are descending on you. And I'm waiting for the massive amazing new age experience and nothing happening and I'm feeling like a horrible failure because I'm not feeling anything, except being in the dark. And I'm waiting for some absence of all the bombardment you know? Not happening. And then so in shame I leave this room and as soon as I open that door, it was like stepping off of a boat onto a dock. It was like very weird. I couldn't feel the absence because it was kind of over my head, but I could feel it coming back on again when I stepped out. Very interesting.

Steven: Right, so and that is all, number one so true and it why there so few places in our world.

Jeffery: Everybody should have one of those rooms in their house.

Steven: Exactly.

Jeffrey: The house should be designed that way, to be shielded from everything, you know.

Sound Healing With Guest Dr. Jeffrey Thompson

Steven: So since we can't get there, one of the ways that through deep listening and focused listening and just really picking into whether it's a Tibetan bowl, if you're like something my teacher in listening to a Tibetan bowl, very different than a piano teacher, was Allan Watts who said very simple, listen to the furthest away sound. Stop your mind and just listen as those little ripples of sound fade away as they fade away that becomes an instant meditation and that awareness in that selective awareness you automatically are blocked out from a lot of the other sounds around you. As a type A individual, someone coming from New York, I love things that I can do in five or ten seconds. When I read a, whether it's in this magazine or others that say well you need to listen to an hour of music to get relaxed, I say no way José. What do you got that gets me there in five minutes. In fact better what do you got in there that get you there in 20 seconds. My entire career in a sense has been answering that question and I have over 50 recordings that'll get you deeply relaxed within 20 seconds. All you got to do is listen, it's that easy. I know you had --

Jeffrey: That's the beauty of being a scientific type and a musician and composer at the same time. So it's not an easy combo to roll the dice and get so for whatever reason here we are. The, for whatever the cosmic purpose is, scientific mind and a musician all together takes the composer and the musician and the artist need to make music, and beautiful music. Combine that with scientific know-how to use kind of chords, what kind of pace, what kind of layering, what kind of entrainment pulses that you're going to build in and a host of other things too orchestrate scientifically a musical effect to put you there in just a few minutes. And measure it and see that it works.

Steven: I'm sure a lot of our listeners will be maybe stimulated, some will be confused some will be intrigued there will be lots of questions that come up after this, what in summary as our time draws to a close, we're saying certainly is one of the keys is to pay attention become more aware of how you're feeling in general when you listen to certain sounds, certain music become aware and give yourself the opportunity of listening to sounds and music not just when you're multitasking, not when you're doing something else or watching TV or roller skating or skateboarding or whatever, but just as we did back in the 60's where you close your eyes and turn the lights down and listen.

Jeffrey: Put some music on. I'm going to stop my momentum. I'm going to stop myself in my tracks and I'm going to do it for 10 minutes. If you can't make that commitment, you're in real trouble. That's professional help.

Steven: Exactly even five, if you can't find five minutes in a day you need more than sound healing is going to offer.

Jeffrey: The Phenomenon is saying you take five minutes and you shut the light out, close your eyes and put the music on and you wake up an hour later, is different than saying I got to take an hour. That's stressful. It takes you 30 minutes just to, the anticipation you've got an hour cut out is going to make you stressful.

Sound Healing With Guest Dr. Jeffrey Thompson

- Steven: Right, exactly. So let's decrease people's stress, let's tell them how to get in touch with us to check out some of our records, to send us emails directly or through the email on the internet connection that they're listening to us right now. Your name and website:
- Jeffrey: I have a, probably the easiest to remember would be Jeffthompson.com.
- Steven: J-E-F-F?
- Jeffrey: Yeah. Thompson.dom and also, that points to the same place as neuro-acoustic.com. Neuro, N-E-U-R-O acoustic, A-C-O-U-S-T-I-C, those both point to the same place. And it's got articles and click elves and listen to them and a lot of information about this whole phenomenon, the field.
- Steven: Great. Well I realize that I haven't visited your websites, so I will definitely do that, my website is, either my name, Stevenhalpern.com or my company name is [innerpeacemusic](http://innerpeacemusic.com), that's I-N-N-E-R-P-E-A-C-E-M-U-S-I-C dot com. Lot's of great sound samples, descriptions of music a number of good articles about 20 years of archives of my monthly newsletter where I speak about and reflect on many topical issues of the day as well as many of the principles and key points that we've looked at today. And respond to emails and questions that the people have and help clarify some of the misinformation and disinformation that's been out there. So as our time draws to a close, I'd like to thank you very much for being with us today.
- Jeffrey: Oh, always a pleasure.
- Steven: Yeah, I had a lot of fun and hopefully opened up a lot of doors that will continue to explore and hopefully have a lot of you out there join us in exploring your own world and your sounds and the music that make it...
- Steven: Write in and email us in care of this internet radio show and we'll include that feedback and keep the discussion going on. So until next time, everyone stay tuned, this is Steven Halpern on the first of the series of discussions exploring the many dimensions of sound healing