Shrink Rap Radio #194, February 6, 2009. Life Among The Pirahã – An Amazonian Psychology

Dr. David Van Nuys, aka "Dr. Dave" interviews Daniel Everett
(transcribed from www.ShrinkRapRadio.com by Jo Kelly)

Excerpt: *"When the MIT team came to visit in January of 2007, after they had been there for a few days – these are well trained psychologists – two of them said, "These must be the happiest people anywhere". And I said well that's sort of subjective isn't it, how could you ever evaluate who's happier? "Oh well we would measure the time they spent smiling and laughing, and compare that to the time other people spent smiling and laughing." And they said it half jokingly, but they were impressed just like I was with how much time the Pirahã spend smiling, laughing, talking animatedly. You do see unhappy Pirahã but very rarely, and there has to have been some real traumatic event – they don't sit around brooding – and they are an example in that respect, because their lives aren't easy."*

Introduction: That was the voice of my guest, **Dr Daniel L Everett**. Dan Everett, Ph.D. is Professor of Linguistics, Anthropology, and Biological Sciences and Chairman of the Department of Languages, Literatures, and Cultures at Illinois State University in Normal, IL. He received his Sc.D. from the Universidade Estadual de Campinas, Brazil, in 1983. He has taught at the Universidade Estadual de Campinas, the University of Pittsburgh, and the University of Manchester, England. He is also a frequent Visiting Scientist at the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany. He has conducted research in the Amazon jungle of Brazil for more than thirty years and has authored nearly 100 scientific articles and six books. His most recent book is *Don't Sleep, There are Snakes: Life and Language in the Amazon Jungle*. His research on the Pirahã Indians of Brazil and his conclusions on the evolution and nature of human language have sparked tremendous controversy internationally. He has been featured in the New Yorker magazine, New Scientist magazine (three times), Scientific American, Science News, The Guardian, Der Spiegel, The Independent, El Mundo (Spain), and other newspapers in countries from Holland, India, Japan, and elsewhere, including extensive coverage in most major Brazilian newspapers and news magazines. PBS Nova and the BBC are planning a documentary on his research. He speaks Portuguese, Pirahã, Spanish, and English.

His website is: http://www.llc.ilstu.edu/dlevere/

Dr. Dave: Dr Dan Everett, welcome to Shrink Rap Radio.

Everett: Thank you for having me.

Dr. Dave: You have written an absolutely fascinating book detailing your adventures in the Brazilian Amazonian jungle, with an aboriginal tribe that has had very little contact with the outside world, and whose language is apparently unrelated to all other known language groups. Evidently your linguistic research there has kicked up quite a storm in academic circles because it challenges the work of Noam Chomsky.

Everett: Well it's kicked up quite a storm in academic circles not only because it challenges the work of Chomsky, but because it actually challenges the work of a lot of linguists who are not even Chomskyans, by my claim that culture can effect the overall shape of a grammar. This is something that many linguists, but certainly not all, thought we had got beyond fifty years ago; but if I'm right, that was a wrong turn that we made.

Dr. Dave: Wow. Well as you know, the focus of my show is psychology, and most of my past guests have been psychologists, but when I heard about your book it seemed to me that your encounters with the people who are living a life that is so much out of the past, may shed light on our basic human nature – our underlying nature prior to all the modern trappings of civilization. My thought was that these people might provide us with a sort of snapshot of early psychology and consciousness, and that is why I'm so excited to speak with you today.

Everett: Well that's great. I do believe that the implications of this research and the Pirahã themselves for psychology is profound; and in fact the most recent work that has been published that I was a co-author on involved several MIT faculty members from Brain and Cognitive Sciences travelling down to the Amazon in 2007 to test my claims. The first paper from that research has now appeared in the journal Cognition and was picked up by Discover Magazine as one of the *Top 100 Science Stories of 2008*, confirming what I said about the absence of numbers in Pirahã.

Dr. Dave: Well that's really great; it confirms my intuition that there's good psychological meat here, and maybe we can go into that a bit more.

But before we go into all that, fill us in a bit on your background and the circumstances that led you and your family to go off into the wilds of the Amazon.

Everett: Well when I first went to the Amazon, becoming an academic or doing research, publishing in journals, creating an academic storm of any kind, were the farthest things from my mind. I was a graduate of the Moody Bible Institute in Chicago, Illinois. I grew up in Southern California, and became a Christian – converted – when I was about 17, got married at 18, went off to Moody Bible Institute and prepared, and eventually left for Brazil as a missionary to translate the bible for the Pirahã, who we had been told was a very difficult group: recalcitrant, reticent to accept the Christian gospel, and also spoke an extremely difficult, unusual language. So that is how we came to be assigned to the Pirahã, and my initial motives for going there just couldn't be more different than my motives for working with them today.

Dr. Dave: When you first went down there, that was about 30 years ago, is that right?

Everett: We went in October of 1977.

Dr. Dave: OK, my math isn't fast enough to figure that out (laughing).

Everett: 32 years (laughing).

Dr. Dave: OK; thank you (laughing) I need all the assistance I can get.

You know I grew up in Southern California myself, and also in a fairly fundamentalist Christian environment, and so I'm familiar with the Moody Institute and share a similar background with you in that regard. As a matter of fact I had fantasies – I was kind of programmed – to go off and be a missionary in Africa or something. You went down there as a missionary to convert them, but I have the impression they ended up converting you to some degree.

Everett: Well not just to some degree, completely actually. They represented a complete disconnect between what I had been led to believe tribal societies would be like. I sort of had the idea that these people would be waiting for people to come and tell them about the good news of Jesus Christ; that they were in the darkness of sin and that they were going to perish without the Word of God. All these phrases were strongly embedded in me as I went down there.

Then I got down there and found that (a) they were quite happy; and (b) they really couldn't give a rip about the message I had, it didn't fit at all.

Dr. Dave: Oh (laughing)

Everett: That challenged my thinking; just to see how indifferent they were to what I had to say, and how happy they were already began the process of re-evaluating my own spiritual stance.

Dr. Dave: I was fascinated by that aspect certainly; and by your courage in fact to be open to looking at your own stance, and to reconsidering what you went down there programmed to do. There is so much information in your book, and we are not going to be able to cover it all, clearly.

There were some facts about Brazil that really struck me, things that I didn't know: for example that Brazil is larger than the continental US, I didn't know that; and that Brazil is mostly jungle and yet most Brazilians have never been in the jungle.

Everett: Yes that's right. It's astounding for some people to realize that Brazil, which is by far the most populous nation of South America – more people live in Brazil than all the other countries of South America combined, which makes Portuguese the number one spoken language in South America, not Spanish – most of them live in the states of the south, 40% of the population of Brazil lives in the small state of Sao Paulo.

Dr. Dave: Well I didn't know it was the most populous country either, so that shows how well informed I am as an American (laughing).

The title of your book is *Don't Sleep, There are Snakes*. This is something the Pirahã say to one other before going to bed; is this kind of like we say "sleep tight, don't let the bedbugs bite"?

Everett: It's pretty similar to that, although it reflects something in Pirahã culture that we don't share. We say "sleep tight, don't let the bedbugs bite" but then we do in fact intend to sleep tight. When Pirahã say "don't sleep there are snakes", that's a similar sort of humorous statement and they can even tailor that to individual people. So my ex-wife was in fact not afraid of snakes but she was afraid of tarantulas, so they often told her "don't sleep there are tarantulas" (laughing).

Part of it is the value that they have of not losing control of yourself; and if you sleep soundly for lots of hours, that is a way of losing control and not being aware of your environment. It's dangerous, and it also is not a value that they have. They have a value to always be aware; and so they tend to not sleep soundly for eight hours a night.

Dr. Dave: Yes; I was struck by that. You point out that the jungle is in fact a dangerous place to be unconscious and so they tend to take lots of naps, and you point out that maybe the longest they might sleep at a stretch might be two hours; and that at any hour of the day or night people would be out fishing, or talking, chatting, other kinds of things going on.

Everett: Yes that's right. That's not to say that you can't find people who are sleeping all night long, but it's rare; and one of the strangest sounds in the village, the most eerie sound in the village whether night or day is silence. Just to have the absence of conversation – it's almost never experienced. And when you do suddenly realize there is no noise coming from the village something must be up. I usually run over to the village when people stop talking; and at night it's about as rare to hear silence as it is during the day.

Dr. Dave: Interesting.

Now you've already made reference to the fact that you were struck by how happy these people were; and your descriptions mostly portray them as laughing, playful, carefree – even though jungle life is quite hard. Do I have that right?

Everett: Yes, that's right. When the MIT team came to visit in January of 2007, after they had been there for a few days – these are well trained psychologists – two of them said, "These must be the happiest people anywhere". And I said, "Well that's sort of subjective isn't it, how could you ever evaluate who's happier?" "Oh well we would measure the time they spent smiling and laughing, and compare that to the time other people spent smiling and laughing." And they said it half jokingly, but they were impressed just like I was with how much time the Pirahã spend smiling, laughing, talking animatedly. You do see unhappy Pirahã but very rarely, and there has to have been some real traumatic event – they don't sit around brooding – and they are an example in that respect, because their lives aren't easy. So it makes me feel like a complainer very often when I'm in the village, because things that I find difficult are just as hard for them as they are for me, but they don't express any sense of difficulty.

Dr. Dave: Well I'm glad to hear that you had psychologists go down who confirm your observation about their happiness, because otherwise one might suspect – well here's somebody who has fallen into that noble savage myth or assumption – a kind of romanticized view of village life. But you

point out that it's not romantic in the sense of being easy, but never the less they do seem to be happy.

Everett: Oh absolutely. I remember in the first year or so when I was still a missionary and had a missionary mindset, I wasn't interested really in understanding their culture; and it was frustrating to me because they just seemed to be a bunch of people on a campout.

Dr. Dave: (laughing)

Everett: I hadn't noticed all the tight connections and subtle nuances of their culture. They just seemed to be joking around all the time, and they didn't seem to take life seriously; and for a Christian missionary that's a serious flaw, and it took me some time to realize that that was in fact the opposite of a flaw, and a significant strength in the face of difficulty.

Dr. Dave: That's really fascinating. How would you describe their psychology, other than this happiness that we've been talking about? And I know it's tough to generalize but do you have any overall observations about their psychology?

Everett: Well for the Pirahã one of the most important goals is to be what they call in their language "tigisai" which is hard, or tough. Even though they smile a lot, they are lean, mean, fighting machines. The Pirahã have incredible endurance and this is a very important value that they have. They know the behavior of any animal, any kind of living creature in the jungle, they know everything there is to know – from the point of non botanists – about plants. They probably have a knowledge about their environment that rivals any biologist or botanist and probably is superior to it in many ways. They are completely familiar with their environment and developed the skills to live in it; they have adapted to the jungle there to an amazing degree – and many other groups do this as well – but they also manifest a sense of pride in themselves that is hard to find elsewhere even in the Amazon.

So they have resisted change for over 300 years, which is when they were first contacted. Obviously there have been a couple of changes here and there, but the striking thing is that the groups around them have almost completely enculturated into Brazilian society, whereas the Pirahã remain as they were described in the 1700s by the priests who first visited them.

Dr. Dave: Yes; that's what makes them so fascinating, and almost kind of a laboratory of something about basic human nature, I would think.

Did you see any signs of what we would consider mental illness?

Everett: No; there were some people who were born with congenital defects, and so in my experience I have seen perhaps two people that are retarded mentally in their development, but nobody who seemed to be having severe mental illness or personality disorders or that sort of thing. I've never really seen anything like that, and I know all the Pirahã; and that's a very interesting fact about them.

Dr. Dave: You say you know them all, I was struck to encounter in the book, I got the impression there may be only about 300?

Everett: That's right there are just over 300 Pirahã; and over the last 30 years I have gotten to know every single one of them. There are of course new babies and small children that I haven't got to know, but anyone in pre-adolescence, adolescence on, I know.

Dr. Dave: Did they used to be a much larger group?

Everett: Yes the evidence we have, is that like other Amazonian groups, all languages groups of the Americas, they were once much larger. The estimates of the entire group by the early priests and explorers who went there – although often these have to be taken with a grain of salt – is that they were upwards of 60,000 people, and now they are in the 300s.

Dr. Dave: Wow; they are kind of a precious resource then.

Everett: Yes.

Dr. Dave: In the past we have referred to these kinds of people as "primitive" but from your description they are not in any way stupid, it sounds like they are exceedingly bright in terms of their very detailed knowledge of animals and the environment, as you pointed out.

Everett: Yes the jungle is a demanding place, and if you don't have your mind very well developed and you are not alert and sensitive and knowledgeable about where you're at, you are not going to survive very long. I mean, when they take me to the jungle, they find me astoundingly ignorant and poorly adapted, and not very adept at even learning about the jungle. They just find it astounding that someone has to be shown the same path several times.

Dr. Dave: (laughing)

Everett: You walk out in the jungle a couple of kilometers and for me I'm totally lost. They know exactly where they're at. Of course they have the same experience when they come to a city, they get lost very easily.

Although I should say that they don't get lost as easily as we do in their environment. Because their first question – since they don't use left or right, they navigate by river – their first question is "where is the river?" And as soon as you can tell them in a city – which in Brazil is easy because all cities just about have rivers – where the river is, they get a map of the place in their head.

So I took a Pirahã out of the tribe to the hospital one time in Porto Velho, Brazil. It was his first time ever out of the tribe. He went to the hospital in the very large city of Porto Velho, and he had only seen my home in Porto Velho one time. I took him to my home which was 25 kilometers outside of town, about 12 to 15 miles outside of town. He saw it; he saw that it was near the river. I took him to the hospital, and I left him at the hospital and I said, "I will be back to see you tomorrow". He said, "I don't want to stay." I said, "You have to stay, the doctors will take care of you". In the morning he showed up at my house. He walked all the way, never having been there before, in his hospital gown, because he didn't want to be in the hospital without me. And I don't think I would have been capable of doing a similar feat if I had been lost in the Pirahã, I think I would still be there.

Dr. Dave: Yes. Now their language is so unique, maybe you can tell us a bit about their language; and also give us a sample – if you could speak several sentences of it – because I know that you pointed out that tonality is an important aspect, as in Chinese, and you talked about glottal stops, and I'm not even sure if I really know what a glottal stop is or not.

Everett: OK, I'll give you a couple of samples of their language. So first of all, what's a glottal stop.

Here's the word for macaw in Pirahã: "kaaxái; kaaxái"

Here's the word for small caiman in Pirahã: "kaxaxái; kaxaxái". The difference between those two is the number of glottal stops they have. So every time you hear that "ax" sound (pronounced "ah"), so "kaxaxái" that break between the vowels is the glottal stop.

Dr. Dave: OK.

Everett: Now to give you an idea of the tones, one of my favourite examples is – the word for friend is "bagixái"; and the word for enemy is "bágixái".

Dr. Dave: I didn't hear a difference.

(laughter)

Everett: Let me whistle them – the word for friend is "bagix**á**i". I'll accent the tones a little more strongly there so that you can hear. And I can whistle that

(Everett whistles with rising tone at the end, corresponding with the acute **á**).

Whereas the word for enemy is "b**á**gix**á**i"

(Everett whistles in the different tones, including rising tone at the beginning, also with acute **á**).

And if you don't get the tones right you've really confused them.

Dr. Dave: Yes.

Everett: And there are a lot of other examples like that.

They only have three vowels and eight consonants, and there are only two other languages in the world known – Hawaiian, and Rotokas spoken in New Guinea – that have similar small numbers of sounds. Yet with the tones, which Hawaiian and Rotokas don't actually have, they can communicate anything that they need to communicate, but then their syntax, their word structure is extremely complicated. I've been accused of trying to simplify their grammar, but if you read my doctoral dissertation a long, long time ago you find out that the word structure is extremely complicated. Much more complicated than English or Portuguese or any Indo-European language.

And the grammar itself is fascinating for a number of reasons, but primarily what has gotten it famous is what it *doesn't* appear to have, and the link that I have claimed to exist between culture and the grammar itself.

Dr. Dave: OK; maybe we will come back to that. I suspect that there is an intimate relationship between language and consciousness. Can you

comment on the ways in which the characteristics of their language appear to impact what they are and are not aware of?

Everett: Well one obvious example is the absence of number words in their language. This is the first language ever documented that doesn't even have the word for one. There is no word for one.

Dr. Dave: Amazing.

Everett: So when we did these psychological experiments that came out in the journal *Cognition*, one of the things that comes to mind and that we tested for is – how much of what we can talk about relative to quantity is bound up with numbers? Are we able to talk about quantities because we have numbers, or are there some cognitive characteristics that exist prior to numbers?

And we found out that the Pirahã have a sense of exactness; so they can do exact matches, they can match up things. We can give them so many balloons and so many spools of thread and they can match them up, and not leave one hanging over; and if there is one left over, they tell you it is left over, in a sense. So they have a sense of exactness without a sense of numbers; and some people had thought that we get the sense of exactness from numbers.

It tells us that numbers are a cognitive technology. They enable us to talk effectively about larger quantities, and reason effectively about larger quantities. So without those words in their language, obviously the Pirahã are very limited in what they can reason about quantitatively.

Another example is the fact that they don't have fixed words for color, although they can describe colors.

They don't have certain kinds of tenses we have.

One thing they do have: every Pirahã verb has to have a suffix that tells you whether the evidence for your assertion is direct observation, hearsay, or deduction. So if I say, "Is John here?" If you saw him leave, you could say, "John is not here" and put the suffix on that means direct observation. If I ask you the same question and you only heard someone say that John left, you use that suffix; and if I ask you if John is here and you look down at the water and his canoe is missing, you can say, "He is not here" and put the deduction suffix on there.

Dr. Dave: That sounds like a very useful feature of language; one that maybe would be useful to us. (laughing)

Everett: Yes it's a fascinating feature of language. They are not the only language that has these kinds of particles but they are very interesting in use. Of course whenever you have something like this it facilitates lying (laughing); so if you want to say somebody has gone, but you know in fact that they haven't gone, you put the suffix on there that says, "I saw him leave", and it makes it more convincing. So they can lie, like we can lie.

Dr. Dave: Yes. I'm thinking of what's been called the Whorfian hypothesis I think.

Everett: Right.

Dr. Dave: Finding for example the fact that Eskimos have many words for snow, and as a consequence they perceive a lot of different kinds of snow than most of us would be able to perceive. So I am thinking that maybe there are similar things that go on there, for example I am recalling an episode that you described – where a bunch of Pirahã were standing on the river bank looking across the bank to the other shore, and you go over to see what is it they are all talking about and staring at. And it's a spirit, and they all agree that they see a spirit, but you don't see the spirit.

I'm wondering if that's kind of like the snow, that somehow there is a category of experiencing that they have developed, somehow maybe tied in with their language or their culture that is closed to you.

Everett: Well I'm sure that there are many things that exist in their culture and language that are tied to the culture in a way that are closed to me. In that particular case I to this day don't fully understand what I saw. That is to say: I know that there was not a spirit there, and I know that they say there was a spirit there, but I don't have a good explanation for the disjunction in our perception.

But the one example that does come to mind for language is they don't have words for left or right. So these are relative directional terms, and they are common in lots of languages in the world, but not all. So since the Pirahã don't have left or right, how do they tell each other which way to turn, or how do you give anybody directions? Well you say where ever you're at – turn up river, turn down river, turn towards the jungle or turn towards the water. That means you always have to know where those things are.

So this linguistic fact, that they don't have left or right but navigate using fixed features of their topography, has been shown – and I've already noticed this myself from the example I gave you of the fellow who found his way back to my house from the hospital – but other researchers, for example from the Max Planck Institute for Psycholinguistics at Nijmegen, have shown that people in systems like this actually are able to navigate better in brand new environments than people who come from languages like English, where we tend to use relative terms that aren't fixed in the geography or typography, such as left and right.

Now if you are an English speaker and you mainly use north, south, east, or west, then you are functioning like a Pirahã; because that is in effect what we are doing when we use north, south, east or west. But most of us don't do that; most of us, you tell someone, "turn left" but you wouldn't say, "turn west" because most people wouldn't know which way west was in a quick acting response.

Dr. Dave: OK. Some of us do that more naturally than others though; I tend to know where north, east, south, west are usually – but a lot of people don't.

Everett: No, I'm one of the ones who has to stop and think about it. Obviously if I see the sun I know where things are, but it isn't something that is pervasive in our culture. In effect, what I'm saying is that any Pirahã would know immediately west, east, north, south – that's the only direction they use – where as Americans, or Brits, or just about any European might happen to know the directions relative to where they are at in any new place, but they might not too. When they don't, left and right gets to be a very sloppy way of telling someone how to get somewhere.

Dr. Dave: Yes. Now we mentioned spirits. What can you tell us about their religion; do they have anything that you would consider to be "a religion"?

Everett: No, I wouldn't really classify it as a religion in the sense that they believe in any kind of norms that should control the way we behave based on supernatural entities, or supernatural history of some sort.

They believe that the universe is occupied by a number of entities. Just as it has monkeys and it has humans, it has things that look like humans but aren't humans because they have slightly different characteristics. I have translated the words for these creatures as spirit very frequently, but they don't have an exact concept of spirit like we do – some sort of bodiless

entity that could take form or not take form, some sort of magical entity. These other things that they believe that they see – like the example that I give at the beginning of the book, where they are looking at the beach and see something that I don't – they believe to have real physical limitations and real physical properties just like we do, except that they have additional properties or lack properties that we have. Some of them are mean and some of them are nice, it depends on who you talk to.

And this doesn't really fit religion – it's sort of like a different kind of classification of the world – but it is very important in their day to day life. I guess the closest thing they have to employing that as a religion is that they use them occasionally like boogie men to talk to their kids, "watch out, you go out there and the spirit will get you." Now the adults actually believe that, but the function is to control kids' behavior sometime; and so that is sort of the closest thing they have to a quasi religious code.

Dr. Dave: What about some kind of mythology – what sort of story do they have for where it all came from, where they came from?

Everett: They are not interested in that; which makes them extremely interesting for anthropologists and linguists. They don't have any creation myths whatsoever – you can't get a single story out of the Pirahã. You ask them how the world was, and they will simply tell you, "The world is like this" which means it has always been this way. They are not curious about that because it's not something that arises; what's to explain? There are trees and fish and we have to live in this environment – we live in this environment.

So this has been very surprising to a lot of people. A Brazilian anthropologist has actually done research on this, and I helped him get started, he is a good friend of mine, and he published a book in Portuguese in which he confirmed that in fact they do not have creation myths.

Dr. Dave: So what does this say about their sense of time; do they have a sense of the past, of the future?

Everett: They don't talk about the past that goes beyond living witnesses. So there is no supernatural taboos against talking about the dead, but once somebody has died they are sort of gone – they are not sort of gone, they are gone. So you might talk about things you did with them or something like that.

I tried to find the names of grandparents one time in a village. It took me quite a while, because they don't have real words for grandparents – you have to say so and so had a father, that father had a father, that guy had a father – so I could find only one person who could name all their grandparents, and that's because that was the only person who had actually seen all their grandparents in the village, because the life expectancy is so low. Unless they had seen them, they didn't know and they didn't talk about them.

Dr. Dave: Did they have any sense of an afterlife?

Everett: No, you don't hear Pirahã talking about "the happy hunting ground" or anything like that; when you're dead, you're dead. They put you in the ground, usually near the river's edge so that erosion will in a year or two take the grave into the water. You ask them where do people go when they die – and I asked this of somebody who had heard Christian myths as a little boy when he had been raised for a couple of years outside the village – and he tried to give me a response, but then I realized he was just repeating bits of Christian stories that he remembered. In fact you don't find any Pirahã telling you about an afterlife for any person.

Dr. Dave: Are there any special roles in the tribe; for example leaders, or shaman, witch doctors, the healer?

Everett: No there are no specialized roles, everyone does exactly the same thing – it's just some people do it better. So if you are going to go on a hunt you will find somebody who is a good hunter and probably do what they tell you; but when the hunt is over that is the end of their authority. So there are no specialized roles; there is recognition that some people do things better than other people, but that doesn't give them any sort of title, or special social status.

Dr. Dave: That's very interesting.

What about dreams – do they have a theory – or what's their view of dreams? Because we know that everybody dreams.

Everett: Yes, they talk about dreams, and they have a verb for dreaming; which is very interesting because they don't usually have verbs for expressing their desires and that sort of thing, they do this with suffixes on a single verb. But when they have a dream, they know that they're dreaming versus being awake, but they don't believe that the experiences they have in those states are fundamentally different – they are sort of altered states of

consciousness. So somebody will start telling you about something he did, and you say, "Well wait a minute, you didn't go anywhere last night, you were sleeping in my living room" – I often had Pirahã sleep in the house – "so how could you be out hunting and doing all this stuff at night when I happen to know for a fact you were lying in here sound asleep." "Oh I was doing that in my dreams." But to them they were really doing those things.

Dr. Dave: And is their dream imbued with any special significance or meaning? Do they see it as either related to their life, or related to a message?

Everett: No they don't get any special symbolic significance out of a dream. They just recount things they did in their dreams, but they don't try to interpret them or say that "I dreamed this, and that means that in real life this is going to happen" or something like that.

Dr. Dave: So they are very matter of fact (laughing).

Everett: Yes.

Dr. Dave: You mentioned sleeping in your house, and evidently they have a very different sense of privacy than we do, but they do have some sense of privacy. Maybe you can talk about a bit.

Everett: Yes. They are not worried about you seeing their body parts as long as you don't stare. There is a sense of modesty – the Pirahã can be completely naked and still be modest – the way you express modesty, you don't look at people. If I'm in the river taking a bath and I don't have any clothes on, and a woman comes down, she won't stand and stare, even if she talks to me she will look above my head, and you know she's not – and the same thing goes for anything you see like that. They go off to get privacy to relieve themselves, but if you happen to be walking along and see someone – because the don't make a big deal of getting private, they just go off a path somewhere in the jungle, and if you are walking down that path you will see them – well you ignore them. You pretend as though you don't see them, and that is a way of giving them space, and showing modesty on both parts. Also with sexual relations, they tend to be quite private about those things, not always, but in general they are very private about them.

Dr. Dave: Do you have any way of suspecting whether that their sense of modesty and privacy is as a result of contact with Europeans, or whether it is more or less innate?

Everett: Well I don't know about innate, because that is a much wider question than just the Pirahã. But I know that some aspects of their modesty are indigenous to them: relieving themselves in private and that sort of thing, they would just never do it among themselves.

Other parts of their modesty are a result of their desire to avoid problems with outsiders. So they know that if women walk around without any clothes on, and Brazilians or any outsiders come, there could be problems because they have seen this happen before. But when they are sure that no outsiders are around, or outsiders they can trust are there, they are completely open and often don't wear clothes.

They don't wear clothes for modesty when people that they can trust are there. For example, I was working in the house one time, and this young woman walked in and she was interested in what I was doing – I was nailing some stuff up in my house – and she looked down at her dress and saw there was a rip in it, so she just took her dress off, and they don't have anything underneath the dresses, and was fiddling with that while she talked to me. And she wasn't being flirtatious at that time or anything; it was just a perfectly natural thing, because she was treating me like someone else in the village. Whereas if an outsider they didn't know were there, she would never have done that.

Dr. Dave: Can you say a little bit about marital relations – fidelity, infidelity, and so on?

Everett: Well they vary considerably, just as ours do. I've often said that just as we are serially monogamous, they are serially monogamous. Nobody has multiple spouses; one person at a time. I know couples that have been together for the past 30 years, and probably will be together until they die. I know individuals who have had a succession of spouses, both male and female.

When they are together, promiscuity is not something they take lightly, except in certain circumstances. So it's not that outlandish if everybody is happy, and dancing, and singing for people to be somewhat promiscuous; but you don't leave the village, it's a very short term thing, and the punishment for that is pretty mild.

There is a little bit of punishment involved, and I talk about it in the book: there was a man and his wife made him keep his head in her lap all day, and anytime he tried to move she jerked his hair and hit him in the face with a stick.

Dr. Dave: (laughing)

Everett: And he laughed about it. Because I didn't know what was happening, I walked over and asked him if he could come study with me and teach me more of the language, and he just grinned and said, "I can't go anywhere today" and as soon as he said that she hit him on the head with this stick and jerked his hair, and they were both sort of laughing. So I asked someone else what's going on and he said, "Oh he was with another woman last night so his wife's not letting him leave today, he has to stay there." And that's about as serious as it's taken.

But if you want to have another relationship, the equivalent of what we might call divorce and remarriage, although those terms don't fit well with the Pirahã, you just go off for a few days with the person you want to be your new spouse, and when you come back that's accepted and that's the end of it.

Dr. Dave: What about homosexuality?

Everett: There's a lot of sexual play that's obvious between men; and it goes beyond just horsing around sometimes. Although they are kind of private, I talk about this in the book – seeing my daughter who was twelve at the time, she is in her 30s now, but she was watching two men on the floor right in front of her with their pants down, and they weren't having actual sexual relations but they were coming pretty close to it, and laughing and giggling and weren't being modest at all, but by and large that doesn't happen. Sexual relations aren't obvious in public, so how much homosexuality there is – as I talk to the men I get evidence that most of them are bisexual – but it's not something that's normally done openly in the group. There's a couple of guys who are fairly openly gay – every man has to have a spouse and children – but the women have a slightly different dialect from the men, and this one man in particular talks in the women's dialect.

Dr. Dave: Interesting. What about child rearing; they have some pretty different ideas about child rearing than we do?

Everett: Well they don't believe in physical discipline. There are always exceptions, no matter what a culture's values are – Americans don't believe that murder is OK, but we have lots of murderers in jail, so those Americans who would still probably say murder is not OK have violated their own norms – so you do find Pirahã hitting their children from time to time, but

that is not sanctioned in the culture, that is frowned on. You don't hit people, you don't show violence, you don't show anger in the ways of any overt displays of emotion like that.

Children learn because from a very early age they get responsibilities. As soon as they are weaned they start getting hungry like everybody else, they have to carry things, things are expected of them. If a mother goes into the jungle and gives her little boy who is four a small load to carry back, and he starts throwing a fit, well he is going to find himself alone in the jungle because mom's going to keep coming.

Dr. Dave: Yes. And you point out that they don't speak baby talk to their children at all, they really treat them kind of as adults, as fully responsible adults from very early on. If a mother sees a two or three year old getting too close to the fire, or playing with a knife – you give an example of playing with a sharp knife (laughing) – they let them go ahead and do it, and maybe they get hurt and take their lumps, but they see that as part of the toughening up process to live in the jungle.

Everett: Absolutely. I had a psychologist (who is now at Columbia University, Peter Gordon a good friend of mine), came to the tribe with me in the late 80s and early 90s, made a few trips, and he has on film, we were talking and behind us – we didn't see this happening at the time, we noticed it when we looked at the film – there is a baby that can't even walk just sitting up with a very sharp butcher knife, playing with it. The mother is talking with us; now the baby drops the knife onto the ground and what does the mother do? She reaches over and picks it up and gives it back to him, then turns around and starts talking to us.

I have seen toddlers get cut and burned, but when they reach seven or eight, they know how to handle themselves; they are not going to do that anymore, they know what will hurt; they know how to behave around fires. If you bring in American children of the same age they are more likely to get seriously hurt than any Pirahã child because they have been protected and sheltered. If a Pirahã child is running and falls down and hurts themselves, the mother isn't going to run over there and say, "oh poor baby" and start kissing it, she'll say, "don't do that again that hurts". (laughing) She scolds them for falling down and hurting themselves. If it's a serious hurt, if someone is hurt seriously they are going to look for help – they love their children – but if it's minor stuff, the lesson is be more careful next time.

Dr. Dave: Yes this is one of the messages that came though to me in the book. These people live in a tough environment and so they expect

toughness of themselves. And in some ways for you as an outsider your experience was that they weren't always very helpful at times when you expected somebody to kind of rush in, and you would have considered it to be common courtesy for someone to extend help, they sort of left you to your own devices.

Everett: That's right. I remember going there with a phonetician from UCLA in 1995, and we had a lot of gear to carry up the river bank. And the Pirahã, especially these really strong Pirahã men, were all standing around watching us - and the phonetician was professor at UCLA and he was in his 70s already – he said, "Isn't anyone going to help us?" And I said, "No, they are not going to help us. They didn't tell us to bring this stuff, they just find this curious." And he said, "Can't you pay them to help us?" I said, "What would I pay them with, there is nothing they want that I have, and they are not going to get involved in some other culture's activities for pay."

They will get engaged like this when it is something either to their direct benefit, so if I'm bringing supplies that they know are going to go for the whole village, they will rush down and help me carry them up - they might carry them off, too, I might never see them again – so I have to be right with them but they will carry them up. If it's something that has to do with medical help, or something like that; if there is a young man, and the young men are vital components of the culture because they will hunt and they protect – the whole village will respond if he's in bad health. And they will to a young woman too, as long as she's integrated into the society and her husband is there and that sort of thing – although I don't want to give the impression having just said that that there is a big difference between the way men and women are treated, by and large there aren't.

So they will help sometimes for emergencies or for things that are seen as to the benefit of all, but for the average individual thing don't expect people to come help you. If you started a project or you've got something to do, do it yourself.

Dr. Dave: Yes. Of course another dramatic feature of their lives is how little they have, in terms of material possessions they have practically nothing; the shelters they build are extremely simple, they got maybe a knife and a pot or a pan. Contrast that with when you needed to move about it was like an expedition (laughing) – all sorts of belongings and things that we would consider to be necessities, and yet they can just pick up and go some place and it's no problem. I reflect on that as we enter a difficult economic time and we worry about our material well being, and here are these people who have so little and who are quite content.

Everett: Yes, they have a standard of living that is very different from ours.

If you walk with a Pirahã man into the jungle to gather things such as Brazil nuts, you might be surprised that he will have a machete with him and nothing else, he will go barefoot. You wonder how are you going to carry this back? Well he makes a basket when he gets there – after he has gotten what he needs, he makes a big pile, then he walks around and finds just the right kind of leaves and vines, and in about 15 minutes has woven a basket with a tumpline just right to carry his stuff back. When he gets back he just tosses that aside, and make another one the next day if you need it. They are very confident in their abilities; they can find food, they can identify danger so much better.

So one of the problems that we have is that we are so specialized, and we have so little knowledge as individuals of our environment, and how to live in our environment without electricity or power. Life would be much harder for us if we were placed into an environment like the Pirahã's because we just don't have the cultural underpinnings to survive as they have. It would take a great deal of extra training for the average American to even come close to living like the Pirahã do.

Dr. Dave: OK. You have been very generous with your time here; I'm just going to ask you a couple more questions.

What about their relationship with other tribes and so on – do they have a history of warring or a history of peace?

Everett: In the 1700s and 1800s there is evidence that there were wars. These are partly because of attacks by Brazilians, partly result of attacks by other Indian groups over different land. But over the last couple of hundred years they have developed a culture of peace, and the concept of war and conflict is foreign to them now. They know of other groups and they fear other groups that are in their environment. Their typical response is, "if you come, I will go; we are not going to fight". So Pirahã will only fight to defend the lives of their family.

I have had people come in and hear me speaking with the Pirahã and say, "Oh if you gave them the order to kill us now they would do that wouldn't they?" And they have these movie ideas in their mind. I said, "Look if any violence started right now, every one of these people would disappear into the jungle. And if you ran after them and started to threaten their family, you would be dead in the jungle, but they are not going to just start

fighting." The wisest course of action for any Pirahã is to retreat, and fight only if absolutely threatened. So warfare is now a foreign concept to them.

Dr. Dave: Well to sort of begin to wrap things up here, I'm curious what the impact of your 30 years with the Pirahã has been on you personally. On how you see the world, how you think about yourself.

Everett: Well I certainly don't think there is only one way to do things. So I take lots of claims that psychologists and other scientists make about this or that structure being innate with a grain of salt. Because I think back on the Pirahã and the other dozen or so Amazonian languages I've done field work on, and realize that some people live extremely differently from our predictions.

I'm not afraid of bugs any more.

I'm used to hard circumstances - that doesn't mean that I like hard circumstances - give me a good hotel any day over sleeping on the ground, but I can sleep on the ground; and I know how to live in the jungle, and these are things I didn't know growing up in the desert of Southern California.

But mainly I've learnt from the Pirahã – and I haven't learned it nearly as well as I should have, and certainly not like they know it – but to appreciate each day and take satisfaction in life from the day that I have good health, and I'm alive right now; and things might not be the same tomorrow but I'm not worried about tomorrow; and they might not have been the same yesterday, but that's gone. That sounds trite and trivial and a lot of people have said it, but it's my lesson from the Pirahã, and they've taught me this, and they live it every day and I just feel really privileged to have spent so many years of my life with them.

Dr. Dave: Well that's a good reminder from us all. And Dr. Dan Everett I want to thank you so much for sharing all that you have with us, and for being my guest today on Shrink Rap Radio.

Everett: Thank you very much for having me.